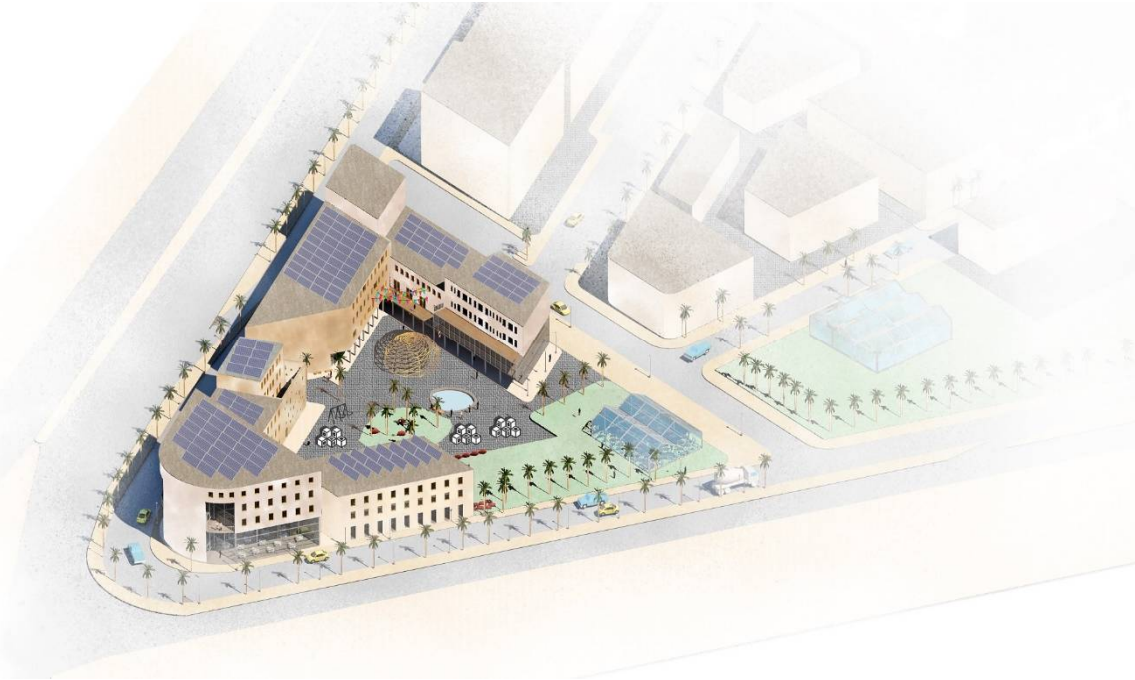


Final Report Feasibility Study Youth Business Campus Mafraq



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Abstract: GreenfieldCities (GFC) aims to reduce forced migration with cost effective PPP efforts in regions of origin. GFC executed a feasibility study for a Youth Business Campus (YBC) in Jordan for Jordanians and Syrian refugees to live, learn and work. The study concludes the YBC is feasible in all relevant aspects hosting 2500 youths, working in six sectors: Agri-Food, Water, ICT, Energy, Construction and Hospitality. Risks are at acceptable levels. Impact on at least 8 SDG indicators including "Decent Work and Economic Growth" is very significant. GFC is outstandingly embedded in Jordan society and will develop, operate and maintain the campus for the long-term. About 50 education providers, private businesses and other key partners confirmed their support and willingness to participate in the YBC. Key MPs in Dutch parliament and key stakeholders in Jordan support the YBC model. Transitioning from donor funding to private impact investment requires donor seed money. The total public funding need for a sustainable YBC in Mafraq for 2500 people with new jobs is €10 million. This is an investment of €4k/person and compares very favorably to the €150k-€170k in taxpayer support needed for hosting a single refugee in the Netherlands. Only the first pop-up stage of the YBC (for 250 people) requires donor funding. The next stages will be predominantly financed by impact investors. To raise €10 million in donor funding, GFC needs to secure €3 million for the next 4 years and will ask this from the Dutch Government. The remainder will be co-financed by other donors and impact investors. This ask is no-regret and very small compared to the avoided costs through a working model for dignified, humane and sustainable reception in the region of origin.



Executive Summary

Reducing Migration Requires Innovation and Private Investment Stimulation

GreenfieldCities develops sustainable urban areas in regions of origin of migrants to help to reduce forced migration flows, climate change impact and gender inequality. To secure that projects can scale and repeat, the concept includes future returns for impact investors, facilitating transition from donor funding to private impact financing.

The Dutch Ministry of Foreign Affairs supports innovative ideas for solutions including reception in the “region of origin” and supported GreenfieldCities with a grant in 2018 to carry out the feasibility study “Mafraq Campus Pilot Project to Help Reduce Forced Migration”. In the past 12 months, GreenfieldCities diligently executed work to determine if and how realization and operation of a campus concept in Mafraq would be feasible. This report describes the results of this study in detail.

In the early stages of the study it became clear the Mafraq campus pilot project should be an enabling environment where young Jordanians and Syrians could live, learn and work: a Youth Business Campus. The Youth Business Campus is a combination of high quality infrastructure (assets), supporting services (education, training and business) and a long-term responsibility commitment to support local institutional strengthening. GreenfieldCities studied the feasibility for the development and operation of a Youth Business Campus for up to 2500 people in the city of Mafraq in Northern Jordan; about half of them young local Jordanians and half of them young Syrian refugees. Mafraq is heavily impacted by the Syrian crisis. Half of its 120.000 people are Syrian refugees. Up to 70% of young people in the town are unemployed and hosting 60.000 refugees (and hundreds of thousands in the area around Mafraq) puts an enormous stress on the available resources like water, housing, public services and jobs.

Secure Implementing in Line with Jordanian and Dutch policies. More than a Just Study Report

According to GreenfieldCities, support interventions need to be driven by local demand. GreenfieldCities researched and developed the following aspects of the Youth Business Campus:

1. Needs and desires of young people and general population in Mafraq;
2. Transposition of (support) needs into investible business cases;
3. Public and private support for the idea and roles of different partners;
4. A Sketch Design as a stepping stone towards implementation;
5. An approach for a realistic way forward.

GreenfieldCities studied the many available development plans and strategies for Jordan, and talked with hundreds of local, regional, national (Jordanian and Dutch) and international stakeholders. By integrating their input and feedback into the Youth Business Campus plans, and returning to the same stakeholders with these results, iteratively, a detailed and credible solution was developed that is widely supported in Jordan. This document is therefore not another study report. It also includes the necessary information for a go/no go decision for the GreenfieldCities development plan for the Youth Business Campus in Mafraq.

Impact, Wide Support and Transition to Private Investment All Feasible and Realistic Goals

The situation in Mafraq is dire. People feel abandoned by leaders and international support. Youth does not see any future for themselves in Mafraq. The pressure on resources such as water is so high that without interventions, threats to livelihood in Mafraq will become existential. Fortunately, there are also opportunities in Mafraq that can serve as starting points for the Youth Business Campus. There still is young talent, and there is a basic but vivid retail sector. Young people,



especially young women, would welcome opportunities to gain working experience and a career-starting job in Mafraq. The recent development of large solar farms and the presence of the GIZ¹ supported (energy) vocational training center in the King Hussein Free Zone is favorable for developing clean energy activities. There are logistics, small-scale hospitality and tourism opportunities as well. ICT training institutions expanding from Amman see possibilities to educate local talent in Mafraq for regional employers. There are opportunities in construction too. The current market is such that real estate developers that build energy-efficient buildings at the right cost level, will quickly sell 100% of their products in Mafraq. Twenty percent of Jordan’s agricultural production comes from Mafraq. This sector wastes water and is not competitive. At the same time, this means that there is room for improvement. Surprisingly there is also local financial capital, willing to invest locally, when circumstances are acceptable and business cases attractive.

Based on the local research, GreenfieldCities identified and developed 6 sector business cases that are summarized Table 1.

Table 1 The identified business sectors for the Youth Business Campus are highly synergetic and cover local needs.

| <i>YBC sector business case</i> | <i>Local urgency level to act</i> | <i>Attractiveness for private Investors</i> | <i>YBC potential to help create jobs (# of jobs)</i> | <i>cross-sector impact to make YBC thrive</i> | <i>Time to impact (months)</i> |
|---------------------------------|-----------------------------------|---|--|---|--------------------------------|
| Energy | medium-high | high | 50-200 | Very high | medium (12-48m) |
| ICT | medium | high | 50-500 | high | medium (18-48m) |
| Hospitality | Low | high | 50-100 | very high | very short (12-18m) |
| Construction | medium-high | high | 50-300 | very high | medium (18-24m) |
| Agri Food | very high | fairly low | 30-500 | medium | long (24-60m) |
| Water | extremely high | very low | 50-500 | very high | medium (12-36m) |

Five of the six cases are attractive for impact investors under the condition that public donors duly support the transition to private sector financing, and that future investors can trust that governance and management of the Youth Business Campus is strong. There is one sector that is of existential importance to Mafraq and for which GreenfieldCities could not yet develop a financially attractive business case: the water sector. Fortunately, the positive *Returns-on-Investment* of the other cases can & will amply compensate the water case. This is one example why a multi-sector approach is important. Other reasons for this approach are that the cases strengthen each other in a myriad of ways (cross sector impact), have different times to impact, and that they create diversity and liveliness and reduce single sector dependence of the local economy. The overall impact of a multi sector Youth Business Campus is large as is illustrated in Figure 1.

¹ German Corporation for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit)

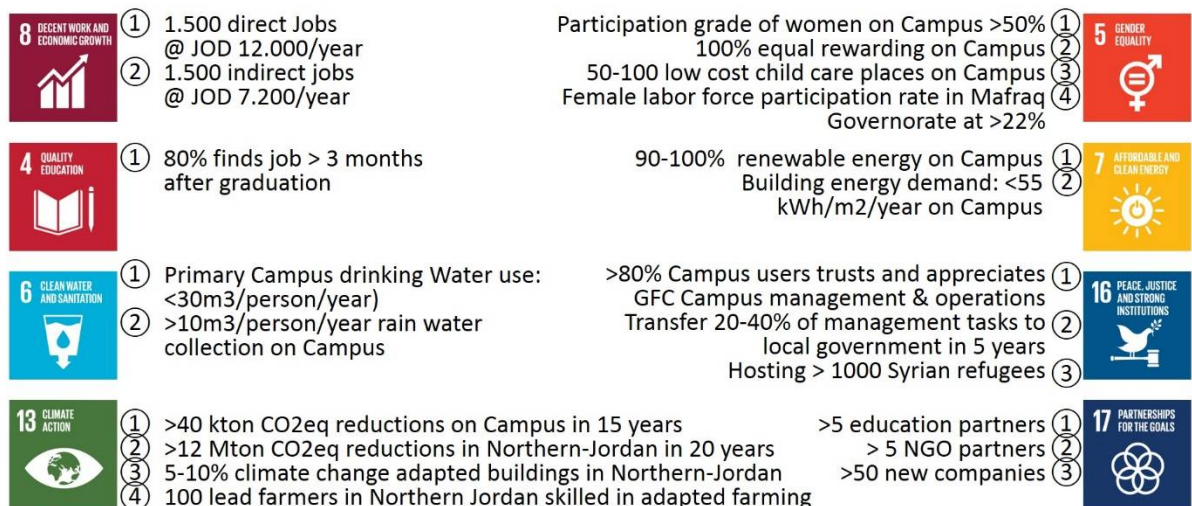


Figure 1 The impact of the Youth Business Campus contributes to national goals and fulfils local needs.

The study concludes the Youth Business Campus is feasible in all relevant aspects. Risks are analyzed in-depth; risk-mitigation is possible and has already been put into action. In all, risks are assessed to be acceptable and manageable.

The GreenfieldCities strategy to involve public and future partners in the development of the plans worked well. This report includes 50 support and partner letters. GIZ, JREEEF² and Orange, support GreenfieldCities with concrete development and construction fundraising. During the study, GreenfieldCities stayed close to the principle that there are many expert partners available in Jordan for the different sectors and that GreenfieldCities can focus on its core role: facilitate that the Youth Business Campus develops as a place where people want to live, work, learn, invest and do business. In other words, GreenfieldCities must make partners more successful. The study also helped to assess the limits of innovation and (speed of) change that local and international stakeholders find acceptable. The general conclusion is that everybody sees benefits in innovation but that many do not have faith in change until they see it demonstrated. This was an important conclusion for shaping the GreenfieldCities implementation strategy including the financial road map.

Right from the start, potential users (Jordanian student groups from two major Jordan Universities and GreenfieldCities Syrian team members) have been actively and intensely involved in the urban planning and the design of the Youth Business Campus. The biggest design challenge was combining the selected six sectors and the multi-functionality (living, learning, working and relaxing) into a place with character and coolness. A place that inspires and has sustainability built-in. The result is a sophisticated urban plan for the site in which the step-wise development will take place along functional axes. The 3D design looks compact, yet spacious. Powerful, yet inviting. Small-scale and tailored to human size, yet 'grande'. Open, with enclosures. In short: a great place to live, learn, and work (see the title page and Figure 2).

The development of the design brought the Youth Business Campus to life for partners and stakeholders. The design work also enabled GreenfieldCities to realistically work on roles of construction partners, permitting issues, financial planning and a realistic schedule for implementation.

² Jordan Renewable Energy and Energy Efficiency Fund.



Figure 2 An impression of the first phase of the Youth Business Campus.

To reduce implementation risks, GreenfieldCities developed a stepped implementation approach for realization of the Youth Business Campus. The first implementation phase is a so-called *pop-up* stage. This stage still requires public donor funding and serves to align partners in project implementation and grow ownership by a local core team. This stage will also generate the first revenues to convince impact investors to step in. The *pop-up* offers learning, working and living space for up to 250 people. The follow up stages are called *Touch-base* and *Fully developed* as is illustrated in Figure 3. When fully developed, the Youth Business Campus will be a lively and sustainable district with up to 2500 Jordanian and Syrian people, of which 50% women, with mid-income earnings and solid perspectives on living a good life in their own region.

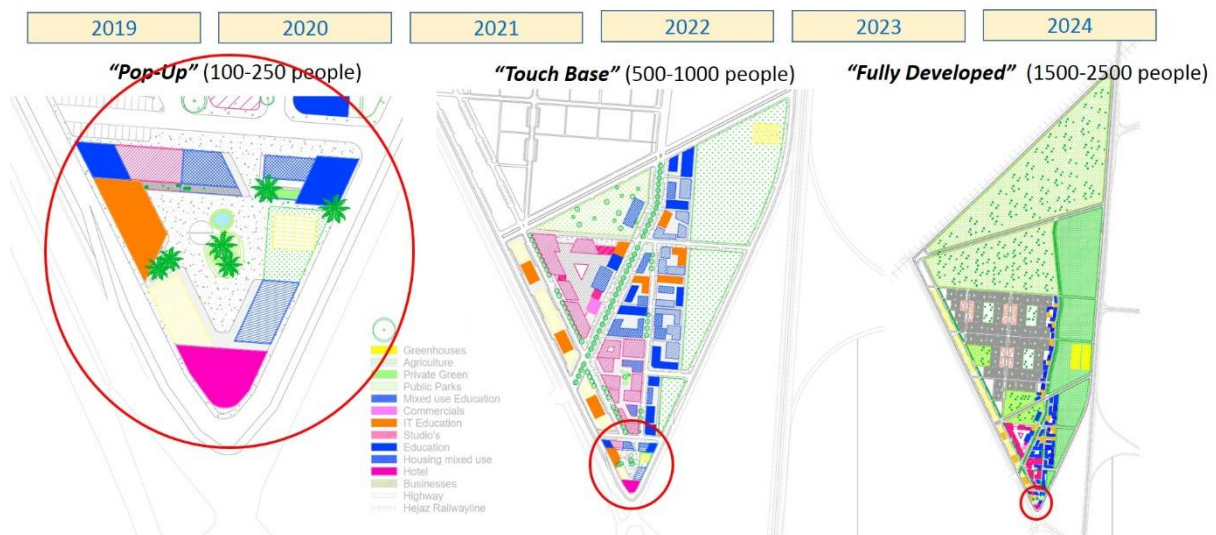


Figure 3 Stages of development with the Pop-Up stage on the left.

The staged approach is important to limit financial risks, test what works, and see what needs to be adapted. Phasing is also crucial to serve the transition towards private impact funding. The *pop-up*



stage shows what revenue levels are realistic and feasible locally and what improvement of labor productivity levels can be expected.

The GreenfieldCities research provided strong indications that impact investors are looking for and interested in investment opportunities, but that they demand proof of concept before committing. For 2019-2021 the investment need is about € 10 million and has still to be predominantly funded by public donors. However, after operating 3 to 5 years, the Youth Business Campus is already financially self-sustaining as is shown in Figure 4.

| | 2019-2020 | 2020-2021 | 2021-2022 | 2022-2023 |
|---|------------------------------|-----------------------------|-------------------------------|-----------|
| Investment Need | €7,5M-€9M | | €15M-€18M | |
| Possible Sources: | | | | |
| Gov. Grants & Donors | €7,5M-€8,5M | | €3M-€4M | |
| Impact Investment | €250-€500k | €300-€500k | €12M-€14M | |
| Campus Services | €200-€300k | €400-€700k | €400-€700k | €1,5M-€2M |
| Revenues per year | | | | |
| | 90-95% Public Funding | “The years of proof” | 70-90% Private Funding | |
| Added value for Mafrqa Economy per year | €300-€500k | €700-€900k | €1.5M-€2M | €5M-€10M |

Figure 4 Funding needs and transitioning from public to private funding.

Public and Private Partners on Board

In 12 months, GreenfieldCities grew from completely unknown to very well-known and widely supported in Jordan. The development pace and depth of embedding are remarkable. GreenfieldCities’ local visible presence in Mafrqa, including Jordanian staff, obviously played a role. Adding an influential and committed Jordanian Advisory Board has helped GreenfieldCities with strategic advice, network building, governmental support and local embedding. The GreenfieldCities Advisory Board Members have helped shaping and modernizing Jordan over the last decades in roles as Cabinet Ministers, Senator, leading sustainability and women advocates, entrepreneurs and scientists.

Admittedly, there are also still a few stakeholders that doubt that GreenfieldCities can succeed in Jordan. Information and results in this report can help getting them on board. During the study, GreenfieldCities learned to discuss specific sectors and cases for the Youth Business Campus with stakeholders that focus specifically on those sectors. The result is that stakeholders like GIZ see value in the energy part. Orange and Nederland ICT members see value in the ICT part. Luminus, RBK, SPARK, Nuffic and Wageningen Research see value in the education and science part. UN Habitat sees value in locating part of their (already funded) affordable housing plan on the Youth Business Campus. More examples of growing partnerships are in the report. The result of the growing non-government stakeholder support is that the project also becomes more credible and more attractive for the Jordanian public sector. Relationships with key ministries and local government are strong and within six months from now GreenfieldCities will be part a number of key national policies and plans in Jordan.



Impact Dutch and EU Perspective: Reduced Influx, Better Integration, Lower Costs

The concept of the Youth Business Campus aims at helping to curb forced migration by creating sustainable reception and opportunities in the region of origin. Clearly, this has a positive impact on the Netherlands and the European Union in two ways:

1. Youth Business Campuses provide opportunities and add to stability in regions of origin and reduce the need to migrate. They also provide solid stepping stones for returnees and promotion of international trade. Reduced and better managed influx of people to the EU will be a visible result to EU citizens, helping make the social and political debate on migration and integration fact based and constructive again and hence contribute to reduction of political and societal tension.
2. Youth Business Campuses help reduce the costs of managing migration and help transitioning from charity and humanitarian aid to investment. In the Netherlands, reception and integration costs of non-western refugees over a 5-year period add up to taxpayer funded amounts of between € 150.000 and € 170.000 per person. For Youth Business Campuses, taxpayer funding of between 3 and 5 k€ per person is sufficient. The business case for investing public money in the Youth Business Campus concept is very strong from a Dutch or EU perspective.

The study's political assessment convincingly demonstrates that the GreenfieldCities mission to receive refugees and reduce push factors in the region of origin fits the view of all political parties in Dutch Parliament. Moreover, parties currently part of the government coalition like and support the specific approach of GreenfieldCities. They appreciate how GreenfieldCities translated the policy of reception refugees in the region of origin into a tangible concept and design of a Youth Business Campus. The GreenfieldCities concept fits the policy as outlined in the 2017–2021 Coalition Agreement hand in glove. GreenfieldCities' mission and actions are aligned with key elements of Minister Kaag's Foreign Trade and Development Aid policy.

The GreenfieldCities approach includes employing Syrian refugees currently residing in the Netherlands, giving them a meaningful job while bringing in the local perspective for the design and development of the Youth Business Campus inherently. This part of the approach also has wide support, both from Dutch national politicians as well as local governors.

Use growing Partner Momentum to Get Most out of Committed Support to Jordan

The Mafraq Youth Business Campus fulfills local needs for young Jordanians and Syrians. It offers chances for Jordanian, Dutch and EU companies and has strong support. As said before, almost 50 organizations signed for that. Amongst others GIZ and Orange are fundraising for GreenfieldCities.

Based on the positive outcomes of the feasibility and local development work and based on the need for public funding for the pop-up stage, GreenfieldCities asks the government of the Netherlands to support GreenfieldCities with development and implementation seed funding of €3 million for the next 48 months. These could be funds that are already allocated to Jordan.

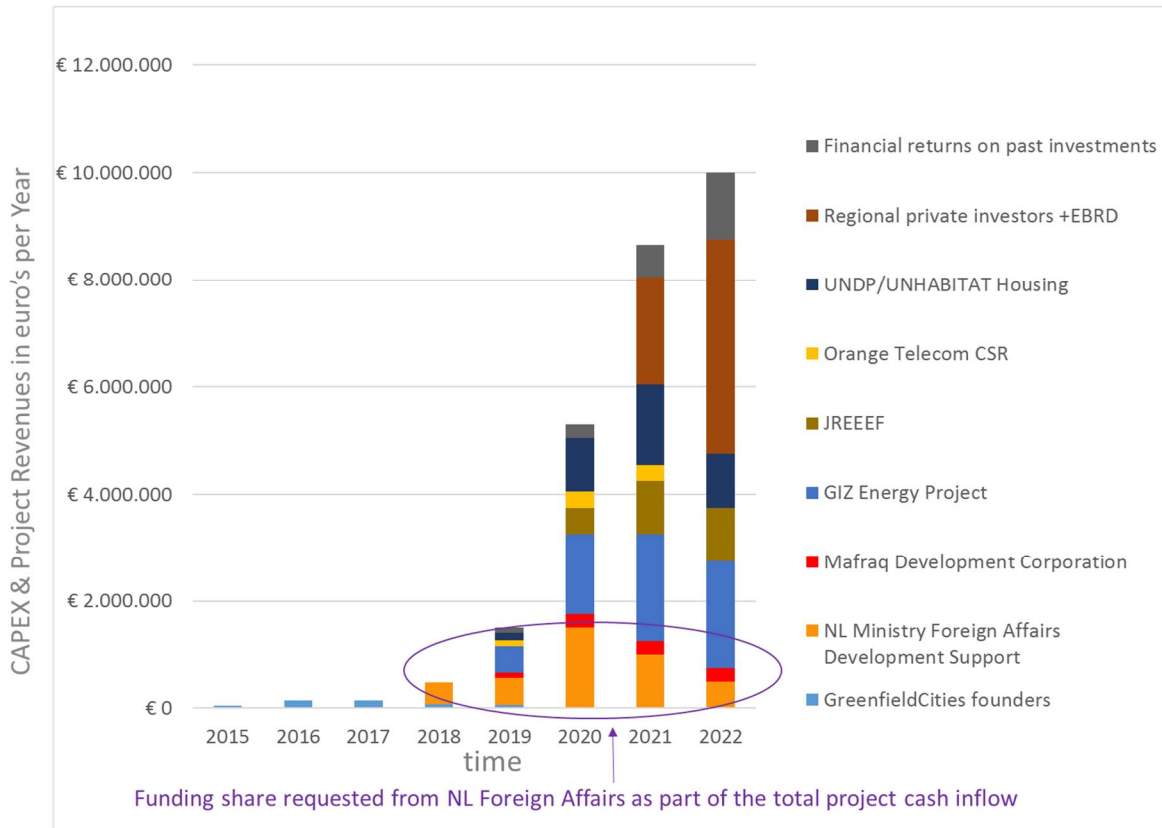


Figure 5 Financial support and development for the Youth Business Campus over time.

The orange blocks at the base of the 2019-2022 stacks shown in Figure 5 indicate the seed funding asked from the Dutch Government. Although still developing, the figure shows as well how the financial side of the project is progressing and how the transition from donor funding to private impact funding is expected to materialize. It is key to have base funding for a few years ahead to get co-funding from donors of (sectorial and/or functional) building blocks, to get private impact investors on board and to keep the project development pace high.

The feasibility study predicts substantial returns on base funding by the Dutch Government:

1. Maximizing impact for every invested Euro in terms of reaching the SDGs, in particular Economics, Climate, Environment and Gender;
2. Maximizing private financial leverage and donor co-funding with at least a multiplier of 5;
3. Maximizing opportunities for Dutch export and trade and supporting SMEs. The direct trade relationship between the Netherlands and Jordan is solid but small in terms of economic value. However, in a 1.500 km radius around Amman, the trade and business interests have value that is similar to that between the Netherlands and the US. Jordan can be an ideal stepping stone to the larger Arabic markets. GreenfieldCities intends to demonstrate this with export oriented activities involving Dutch companies such as Priva, Nijhuis Industries, Semilla, VANAD Group, CD20, Lagerwey / Enercon and Uniqa. The financial stakes in terms of additional turnover related to the realization of Youth Business Campus itself range per company from hundreds of thousands of Euros to tens of millions of Euros (Lagerwey / Enercon for instance).
4. The Youth Business Campus is an innovative concept for sustainable reception of migrants in their own regions of origin. This can help shaping the Dutch policy on migration. The concept has repetition and scaling potential and will reduce or avoid costs of reception and integration in the Netherlands or the EU.



5. Contributing to regional stability and strengthening of governance through (collaboration with) the large international IGO's and Financial Institutions;
6. The Netherlands can lead the EU policy development on migration by further developing GreenfieldCities' concept and working model.
7. Improving the effectiveness of support amongst others by measuring impact and setting benchmarks.

The requested investment is no-regret. Capacity building and education are already part of the ongoing support activities financed by the Netherlands. Because of intensive and continuous interaction with the target groups GreenfieldCities can secure for the longer term that these activities are perfectly aligned with the capability building and educational needs of the target groups. The part of the investment in infrastructure assets is also no-regret. These buildings and renewable energy and water assets provide value to Mafraq in any case. Currently all construction completed in Mafraq is absorbed by the market. By developing and building "what the local market can bear", the worst case is that the Youth Business Campus does not grow at the desired pace. The sunk investments will offer returns and impact in any case.



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List of Abbreviations

| <i>Abbreviation</i> | <i>Meaning</i> |
|---------------------|--|
| AABU | Al al-Bayt University |
| AAUC | Amman Applied University College of Hospitality and Tourism Education |
| AFD | Agence Française de Développement |
| B | Billion |
| BaU | Business as Usual |
| BHOS | Dutch Ministry for Foreign Trade and Development Cooperation |
| BIM | Building Information Modeling |
| BMU | German National Ministry for the Environment |
| BMZ | German Federal Ministry of Economic Cooperation and Development |
| BORDA | Bremen Overseas Research and Development Association |
| CAPEX | Capital expenditures |
| CBI | Dutch Centre for the Promotion of Imports from developing countries |
| COA | Central Agency for the Reception of Asylum Seekers |
| CSR | Corporate Social Responsibility |
| DCHI | Dutch Coalition for Humanitarian Innovation |
| DEVEX | DEvelopment EXpenditures |
| DFID | UK Department for International Development |
| DRIVE | Development Related Infrastructure Investment Vehicle (financial support program) |
| EBRD | European Bank for Reconstruction and Development |
| EC | Electricity Conductivity level |
| EDAMA | Jordanian Private Sector Driven Institute for Sustainability |
| EDSCO | Energy Development and Services Company |
| EE | Energy Efficiency |
| EFE | Education for Employment |
| EIA | Environmental Impact Assessment |
| EMRC | Energy and Minerals Regulatory Commission |
| EPC | Engineering, Procurement and Contracting |
| EU | European Union |
| FAO | UN Food and Agriculture Organization |
| FMO | Dutch Development Bank |
| GCF | Green Climate Fund |
| GDP | Gross Domestic Product |
| GFC | GreenfieldCities |
| GGGI | Global Green Growth Institute |
| GIZ | German Corporation for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit) |
| HAED | Jordan Hydroponic Agriculture and Employment Development Project |
| HCSS | The Hague Centre for Strategic Studies |
| IDECO | Jordan, regional power utility |
| ILO | International Labour Organization |
| IPP | Independent Power Producer |
| JEA | Jordan Engineering Association |
| JEPA | Jordan Exporters and Producers Association for Fruit and Vegetables |
| JGBC | Jordan Green Building council |
| JIC | Jordan Investment Commission |
| JOD | Jordanian Dinar |



| | |
|--------------|--|
| JREEEF | Jordan Renewable Energy and Energy Efficiency Fund |
| JRP | Jordan Response Plan(s) for the Syria Crisis |
| JUST | Jordan University of Science and Technology |
| KHBTDA | King Hussein Bin Talal Development Area |
| KS | Knowledge Station in Mafraq |
| kW | kilowatt |
| kWh | kilowatt-hour |
| LNG | Liquefied Natural Gas |
| LoI | Letter of Intent |
| LTUC | Luminus Technical University College |
| m | months |
| M | Mega |
| MDC | Mafraq Development Corporation |
| MENA | Middle East and North Africa |
| MinBuZa/DSH | Dutch Ministry of Foreign Affairs / Directorate Stability and Humanitarian Aid |
| MinEZK | Dutch Ministry of Economic Affairs and Climate |
| MinSZW | Dutch Ministry of Social Affairs and Employment |
| MinV&J | Dutch Ministry of Security and Justice |
| MoA | Ministry of Agriculture |
| MoED | Ministry of Education |
| MoE | Ministry of Environment |
| MoE&A | Ministry of the Environment & Agriculture |
| MoEM | Ministry Of Energy & Mineral Resources |
| MoFA | Ministry of Foreign Affairs |
| MoHE | Ministry of Higher Education |
| MoI | Ministry of Interior |
| MoL | Ministry of Labor |
| MoMA | Ministry of Municipal Affairs |
| MOPIC | Ministry of Planning and International Cooperation |
| MoPW&H | Ministry of Public Works and Housing |
| MP | Member of Parliament |
| MP Bundestag | German Member of Parliament |
| MVO | Dutch term for CSR: Corporate Social Responsibility |
| MVP | Minimum Viable Product |
| MW | Megawatt |
| NAPGG | National Action Plan for Green Growth |
| NARC | Jordan National Agricultural Research Center |
| NDC | Nationally Determined Contributions (for climate change mitigation & adaptation) |
| NGGP | National Green Growth Plan |
| NGO | Non-Governmental Organization |
| O&M | Operation and Maintenance |
| OSF | Open Society Foundations |
| PoC | Point(s) of contact |
| PPP | Public-Private Partnership |
| Pue | power usage effectiveness (of a data center) |
| RBK | ReBootKamp (intense software engineering training course) |
| RE | Renewable Energy |



| | |
|-----------|--|
| REACH2025 | Jordan's Digital Economy Action Plan |
| REEEL | Renewable Energy and Energy Conservation Law |
| RfP | Request for Proposal |
| RoI | Return on Investment |
| RSS | Royal Scientific Society |
| RVO | Netherlands Enterprise Agency |
| SDC | Swiss Agency for Development and Cooperation |
| SDG | Sustainable Development Goal |
| SME | Small and Medium Enterprise |
| TUD | University, Technical University Delft |
| TVET | Technical and Vocational Education and Training |
| TWEED | Training for Water and Energy Efficiency Development (GIZ program) |
| UNDP | United Nations Development Program |
| VNG-i | International Branch of Dutch Association of Municipalities |
| WEARC | Water, Environment and Arid Regions Research Center |
| WAJ | Water Authority Jordan |
| WIRE | Women in Renewable Energy |
| WUR | Wageningen University & Research |
| WWN | World Water Net |



1 Introduction

The European Union (EU) faces a circle of instability around its territory that poses a challenge for EU governments and citizens. Youth in the Middle East, Northern Africa and further southwards on the African continent face insecurity, unemployment and a lack of perspective on a better future in their countries. Many take the risk to cross the Mediterranean under life threatening circumstances to reach the EU. Countries such as Greece and Italy have to deal with the stream of mixed groups of migrants, as neighboring countries close down their borders. It turns out not to be easy to create consensus among EU member states when it comes to dealing with migrants. There is decreasing popular and political support within EU member states to offer shelter to any but the most vulnerable refugees on EU territory. Unfortunately, without strong mitigation action, more mixed migration streams to the EU can be expected from regions where the size of the population grows and migration push factors like climate change, economic hardship and/or conflicts show an increasing trend. The time is now for exploring structurally more effective migration mitigation measures in (potential) migrants' regions of origin.

The Dutch Ministry of Foreign Affairs supports innovative ideas for solutions including reception in the "region of origin" and supported GreenfieldCities with a grant in 2018 to carry out the feasibility study "Mafraq Campus Pilot Project to Help Reduce Forced Migration". In the past 12 months GreenfieldCities diligently executed work to determine if and how realization and operation of a campus concept in Mafraq would be feasible.

The method used in this study is discussed in Chapter 2. The study and plan for the campus follow the principle that solutions should be demand driven. Therefore, the reader will find ample information on stakeholder positions and opinions both in Jordan as well as in the Netherlands in dedicated sections in Chapter 3. The location of the campus, the urban planning of the site and the sketch architectural design are discussed and presented in Chapters 4 and 5. Chapter 6 discusses the results of the feasibility study; the core of this chapter are the sector business cases. In addition, the economy, education, legal and aspects are dealt with as well. Impact in Jordan as well as in the Netherlands (or EU) is presented in SDG format. As migration is high on the political agenda and reducing of migration flows through the proposed solution can only be effective if supported by politicians and government, the position and opinions of these stakeholders is explicitly assessed. Chapter 7 presents an overview of the broad embeddedness and support that GFC has realized. This includes Jordanian governmental and private sector support, Dutch institutions and companies that want to contribute to the building of the campus. Chapter 8 includes the implementation strategy, next development steps and the financial roadmap. The scalability of the campus concept is discussed in Chapter 9. Finally, conclusions and recommendations are presented in Chapter 10.



2 GreenfieldCities Mission & Strategy

GreenfieldCities' mission is to *Create safe Sustainable Cities Together* as an approach to reduce push factors for migration in vulnerable regions. GreenfieldCities believes that humanity has all the tools to do so, and the only thing we need to figure out is how to access and apply these tools in an effective approach.

GreenfieldCities (GFC) translated its mission to a so-called minimum viable product (MVP) and identified a "beachhead market" to launch that product. The MVP is a Youth Business Campus for 1.500-2.500 young people and the "beachhead market" is Mafraq in Northern Jordan, a governorate close to the Southern Syrian border.

GFC aims to help to turn Jordan into the most admired sustainable growth engine of the region. It is clear that this cannot be done without Jordanian and international partners that already make an impact in Jordan every single day. Despite all these great efforts, GFC believes that it is possible to add an approach that includes existing efforts and that significantly helps transitioning from aspirations to implementation, from donor funding to impact investor financing and from short-term to long-term impact.

It may be best and easiest to use an example to illustrate why the window of opportunity is wide open. When the GreenfieldCities founders started working in renewable energy 27 years ago, most friends told them not to waste our time on something that had little merit and lots of problems. Renewable energy was something for environmentalists and it would go nowhere. The opposite appeared to be true. Stepping out of mainstream development meant entering a world of very dedicated and often brilliant people. Twenty-five years later, most people agree that renewable energy is mainstream. The numbers speak for themselves. Since 2008, every year, more investment flows into renewable electricity than into coal and natural gas power plants combined.



Figure 6 The wind energy learning curve.

The renewable energy business case became unbeatable in terms of risks and rewards, both for large and small-scale projects. Costs came down and transition from public donor funding to private funding was achieved. Moreover, assets like wind turbines, once established are fixed, and



cannot leave a community or country. This helps to create stability, energy independence and reduces macro-economic vulnerabilities. Communities can share the benefits of projects (lower costs, reliable income, additional income source farmers, etc.). Within 25 years, in a true triple helix effort³, societies all over the world learned how to slash the barriers to renewable energy value creation (social, technological, financial). The best news is that these lessons (or learning curves) apply to many sectors and in virtually all places on earth.

GFC claims that the renewable energy case can benefit both Jordanian as well as Syrian youth and Europe in a broader way. A broader way, because sectors like water, waste, ICT and mobility go through similar successful transitions. All these transitions are complex, but success is possible, virtually everywhere as long as one succeeds in:

- Demonstrating the business case;
- Aligning stakes between generations and sectors;
- Committing long-term.

Add to this that different from the 1990s, in many cases, a small-scale as such, is not a barrier anymore for starting up initiatives thanks to widespread availability of social, technological and financial resources and tools. Like the energy transition, the migration challenges require innovative approaches and the energy transition is an inspiring example.

When starting the feasibility research in Jordan, GFC noticed that many donor-, government- and some private sector investments and efforts are already being executed in Jordan. Despite these efforts, many of the projects are relief-based, single-dimensional and focus on short-term impact, while Jordan is in need of approaches that work across sector lines and commit to long-term inclusion and operation to revitalize the economy. If one could bundle existing efforts in an environment where globally competitive labor productivity is the norm, this could help to retain talent, and attract businesses and investment. The good news is that some urban areas in the world have these conditions that draw many people, businesses and investments to such places. The challenge is, however, to create more of such places in Jordan and other regions of origin, especially in areas that struggle with youth unemployment and climate change-related issues.



Figure 7 Challenge how to get from an empty lot in Northern Jordan to a buzzing social-economic place that attracts people, businesses and investment.

Creating vibrant urban environments is ambitious, but kick starting the process towards such places is possible by starting with a small district, a Youth Business Campus. A Youth Business Campus is an enabling environment where young people can live, learn and work under enabling conditions to shape their own perspective for the future. Especially in countries with a young

³ Triple helix innovation model: a set of interactions between academia, industry and governments, to foster economic and social development.



population, offering perspective to the 18 to 35 years old seems a table stake issue for the legitimacy of the leadership in such countries. Additionally, the last years have shown that many young people in such countries decide to leave their regions of origin in search for a better perspective in other areas.

The combination of a growing young population that cannot find decent jobs and climate change in fragile areas puts additional pressure on the available public donor and philanthropic resources. Overall, the scale of this global challenge at hand trumps the available resources in the financial public donor and philanthropy pool many times over. This means that within the current global governance and capital system, viable solutions must include a transition mechanism from donor funded seeding to impact investor funded growth.



Figure 8 Six key sectors selected based on the feasibility study research.

With this in mind, GFC started researching the potential for a Youth Business Campus in Mafraq, a governorate that is severely impacted by the Syrian crisis. In the past 12 months, GFC found opportunities for developing a feasible core for the campus around 6 sector cases: ICT, Hospitality, Agriculture, Construction, Energy, and Water. The first 5 cases ultimately offer strong opportunities for the private sector and impact investment. The Water case is an existential table stake case that is not financially feasible for private sector yet.

In Section 6.3, GFC elaborates on the cases and explains how they will re-inforce each other in multiple ways. GFC also explains the sketch design for the campus, including a step-by-step approach for implementation and the transition from donor funding to impact investment funding. During the workshop in Amman on November 18th 2018, GFC presented these results and discussed with almost 90 stakeholders how to align and strengthen each other's activities.

Ultimately, GFC aims to develop, build and operate the campus. The first infrastructure could be in use by early 2020. By 2020-2021, GFC will showcase how to gradually reduce donor dependence and increase private sector investment and export potential. While starting small, the Youth Business Campus develops and grows step-by-step to reduce risks.



2.1 Feasibility Study Methodology

The goal of the feasibility study is to assess with high levels of confidence if, and how the Youth Business Campus in Mafrqa can be realized. The feasibility study is shaped by the Jordanian context. Because of the huge international attention, the availability of plans in different sectors is enormous. Also, the long-term track record of project implementation challenges offers a rich source of data. These implementation challenges contribute amongst others to a perceived high country risk by private (impact) investors, which means that GFC has to show 'proof of concept' based on donor funding. To complete the readily available information, GFC has done field research in Mafrqa and other areas of Jordan to collect information directly relevant for the Youth Business Campus. All this information was analyzed and used to solicit feedback from stakeholders, (re)shape the concept, generate interest and develop partnerships.



Figure 9 Feasibility Study Approach.

This feasibility study is executed differently from a classical feasibility study in the sense that a classical feasibility study tests a given proposition for a certain market or environment. Due to the newness of the concept, GFC needed to build flexibility into the concept itself to be able to find an optimal fit for the Youth Business Campus in Mafrqa vis-à-vis a myriad of strategic plans for the country, a 'jungle' of donors, ongoing development projects and a complex national, local, and tribal leadership reality. Another difference with a classical feasibility study is the inclusion of the project into the local society to test the concept and secure support from local and international stakeholders. This meant amongst others that GFC opened an office in Mafrqa and hired local people to be able to do research locally to increase stakeholder understanding, feedback and engagement. It meant designing it in Mafrqa and working together with Jordanian and Syrian university students. Finally, due to GFC's focus on long-term managing the campus, instead of (theoretical) economic sector modelling, real life partnership creation in at least 6 sectors was explored to test the viability of the concept. Meetings and workshops invariably had a key question: under what conditions are you willing to be part of the Youth Business Campus?



Figure 10 Ongoing and repeated stakeholder consultations are an important part of the GFC Feasibility Study approach.

The initial part of the study consisted of carrying out a stakeholder analysis and assessing the current social-economic situation, needs and opportunities in Mafraq. Working from Mafraq allowed GFC to complement studying reports and plans with interviews and focus group discussions with stakeholders on several levels and from different sectors such as ICT, Construction, Agriculture, Hospitality, Energy, Water, Education, Logistics, Retail, and Healthcare. Gradually, the strengths, weaknesses, threats and opportunities of the various sectors in Mafraq became clear. Based on the study results, sector cases were developed for the Youth Business Campus. The foreseen sector activities can help resolving some of the key issues in these sectors, while creating high value jobs for young Jordanians and Syrians. By visualizing these cases in sector specific slide decks, brochures, and in a sketch design, it became possible to gather high-quality feedback and support while increasing the level of confidence in the feasibility study outcomes.



Figure 11 Following up after the November 18th workshop with the Women Committee of the Jordanian Parliament.

Towards the end of the study, the aim was to gradually translate the stakeholder consultation credits into the first statements of tangible support. One example out of the many results of this approach is the support by Dr. Reem Abu Dalbough, the chair of the women committee of the



Jordanian Parliament. She stated on national television⁴ that she was impressed with the efforts of GFC to extensively consult young women from Mafraq as part of the feasibility study for the Youth Business Campus. All Parliament Members of the Women's Committee discussed the approach with GFC and helped to further shape the women empowering conditions in the design of the Youth Business Campus.

2.2 Step-by-Step Approach Youth Business Campus

To mitigate risks and to allow GFC designers, developers, and management to learn, GFC decided to develop, build and manage the Youth Business Campus in a step-by-step, three staged approach:

- I. *Pop-Up*: offers places to work, learn/study and live for approximately 100 to 250 young Jordanians and Syrians. To enhance flexibility and to mitigate risks even further, it will be easy to move the campus to another location. In the pop-up stage, the concept as has been developed in this study, will be proven.
- II. *Touch-Base*: offers places to work, learn/study and live for approximately 500 to 1000 young Jordanians and Syrians.
- III. *Fully Developed*: offers places to work, learn/study and live for approximately 1500 to 2500 young Jordanians and Syrians.

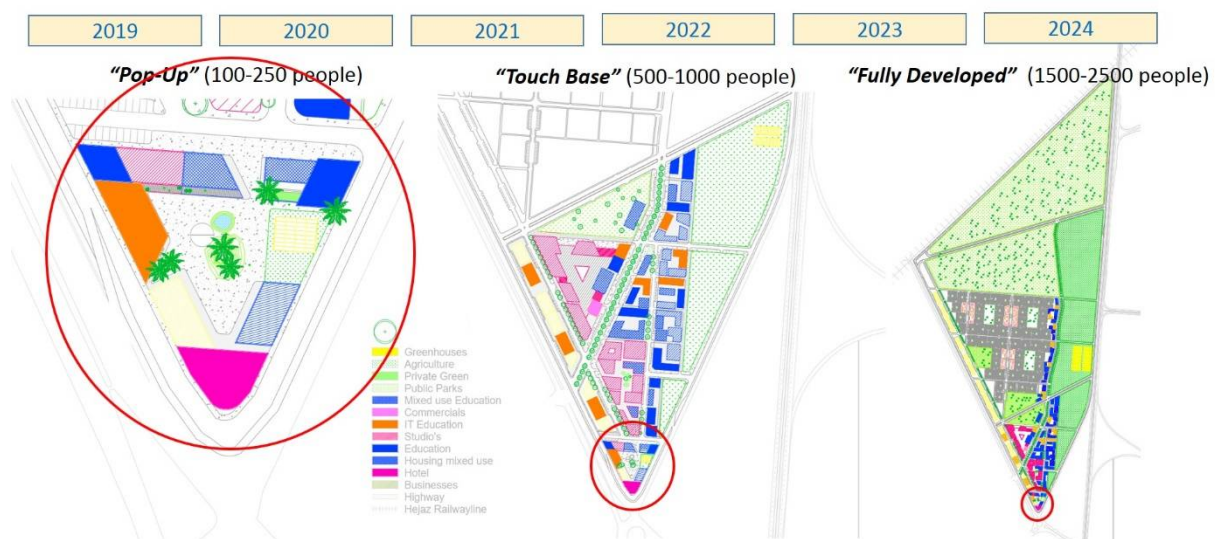


Figure 12 Stages of Development with the Pop-Up stage on the left.

⁴ <https://www.greenfieldcities.org/in-the-news/jordanian-parliament-support-for-greenfieldcities-broadcasted-on-national-tv/>



3 Stakeholder Analyses and Interaction

The GFC approach is a collective Public-Private Partnership (PPP) approach that requires alignment between public- and private stakeholders to make the concept work. In addition, the approach has not yet been implemented in Jordan, which makes the stakeholder analysis crucial to identify key stakeholders, their interests and their position towards the pilot project. The outcomes of the analyses are used to interact with these stakeholders in such a way that chances on development, construction and operation of the Youth Business Campus are maximized and risks minimized; in other words: increase the chance on a feasible pilot project in Mafraq.

The working method of the stakeholder analysis includes:

1. The identification of stakeholders;
2. The preliminary categorization of stakeholders;
3. The interactions with stakeholders;
4. The analysis of stakeholder importance for the project (a), the level of support for the GFC project (b) and the level of interest of the project for the stakeholder itself (c);
5. The analysis of the position of stakeholders based on the latest information and interaction with stakeholders.

The results in this report are a 'freeze' in the time, because the stakeholder involvement and analysis is a continuous process of (new) interactions and relationship management with stakeholders through meetings, interviews, smaller workshops, the Mid-Term workshop and the development of joint concept notes and proposals. This means that GFC continuously measures indicators a, b and c to be able to assess the position of stakeholders in relation to GFC and the Youth Business Campus project. The outcomes of this assessment inform GFC on the position of key stakeholders and the selection of appropriate engagement- and influencing strategies.

GFC uses the following framework to assess the position of stakeholders towards GFC and the Youth Business Campus project (as is illustrated in Figure 13):

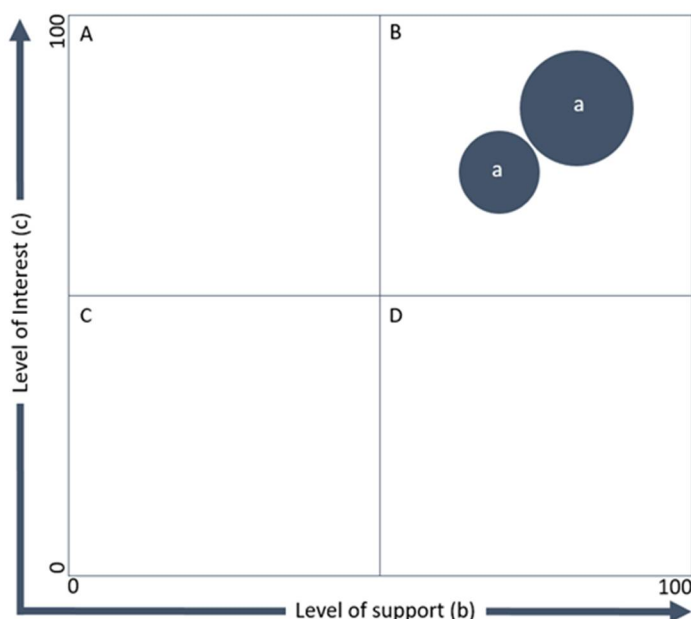


Figure 13 Sample of stakeholders positions towards YBC.

The framework has two axes (b, c) and as many circles (a) as there are stakeholders:



- a. Level of influence (1-5): the extent to which a stakeholder can influence the success of the project. This depends on the amount of power of a stakeholder in the Jordanian context, the level of dependence of the project on the stakeholder and the potential of the stakeholder to block the project. The larger the circle, the more influence a stakeholder has on the success of the project. GFC calls stakeholders with high scores for this indicator: 'key stakeholders';
- b. Level of support (0-100%): the extent to which a stakeholder supports the pilot project. The more a circle (stakeholder) stands to the right of the horizontal axis, the higher the level of support for GFC and the project;
- c. Level of interest (0-100%): the extent to which a stakeholder has a possible (value at) stake in the project. This depends on the level of impact the project can have for the stakeholder, the interests and drivers of the stakeholder and the way the stakeholder can contribute to the project. The more a circle (stakeholder) stands to the top of the vertical axis, the higher the stake in the project.

After the measurement of indicators a, b and c, stakeholders will be placed within one of the four quadrants of the framework (A, B, C and D). This informs GFC about the position of stakeholders towards the project.

Quadrant A: Stakeholders in this quadrant are not supportive towards the project, but have a high stake or level of interest. These stakeholders are 'risks' for the project and GFC actively needs to engage to get these stakeholders out of this quadrant, especially if stakeholders are influential to the project (large circle).

Quadrant B: Stakeholders in this quadrant are supportive towards the project and have a high level of interest in the project as well. These stakeholders are the 'partners' or 'friends' of the project. Key stakeholders for the project should be located in this quadrant. If not, GFC has to apply an appropriate engagement and influencing strategy to change the position of the stakeholders.

Quadrant C: Stakeholders in this quadrant are not very supportive towards the project and have little interest in the project. These stakeholders are 'irrelevant' for the project.

Quadrant D: Stakeholders in this quadrant are supportive towards the project, but have little interest in the project. These stakeholders are 'endorsers' of the project.

Depending on the categorization of stakeholders in quadrants A, B, C or D, GFC applies several strategies to engage:

Quadrant A: This is an unfavorable position of a stakeholder, especially if the stakeholder has a high level of influence on the success of the project. GFC tries to change the position of the stakeholder in this quadrant by influencing their level of support. It requires active relationship management. GFC does this through meetings and using its Advisory Board with motivated and dedicated individuals who can be mobilized to initiate relationships, solve problems with stakeholders and advocate on behalf of GFC.

Quadrant B: This is the most favorable position of a stakeholder. GFC aims to keep important stakeholders in this quadrant, actively inform them about progression of the project and conduct active relationship management.

Quadrant C: If a stakeholder appears in this quadrant, the stakeholder is not very relevant for the project. GFC just informs the stakeholders in this quadrant when there is a possibility to inform, but there is no active relationship management needed.



Quadrant D: This is a favorable position of a stakeholder, because the stakeholder will at least endorse and not object the project. However, caution is required to keep the stakeholder supportive and therefore some relationship management is needed.

Section 3.1 analyses the Jordanian stakeholders. Since the Youth Business Campus will be located in Jordan, most stakeholders are in Jordan. Section 3.2 analyses the Dutch and EU stakeholders. These stakeholders are important for the pilot project, because the YBC also aims to serve as a proof of concept to help reducing and managing migration to the Netherlands and to the EU and vice versa (circular migration).

3.1 Stakeholder Analysis Jordan

The identification of stakeholders (1) has resulted in a categorized list of stakeholders (2) that GFC has interacted with in the Jordanian playfield (3). GFC categorized these stakeholders in six groups:

1. *Jordanian public sector:* this is a group of Jordanian governmental entities that have a focus on sector specific policy development and regulations (e.g. granting permits). This project needs to comply with policies of these stakeholders and if possible, become an integrated part of their plans. The latter can even help to access funding from the international community. Alignment is necessary with Jordanian ministries with large political capital and entities that can potentially stop the project. Stakeholders within this group provide permits to realize and operate the Youth Business Campus.
2. *Education Providers:* this group consists of educational institutes such as universities, community colleges and TVET providers that are operating in Jordan or aim to operate in Jordan. The universities have helped GFC during the feasibility phase with the sketch design, the provision of data and access to students for research purposes. They are potential users and 'clients' of the Youth Business Campus, which implies that GFC concludes rental agreements with these institutes, depending on the nature of the collaboration.
3. *Private sector businesses:* this group includes local-, regional- or international companies (SMEs and large companies) that operate or aim to operate in Jordan. They seek high quality infrastructure and services for a reasonable price, access to market (services), high-skilled employees, liaison services to (local) public sector entities and increasingly (CSR) driven ways to combine business benefits with (societal) impact. With these partners, GFC works on business partnership agreements. These can be rental agreements, marketing and sales agreements, (impact) investment brokering and consulting and project management services. This group will be crucial for the creation of sustainable jobs and financial sustainability of the Youth Business Campus and its projects. These entities are 'clients' for the GFC business model; they pay rents and service fees for the utilization of (GFC managed) infrastructure.
4. *Donors, impact investors and fundraising partners:* this group consists of international donors, governments and impact investors interested and/or operating in Jordan. Donors seek programs and projects that generate impact. Impact investors seek programs and projects that generate both financial returns and impact. For the start of the project, GFC requires donor funding to show 'proof of concept'. After the concept has proven itself on a small scale, impact investors can make the project grow with investments. Increasing impact often requires a long-term local commitment and branching out into local public and private sector actors. Because GFC is in Mafraq for the long run and because it has its focus on reinforcing the local economy by actually building and utilizing sustainable infrastructure, it can help these partners to get more impact out of every euro or dollar invested. Funding partners consist of NGOs, CBOs, associations and private sector partners with whom GFC partners in consortia to access funding from donors. GFC is a relatively young organization that has to prove itself. To apply



for grants and other funding sources, GFC needs therefore well-established partners. GFC attracts those entities by seeking alignment with existing and upcoming initiatives and initiating the development of concept notes and proposals for joint projects relating to the sectors and functions of the Youth Business Campus.

5. *a. Target group:* this group consists of the future citizens of the Youth Business Campus: Jordanian and Syrian youth, female and male, 18-35 years old. Members of the target group are both beneficiaries and 'clients' for the project, thereby essential for impact and financial sustainability of the Youth Business Campus.
b. Local residents: this group consists of the whole population of Mafraq Governorate, except for the target group. These people are random community members, community leaders, family members and relatives of members of the target group. They need to trust and accept the project to avoid rejections from the community.
6. *Advocacy entities and interest groups:* this group consists of (sectorial) associations and entities that advocate for the interest and rights of certain groups of people, the private sector or a whole sector. GFC seeks support from these entities to help aligning with the interests of members, attracting private sector partners, advocating on behalf of the project at the governmental level and accessing donor funding.

After the categorization of stakeholders in groups, GFC translates the outcomes of its interactions with stakeholders in indicators a, b and c (4) and identifies the position of stakeholders towards the project (5).

3.1.1 Jordanian public sector

The three governmental entities that are most important for the project include the *Mafraq Development Corporation (MDC)*, the *Jordan Investment Commission (JIC)* and the *Ministry of Planning and International Cooperation (MOPIC)*.

MDC is the master developer of the KHBTDA and has the task to maximize the zone's economic potential by attracting investment and creating training- and job opportunities in the KHBTDA for people from Mafraq. As the Youth Business Campus is planned to be located in a Development Zone (KHBTDA) with its own governance structure and board, the main governmental partner of GFC and governmental project owner is MDC. The level of influence of MDC on the project is very high (5), because MDC is the responsible entity for the conclusion of the land-lease- and development agreement between the Jordanian government and GFC, and the installation of the basic infrastructure at the Youth Business Campus site. MDC has a direct connection to the Prime Ministry for approval of this deal. The land around the KHBTDA is all owned by the Jordanian military, but the military itself is not involved in the project [MDC, 27-06-2018]. Since MDC is used to work with investors that already have capital and an investment plan once they approach MDC, it required time to make MDC familiar with the GFC approach (donor funded start and transition towards impact investment growth). Currently, the level of support for the project is very high (100%) since interests between MDC and GFC (100%) are aligned. Both aim to attract direct foreign investment and private sector to Mafraq. Nayef Al-Bakheet, CEO of MDC, expressed his endorsement for the plans of GFC as speaker during the GFC Mid-Term workshop [van Beek et al. 2019]. MDC also expresses its support in the form of a letter to request approval for the project from Jordan's Prime Minister (see Annex 1) and a support letters to H.E. Sigrid Kaag, Minister for Foreign Trade and Development Cooperation of the Kingdom of the Netherlands and GFC (see Annex 2). The Prime Ministry responded positively to the request of MDC (see Annex 3). These factors place MDC in quadrant B.



JIC falls under the Ministry of Investment and is the regulator of the KHBTD and other Development Zones in Jordan. JIC has the role to facilitate investments in Jordan and has an office with representatives from all the relevant ministries for investors (such as GFC) to facilitate the incorporation and permitting process. JIC deals directly with MDC, not with GFC. The level of influence of JIC on the project is high (4), because JIC grants permits for the project masterplan and project implementation through MDC. The level of interest of JIC in the project is high (75%), because of their interest to attract investment to Jordan. The lack of guaranteed funds for GFC makes them a bit passive. However, the level of support is high (80%). GFC coordinates with Mr. Fareedon Hartoqa, Secretary-General of JIC. During a technical meeting with himself and his technical team, the masterplan for the pop-up phase of the Youth Business Campus was verbally approved. The other phases of the Youth Business Campus would require a more elaborate assessment in coordination with JIC [JIC, 05-02-2019]. The Ministry of Investment has written a letter to the Prime Ministry in favor of the project (see Annex 4). These factors place JIC in quadrant B.

MOPIC is a very powerful Jordanian ministry responsible to regulate international donations and projects in Jordan. The ministry has to request technical feedback from other line ministries for a project, except for if the project is a national priority (see Section 8.2) [MOPIC, 21-04-2019]. MOPIC does not regulate investments in Development Zones. However, due to the project approach (donor funded start), MOPIC has to approve the donor funded start of the Youth Business Campus [MDC & MOPIC, 25-07-2018]. That is why a good relationship and compliance to its policies such as the Jordan Response Plan (JRP) are important. This makes the level of influence of MOPIC on the project very high (5). MOPIC can be placed in quadrant B, because of the high levels of interest (80%) and support (80%). There were several representatives of MOPIC present during the Mid-Term workshop and there is a no-objection letter from the ministry directed to the Prime Ministry (see Annex 5). The Minister, HE Dr. Mary Kamel Kawar, expressed that she supports the project and sees a fit with MOPIC's SDG-approach [MOPIC, 11-11-2018]. Mr. Awwad Harahsheh, Head of Energy, Industry and Environment Division, is the focal point for GFC within MOPIC. An institutionalization process in local- and national policies has started. Due to the fact that the Youth Business Campus is the first development aid project in a Special Economic Zone [JIC, 7-3-2019], MOPIC and MDC were brought to the table by GFC to discuss how this project should be coordinated. The outcome of the meeting is that MDC is the project owner on behalf of the Jordanian government, but that MOPIC approves international donor funding and aims to monitor the project every six months [MOPIC and MDC, 25-7-2018]. A technical committee will be set up in due course.

MOPIC advised GFC that good relationships with the following Jordanian ministries are relevant for the project [MOPIC, 04-06-2018]:

- Ministry of Energy & Mineral Resources (MoEMR);
- Ministry of Water & Irrigation (MoW&I);
- Ministry of Labor (MoL);
- Ministry of Interior (MoI);
- Ministry of Environment (MoE);
- Ministry of ICT (MoICT);
- Ministry of Agriculture (MoA).

Ministry of Energy & Mineral Resources (MoEMR)

MoEMR is a powerful Jordanian ministry that develops policies and regulates the Jordanian energy sector in collaboration with the Energy and Minerals Regulatory Commission (EMRC). The latter sets standards for renewable energy projects in Jordan. NEPCO is the national energy transmission



company, whereas IDECO is the distribution and sales company for Irbid and Mafraq Governorates [EMRC, 25-6-2018]. As the renewable energy installation of the Youth Business Campus will be below 1MW, GFC does not need permits from EMRC and NEPCO. MDC needs to coordinate with IDECO to connect the Youth Business Campus to the grid [EMRC, 14-8-2018]. The relationship with MoEMR is important (4) due to the ministry's influence on permits for the implementation and replication of innovative renewable energy solutions such as smart-grid, energy storage and grid integration. This will become important for the implementation of the energy 'building block' of the Youth Business Campus (see paragraph 6.3.4.2) for which GFC and GIZ jointly are looking for funding. Private sector sustainability advocacy EDAMA has a strong link to MoEMR. EDAMA supports the efforts to build capacity in the energy sector through the implementation of innovative energy solutions (see Annex 6) and aims to help GFC with its direct line to and strong lobbying capacity within MoEMR [EDAMA, 24-02-2019]. In addition, GFC had positive meetings with Yacoub Marrar, Director of Renewable Energy of the MoEMR [MoEMR, 19-06-2018; MoEMR, 15-08-2018], and with Catalyst Group and Millennium Energy Industries as private sector endorsers with strong links to MoEMR (see Annex 7) for the project implementation in the energy sector. The levels of interest (75%) and support (100%) of MoEMR are high, translated into the verbal approval of the CEO and Board of the Jordan Renewable Energy and Energy Efficiency Fund (JREEEF), as part of MoEMR, to leverage donor funding for the joint GIZ-GFC project proposal [JREEEF & GIZ, 11-02-2019; JREEEF, 20-03-2019]. GFC and GIZ have jointly requested support from JREEEF in the form of a letter (see Annex 8). These factors place MoEMR in quadrant B.

Ministry of Water & Irrigation (MoW&I)

MoW&I is a powerful Jordanian ministry responsible for policies and regulations in the Jordanian water sector, together with the Water Authority Jordan (WAJ) that also has a branch in Mafraq [WAJ, 24-07-2018]. Yarmouk Water Company with its headquarters in Irbid is owned by WAJ and responsible for groundwater pumping, transferring and selling of water in Mafraq Governorate [Yarmouk Co., 23-9-2018]. Water harvesting and wastewater treatment are under the responsibility of MoW&I [MoW&I, 07-03-2019]. The level of influence of MoW&I on the project is high (4) as MDC coordinates with MoW&I about permits for the implementation of water infrastructure and innovative water solutions for the Youth Business Campus. It was expected that the level of interest of MoW&I would be very high due to the water shortages of Mafraq Governorate. Representatives of MoW&I joined the Mid-Term workshop and interest seems reasonable (70%), but the level of support for the project was low (20%). This placed MoW&I in quadrant A. The low level of support was caused by a presentation in the early stages of the study of the premature water management plans that did not fit the Jordanian context [MoW&I, 07-03-2019]. Those plans included the treatment of black water to drinking water quality. During the feasibility study, the water management plans were adjusted according to feedback of MoW&I, WAJ, Yarmouk Water Company, BORDA, Cewas Middle-East and water experts of the Al al-Bayt University and Hashemite University. The water business case focuses now on water harvesting and the treatment of grey wastewater for greening and Agri-Food purposes, and is now in line with current policies and regulations of MoW&I (see paragraph 6.6.2.3 for legal aspects in the water sector).

GFC recently presented its adjusted plans to HE Ali Subah, the Secretary-General of MoW&I, who expressed his support for the project on behalf of MoW&I [MoW&I, 07-03-2019]. After this meeting, GFC was introduced to several water engineers of the ministry to further assist in the development of the water management plans of the Youth Business Campus. Despite this improvement in level of support, GFC estimates that the position of MoW&I is still located in quadrant A (70% interest, 40% support) and will focus its efforts moving MoW&I more to the right side into quadrant B.



Ministry of Labor (MoL)

MoL is a powerful Jordanian ministry responsible for policy and regulations regarding the Jordanian labor market and the Technical and Vocational Education and Training (TVET) sector. The level of influence of MoL on the project is high (4), because the ministry is responsible for labor quota and employment permits for Syrian refugees. It can be stated that the inclusion of Syrian refugees in projects means a red flag for MOL. The attention for the Jordanians needs to be significantly higher to have the attention of MoL [MoL, 16-12-2018]. It means a potential hurdle to obtain permits for entities that want to include them in the labor force. Enterprises as established by Syrian refugees in Luminus' Shamal Start incubator face difficulty to obtain permits. [Luminus Shamal Start, 18-04-2018]. However, MDC expressed that they will endeavor to facilitate the inclusion of Syrians in the Youth Business Campus [MDC, 31-05-2018]. The level of support from the MoL for the project seems fine (75%), but the level of interest is measured to be low to medium (35%) due to the involvement of Syrians in the project. GFC has met several employees of the MoL, including HE Sameer Saeed Murad (Minister) [MoL, 16-12-2018], Mohammad Kher Rshed (Head of Policy Unit) [MoL, 13-08-2018] and Hamdan Yacoub (Head of Syrian Refugees Unit) [MoL, 26-09-2018] in order to align the job creation and TVET strategy of the Youth Business Campus with the policy of MoL. Discussions with MoL were positive and indicated that there is excitement about the job creation element of the project. It also indicated that there is some freedom to 'play' with the percentages of Syrian refugees in the six sectors of the Youth Business Campus. For example; the labor quota in the hospitality sector are more favorable for Syrians than the quota in the ICT sector, which means that these two sectors could compensate each other to achieve the involvement of a certain number of Syrians at the Youth Business Campus [MoL, 26-09-2018]. This places MoL in quadrant D.

Ministry of Interior (Mol)

Mol is represented in Mafraq Governorate by the Governor of Mafraq. Mol is a powerful ministry responsible to enforce law and order in Jordan and to direct institutions such as the civil defense. The Mol on the level of Amman has expressed its support (80%) for the project, but also stated that the responsibility for the project is in the hands of MOPIC (see Annex 9). This makes the level of interest low to medium (35%) and places Mol on the level of Amman in quadrant D. At the level of the Governorate, the Governor is concerned with public security, services and the interest of the citizens [Governor of Mafraq, 08-04-2018]. The Governor chairs the *Governorate Council of Mafraq*, consisting of the Governor and Governorate directors of Mafraq such as the Dir. of Agriculture, Dir. of Environment and Dir. of Water & Irrigation. The Governor works together with the Mafraq Decentralized Council to develop the *Strategic and Executive Plan for Mafraq Governorate 2019-2021 (GDP 2019-2021)* and initiate budget allocations. The Mafraq Decentralized Council is a result of the 2015 Investment Law and consists of 43 elected members representing all districts of Mafraq Governorate for a period of 4 years. The Mafraq Decentralized Council approves and monitors budget allocations, and represent and facilitates the interests of citizens of Mafraq on the level of the Governorate [Mafraq Decentralized Council, 02-04-2019].

The level of influence of the Governor on the project is medium (3), because the project is located in the KHBTDA. This implies that GFC does not have to deal with the Municipality of Mafraq or the Governor of Mafraq, because MDC and JIC are the competent authorities of the KHBTDA [JIC, 05-02-2019]. However, if the Governor's office foresees any security concern, it has the power to interfere in the project. The Governor generally has a facilitating role for GFC in Mafraq and for example personally arranged an office for GFC in the city center of Mafraq in Spring 2018. So far, the level of support from the Governor for the project is very high (90%). The level of interest is



high (90%), because the project aligns with the Governor's interest to create jobs and attract investment to Mafraq Governorate. The project also fits well in the Economic and Social Development Objectives of the GDP 2019-2021. GFC tries to get institutionalized in these plans via Dr. Abdel-Majeed, Head of the Local Development Unit of the Governor's office. In addition to this institutionalization process, GFC works with UNHCR Mafraq to become part of a project-pipeline in which operating entities in Mafraq bundle forces together to initiate projects based on identified gaps in the GDP 2019-2021. The Governor has written a support letter for the Youth Business Campus (see Annex 10).

In addition to the Governor's support, GFC has the full support (90%) of the Mafraq Decentralized Council (see Annex 11). Obtaining the buy-in of the Mafraq Decentralized Council was a request by HE Mary Kamel Kawar, Minister of Planning and International Cooperation [MOPIC, 11-11-2018]. GFC aims to include the Decentralized Council in the management of the Youth Business Campus to develop their capacities. This will help this Council to obtain more credibility and therefore more decision power. This makes the level of interest of the Mafraq Decentralized Council very high (100%). The level of influence of the Decentralized Council will become higher over time as GFC will gradually hand over management tasks of the Youth Business Campus to its members to build management capacity. The Youth Business Campus can fulfil the need of the Mafraq Decentralized Council for a new office building for the second period of the Council. The current space in the Governor's office building is too small. Preliminary reactions from Council members about this idea were positive [Mafraq Decentralized Council, 02-04-2018].

Ministry of Environment (MoE)

MoE is a ministry with dedicated and professional staff, but limited political capital. *MoE* is responsible for policies and regulations on the conservation of the ecosystems, pollution, climate change, environmental protection and partnerships with the private sector to mainstream environmental subjects [GGGI, 18-03-2019]. The level of influence of *MoE* on the project is low (2) due to the limited political influence of the ministry, but MDC has to deal with *MoE* to execute an Environment Impact Assessment (EIA). GFC collaborates with *MoE* on three levels:

1. The Global Green Growth Institute (GGGI) and *MoE* have developed a National Action Plan for Green Growth (NAPGG). The Youth Business Campus is perceived by GGGI as a promising 'green growth' project for the NAPGG project-pipeline (see Annex 12). A meeting with the focal point from *MoE* for this plan is Dr. Jihad Al Sawair, Director of Green Growth, was positive [*MoE* & GGGI, 26-11-2018].
2. The Jordan Environment Fund (JEF) aims to help in the achievement of Jordan's climate change goals and commitments. Shada El Sharif, Director of JEF, is an endorser of the project and has verbally expressed the willingness to contribute by leveraging donor funding on aspects related to climate change mitigation and adaptation, especially in the Water and Agri-Food sectors of the Youth Business Campus [*MoE*, 17-01-2019].
3. The NDC Action Plan (NAP) aims to identify and promote initiatives that contribute to Jordan's NDC commitments. The project fits well to the NDC's climate change mitigation and climate change adaptation policies. A first conversation about inclusion of the project within the NAP was received positively by *MoE* [*MoE*, 17-01-2019]. Conversations are ongoing with Belal Shaqarin, Director of Climate Change Directorate, and Awwad Harahsheh, Head of Energy, Industry and Environment Division of MOPIC.

When looking at the levels of collaboration between GFC and *MoE*, the level of support for the project is high (75%). Regarding the level of interest, *MoE* representatives joined the Mid-Term workshop and the project aligns very well with the NAPGG. It could help *MoE* with a success story



that would therefore increase its political capital. The level of interest is therefore very high (85%). Despite the support, some MoE representatives believe that the potential CO₂-reduction of the project is still too small [MoE, 17-01-2019]. These factors place MoE in quadrant B.

Ministry of ICT (MoICT)

MoICT is a Jordanian ministry with medium political capital responsible to set policies and regulations for the ICT sector. The level of influence of *MoICT* on the project is medium (3). There are no specific permit needs from *MoICT*, but the ministry can promote the project on a national level due to the relevance of the ICT sector for economic development. The level of interest of *MoICT* in the project is medium (50%), because the project does not yet create jobs and does not directly work with the ICT Knowledge Station (KS) in Mafrq (see chapter "Education"). GFC believes that the competitive advantages of the Youth Business Campus will attract private sector, but it requires some time to develop trust in Mafrq before private sector employers will create the needed ICT jobs. In addition, collaboration with the ICT Knowledge Station in Mafrq is still possible in the future. The level of support of *MoICT* for the project is very high (85%). The project aims to create ICT jobs in a Governorate, HE Dr. Mothanna Gharaibeh was present at the Mid-Term workshop himself and meetings with HE Nader Thneibat (SG) and Dr. Nael Adwan, Director of the Investment, resulted in useful inputs and connections to IT companies [MoICT, 27-05-2018; MoICT, 28-05-2018; MoICT, 27-06-2018; MoICT, 05-08-2018; MoICT 24-09-2018; MoICT, 03-12-2018]. *MoICT* stated in a recent e-mail [MoICT, 22-01-2019] to "believe that we can continue the current cooperation ... the ministry will always support you and help to achieve your ultimate success". *MoICT* is located between quadrant B and D and at least endorses the project.

Ministry of Agriculture (MoA)

MoA is a Jordanian ministry with limited political capital, overseeing a small sector that only contributes 2% to the economy but uses 50-60% of the available water resources [MOPIC, 04-06-2018; GFC Advisory Board], responsible for policies and regulations in the agriculture sector. The level of influence on the project is low (2), because of the ministry's political capital and the private sector focus of the Agri-Food 'building block'. GFC has a private sector approach and aims to collaborate with cooperatives, whereas *MoA* recommended GFC to work only with their associations [MoA, 27-6-2018]. GFC follows several statements of farmers and cooperatives in Mafrq Governorate that the *MoA* is unable to support the project. This means that the level of interest of *MoA* for the project is low (20%). Although meetings with employees of the National Agricultural Research Center (NARC) in Mafrq were very positive, a meeting with NARC representative HE Dr. Nizar Haddad resulted in disagreement about the GFC strategy to invest in new agri-infrastructure on the Youth Business Campus, whereas the NARC representative aimed for investment in the existing NARC infrastructure in Mafrq Governorate [NARC, 30-07-2018]. Despite the verbal expression of support during this meeting, GFC had to find out later that NARC, and thereby *MoA*, does not support the GFC project. This means that the level of support for the project is low (20%). GFC therefore aims to inform *MoA* about major achievements and to continue exploring where potential collaboration could emerge. For now, GFC will work with other partners on the implementation of the Agri-Food plans. This places *MoA* in quadrant C.

According to MOPIC [MOPIC, 04-06-2018], other ministries have little influence on the project (1-2), hence the analysis will be brief.

The *Ministry of Foreign Affairs* (*MoFA*) has written that it has no objection for the project to the Prime Ministry's office, and stated that it has no direct interaction with the project (see Annex 13). GFC actively informs HE Nawaf Tell, ambassador for Jordan to the Netherlands. Mr. Tell verbally



expressed his support for the project. This neutral to positive attitude towards the project places this ministry in between quadrant A and quadrant D.

The *Ministry of Tourism & Antiquities* (MoT&A) has little political capital, but supports the GFC project (80%). MoT&A representatives joined the Mid-term Workshop and another workshop focused on Hospitality. Nadia Al Quda, Director of Investment of MoT&A, expressed the support of the ministry in a recent e-mail [MoT&A, 27-01-2019] by stating that “I hope the cooperation between your team and the Ministry of Tourism and Antiquities will continue where you will find full support”. MoT&A has medium interest so far (45%), because the project focuses on hospitality rather than tourism at this stage. GFC sees the development of hospitality services as a way to develop a stable basis for gradual tourism development in Mafraq Governorate. That is why GFC informs MoT&A about achievements and consults the ministry to be able to intensify collaboration once needed. This places MoT&A in quadrant D.

The *Ministry of Industry, Trade and Supply* (MoIT&S) is a powerful ministry, but not very influential for the project, except for the registration the Jordanian entity of GFC (through GFC’s lawyer). GFC and MoIT&S organized a joint visit for GFC partners to businesses in Mafraq to research the business potential in several sectors of Mafraq Governorate. This makes the level of support high (70%). The level of interest is low (30%), as there is no direct work relationship between GFC and MoIT&S so far. This places MoIT&S in quadrant D.

The *Ministry of Education* (MoED), *Ministry of Higher Education* (MoHE), *Ministry of Public Works & Housing* (MoPW&H) and *Ministry of Municipal Affairs* (MoMA) have no or very little involvement with the project. GFC will respectively coordinate with the MoHE for the accreditation of education curricula as used by education providers on the Youth Business Campus. GFC will coordinate with MoPW&H to work on the enforcement of the building codes (see 6.4.5). MoMA is not involved in the project since GFC falls under the authority of MDC and JIC, not under a Municipality in Mafraq.

The *Dutch embassy* and the *EU Delegation* in Jordan form a hybrid group of stakeholders, because they can be public- and funding entities at the same time. The Dutch embassy in Amman coordinates, and executes the Dutch policy on Foreign Trade and International Cooperation in Jordan and provides locally sourced information and advice to the Foreign Ministry in The Hague. Other tasks of the embassy are to facilitate Dutch companies to do business in Jordan and to provide consular services. Important Jordan-specific focus areas for the embassy in Amman are [Dutch embassy, 31-5-2018]:

- Economic Development and Employment (especially through the agriculture sector);
- Education;
- Protection;
- Security and Counterterrorism;
- Water & Energy.

The GFC project fits well within the areas of *Economic Development and Employment*, *Education* and *Water & Energy* since the Youth Business Campus aims to stimulate job creation, high-quality vocational training, and capacity development in the water, agriculture and energy sectors in Mafraq Governorate. Since the feasibility study is funded by the Ministry of Foreign Trade and Development Aid, GFC would expect support from the Dutch embassy during the course of the feasibility study. The Dutch embassy is a potential donor and Dutch agencies that execute financial support programs for projects in Jordan, such as RVO, rely on the advice of the embassy whether financial support should be granted. The Netherlands has selected Jordan as a focus country and has committed to donate significant funding to projects in Jordan for the upcoming years. This



means that the Dutch embassy is very active on multiple levels in the country, which makes the representative of the Dutch embassy (ambassador) an opinion maker in Jordan. This makes the level of influence of the Dutch embassy for the project very high (5). The level of interest for the project is high (80%). Despite assurances of adherence and support by the embassy [Dutch embassy, 15-11-2018; Dutch embassy, 05-02-2019; Dutch Ministry of Foreign Affairs, 08-03-2019], grant providing organizations were allegedly told that GFC would not be supported by the Dutch embassy [De Jong/RVO 21-2-2019], [De Jong/RVO 15-4-2019] and would neither fit the government's policy nor the embassy's priorities. GFC was deemed not to be embedded enough in Jordan. Embassy staff was also not interested to receive more information on progress of the study. Hence, the score for the perceived level of support for the project is low (20%). This places the Dutch embassy in quadrant A. GFC will invite the embassy to share any heartfelt concern and have these discussed. Because the Dutch embassy is an opinion maker, it is considered important to improve collaboration between GFC and the embassy. GFC will therefore explore further in what ways the doubts or objections from the Dutch embassy can be reduced and how alignment of goals and collaboration can be fostered.

Since the EU Delegation is more related to funding, this entity will be elaborated on in the sub-chapter 3.1.4: 'Donors, impact investors and fundraising partners'.

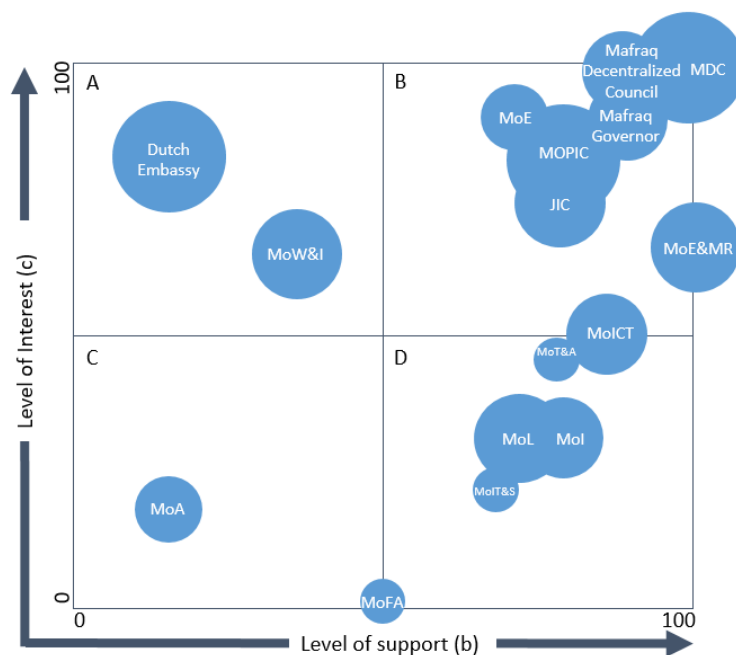


Figure 14 Jordanian public stakeholder positions towards the project.

Figure 14 shows the positions of the public stakeholders towards the project after the measurement of indicators a, b and c. It can be concluded from the figure that:

- There is a very high level of local support and interest (support and interest from Mafrq) in the project, reflected by the support (letters) of MDC, the Governor of Mafrq and the Mafrq Decentralized Council;
- The key stakeholders that score '4' or '5' in terms of 'level of influence' have mostly enabling positions towards the project, except for the Dutch embassy and MoW&I (quadrant A). GFC aims to increase their support by sharing results and progress, listening to their feedback and adapt plans or designs if necessary and if possible to enhance the chances of becoming part of the Dutch embassy's support program for Jordan.



3.1.2 Education Providers

All the sectors of the Youth Business Campus require education to develop a skilled workforce, a prerequisite for private sector development (see 6.2, education). The level of influence of education providers is depending on their position in the Jordanian market, quality of education services and specific role within the project. GFC aims to bring specialized and experienced education providers to the Youth Business Campus to deliver high-quality education services for the target group. The selection of education providers is an ongoing process, but GFC prefers to have multiple specialized education providers on the Youth Business Campus. The involvement of education providers can change, depending on funding and investment opportunities that are connected to specific education providers.

GFC found high levels of interest and support from universities and specialized vocational-, technical and post-graduate education providers. Education providers expressed high levels of interest to become part of a bustling living, learning and working community, significantly increasing the quality of TVET and university education in Northern Jordan and having better access to youth in this part of the country. The high levels of interest also come from the opportunity for funding for their educational programs. This places them in quadrant B. GFC and selected education providers will conclude service- and rental agreements once it is confirmed that the infrastructure of the Youth Business Campus will be constructed. Section 6.2 provides a sectorial overview of the interested and supportive education providers. That chapter also describes their roles at the Youth Business Campus. This chapter describes the scores of those Education Partners, divided in (1) universities, (2) TVET providers & Post-Graduate Institutes, and (3) Enterprise Developers, on indicators a, b and c and their position towards the project. The score of indicator *a* highly depends on the institutional strength and ability to access donor funding. The scores of indicators *b* and *c* highly depend on the letters of intent/ support letters and actions of the stakeholder during the feasibility phase.

3.1.2.1 Universities

The Al al-Bayt University (AABU) in Mafrq and University of Jordan in Amman were already involved during the feasibility phase through their excellent support for the sketch design of the Youth Business Campus (see Section 5.3). In addition, local universities have always granted access to students and data. The level of influence of AABU and other local universities on the project is low (2), because they are no primary 'clients' of the Youth Business Campus. However, universities are an important channel to youth, in addition to a source of university teachers and potential talented youth who can become citizens of the Youth Business Campus. When looking at AABU, the level of interest for the project is high (80%) due to the potential of the project to lift up the whole educational system of Mafrq, the potential to increase the number of *minors*, internship- and employment opportunities for AABU graduates, and the potential to attract national attention and (research) funds. Universities can also make use of the infrastructure of the Youth Business Campus. The most involved university departments are and will be the department of IT, the department of Engineering and the Water, Environment and Arid Regions Research Center (WEARC) (see Annex 14). The level of support of AABU for the project is very high (90%) when looking at the support to date and the intention to partner in the next stages of the project (see Annex 15). On the side of international universities, GFC found a high level of interest (80%) from Wageningen University and Research (WUR) to partner in the project in line with its intention to realize a long-term regional engagement in Jordan (see Annex 16). The level of support of WUR to the project is very high (100%), referring to research support during the feasibility study, joint proposal development activities and its presence during the Mid-Term workshop. The potential influence of this Education Partner on the project is high (4), because of the need in Mafrq



Governorate for strong R&D capacity in the Agri-Food sector, and the joint fundraising opportunities that GFC and WUR explore.

3.1.2.2 TVET and Post-Graduate Institutes

GFC has two main TVET partners: GIZ/NET (Annex 8) and Luminus Education (Annex 17). These parties have both shown a very high level of support (100%) and a very high level of interest (GIZ/NET 100%, Luminus Education 90%) by joining the Mid-term Workshop and taking the initiative to jointly raise funds for specific 'building blocks' of the Youth Business Campus. The level of influence on the project is high (4), because they are important for the donor funded start of the *pop-up* stage (through joint fundraising). In addition, they have the experience, status and quality to create a pool of very skilled youth in all the sectors on the Youth Business Campus (through skilling, upskilling and reskilling). This is needed for the creation of capacity and jobs.

Other TVET partners are AAUC (see Annex 18) and EFE-Jordan (see Annex 19) with low levels of influence on the project (2), but high levels of support (75%) and reasonable levels of interest (AAUC 75%, EFE-Jordan 70%). AAUC joined the Mid-Term Workshop, whereas EFE-Jordan personally introduced GFC to the Minister of Labor [EFE-Jordan, 03-12-2018]. Both parties have not yet undertaken action to fundraise for activities in Mafraq. This (and thereby the levels of support and interest) could increase once the infrastructure of the Youth Business Campus is established, especially for AAUC that expressed the intent to invest in and operate a branch of their proposed in *Center of Excellence in Hospitality* (hospitality training center) at the Youth Business Campus to have better access to students of Northern Jordan. They also expressed that they would like to develop a hospitality *minor* for AABU students, linked to that branch [AAUC, 08-10-2018]. EFE-Jordan has expressed the intent to fundraise and set up education for employment and micro-entrepreneurship services in several sectors on the Youth Business Campus [EFE-Jordan, 03-12-2018]. The Vocational Training Institute (VTC) and ICT Knowledge Station (KS) in Mafraq have a small level of influence on the project (1) due to their limited capacity to help GFC in the creation of jobs (see Section 6.2). KS has shown a high level of interest in the project (80%) during a visit [ICT Knowledge Station, 10-07-2018]. However, since the project focuses on investment in new infrastructure and not in old infrastructure of the KS, the level of support remains in the middle (50%). The VTC has not shown any particular interest (20%) and the level of support remains in the middle as well (50%).

Private sector partners with the intent to upskill and reskill young graduates in the IT sector include RBK.org and Bayanat. The level of influence of RBK.org on the project is medium at the moment (3), but can become higher (4) when RBK.org rolls out its intensive trainings of Syrian and Jordanian software engineers through *American Extreme Learning concepts* (Hack Reactor) for about 100 international hiring partners such as Amazon and Expedia. The same applies to Bayanat that has currently a low level of influence (2). The levels of support and interest of RBK.org in the project are high (80%), referring to its presence at the Mid-Term Workshop and letter of intent (see Annex 20). The level of interest of Bayanat is high (80%) since there is alignment in the objective of job creation for youth in the Governorates (see Annex 21). The level of support is reasonable (70%): Bayanat's concept is still under development and not ready to be launched yet. Finally, CD20 is a Dutch company with strong ties to Luminus Education. CD20 aims to rollout trainings in the Construction/IT sector. Its level of influence on the project is small (1) since C20 is not yet active in Jordan. Its level of support is high (80%), because of the offered help to engineer the Youth Business Campus [CD20, 26-03-2019] and letter of intent (see Annex 22). The level of interest is reasonable (70%), but could be higher once GFC can show CD20 funding commitments for the infrastructure of the Youth Business Campus.



3.1.2.3 3. Enterprise Developers

GFC has three Education Partners that could deliver enterprise development services. The most well known in Northern Jordan is Luminus Shamal Start with, due to its linkage to Luminus Education, a high level of support including the attention to expand the incubation activities to the Youth Business Campus (90%). Its level of interest (70%) is reasonable, because the facility receives a little number of students and submitted enterprise concepts from Mafraq to date [Luminus Education, 07-06-2018]. The level of influence of Luminus Shamal Start on the project is low (2), because the start-up climate in Mafraq requires some changes before it can create jobs. Cewas Middle-East is very supportive (90%) towards the project and has a high level of interest (90%) to give its enterprises a launching platform via joint fundraising (see Annex 23). The level of influence is small (2), because the water sector requires some mindset changes before the sector can really have an impact in terms of private sector development and job creation (Cewas Middle-East, 28-10-2018). The third Education Partner is SPARK with a medium level of influence on the project (3). The level of support from SPARK for the project is high (80%), referring to organization's help to find investors and presence at the Mid-Term workshop. The level of interest is high as well (75%), because SPARK sees the value of the creation of enabling conditions for SME development, especially in a Governorate like Mafraq (see Annex 24).

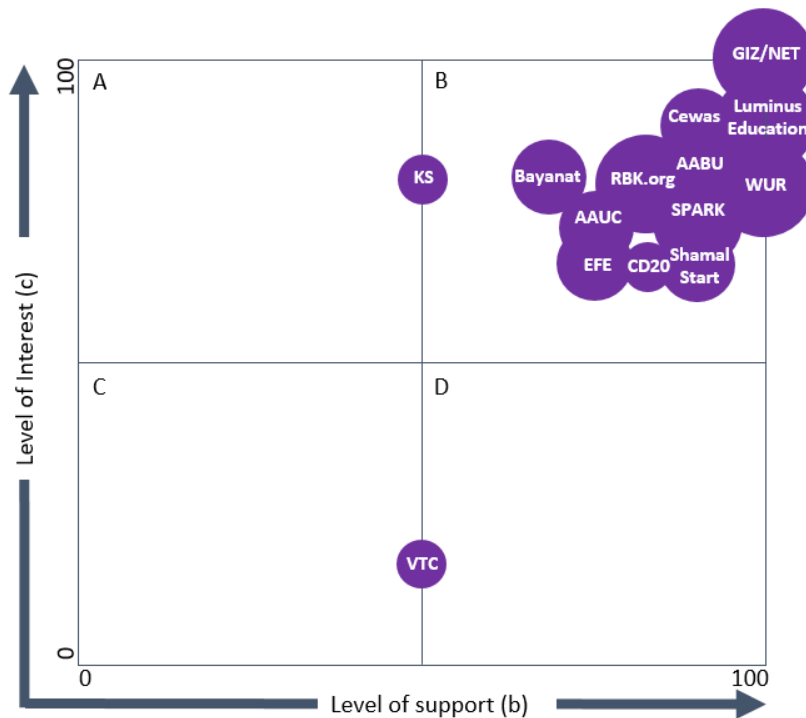


Figure 15 Education providers' positions towards the project.

Figure 15 shows the positions of education providers towards the project after the measurement of indicators *a*, *b* and *c*. It can be concluded from the figure that:

- GFC has succeeded to conclude partnerships with a wide range of strong education providers that can cover the needs for education in Mafraq Governorate;
- The highest levels of support come from Education Partners with experience with institutional donor funding from governments and the EU;
- The education providers from Mafraq, except for AABU, need a strong education partner to develop capacity to have influence on the success of the project. This collaboration model is applied on NET, a local training provider that is technically and financially supported by GIZ. An opportunity for the VTC would be collaboration with WUR in a similar way. This will lead to



institutional strengthening. GFC will help to develop the relationship with the VTC in the near future.

3.1.3 Private Sector: Businesses

The Youth Business Campus aims to bring three types of clients together: education providers, businesses and youth. The private sector includes private sector education providers and businesses. Since Section 3.1.2 already elaborated on the private sector education providers, this paragraph focuses on existing businesses, both SMEs and larger companies, which can provide salaried jobs for youth. The influence of businesses on the project is very high (5), because they are, next to opportunities for self-employment, the main creator of sustainable jobs on the Youth Business Campus. In addition, the attraction of businesses to the Youth Business Campus is needed to financially sustain it and operate its water and energy system⁵.

Table 2 represents the feedback from existing private sector stakeholders and others, and scores on indicators a, b and c per sectorial private sector stakeholder group. The level of support among businesses for the project is high in general, because they see the need for jobs in Mafrq Governorate. The level of interest differs per sector and per business. This has to do with the current conditions for the private sector in Mafrq: a small market, low purchasing power of the local community, low quality of infrastructure, a tribal culture and a limited number of skilled human resources created a negative perception about Mafrq as a business destination. On the other hand, wages can be expected to be lower than in Amman, for example. GFC came across many prejudices about Mafrq during private sector stakeholder consultations: from tribal threats that would hamper employers from firing underperforming staff to a lack of willingness to work hard. The Youth Business Campus aims to change this perception for the private sector by creating trust in Mafrq Governorate. It will take time, but GFC is determined to make a good start with high quality assets and the development of a pool of skilled human resources by its Education Partners. As labor productivity will increase over time, the Youth Business Campus itself will become an interesting market with gradually increasing purchasing power, while trust in Mafrq will grow. This creates real conditions for private sector development.

Table 2 Feedback and scores of private sector stakeholder groups per sector.

| Sector | Main feedback | Conclusions private sector |
|--------|--|--|
| ICT | <ul style="list-style-type: none"> - Mafrq is currently not an attractive location for IT businesses amongst other that depend on sales for their profit, due to small market and low purchasing power [DAI, 29-10-2018] - There is an opportunity for call centers and back-offices of large IT companies for whom the location is irrelevant [MoICT, 28-05-2018]. - IT companies need to see facilities on the ground and a pool of trained people before they can think about investment [CrystelCall, 31-05-2018; Microsoft, 02-12-2018] - Start-ups in the ICT sector that work from the Youth Business Campus can directly find a pool of clients in the | <p>The level of support for the project is high (80%), but private sector stakeholders in the sector need to see facilities including good ICT connectivity infrastructure and a pool of trained people before they can make a decision to settle themselves down in Mafrq. This makes the current level of interest low to medium (40%) and places this stakeholder group in quadrant D. MonstarLab, a Japanese IT company with around 1.500 employees, is an exception and showed clear interest to do business from the Youth Business Campus [MonstarLab, 11-09-2018]. The CEO was also present at the Mid-Term Workshop. However, in order to get more IT businesses from quadrant D to quadrant B, a first step is to build good ICT infrastructure and a second step is the development of skilled human resources (through</p> |

⁵ Except connection to IDECO's grid.



| Sector | Main feedback | Conclusions private sector |
|---------------------|--|---|
| | <p>Campus citizens [Power Edison, 10-07-2018]</p> <ul style="list-style-type: none"> - ICT companies in Amman struggle with human resources, expensive rents and high energy bills [Int@j-GFC private sector stakeholder workshop, 20-09-2018, Amman Chamber of Commerce] | <p>education) and incubation of IT enterprises for the development of IT tools that can be applied in the sector-specific interventions on the Youth Business Campus. The first step is taken in collaboration with ORANGE. Quick wins can be jobs generated by call centers and back offices that do not require difficult skills. The Youth Business Campus aims to ultimately attract 5 SMEs and 1 large IT businesses for the pop-up stage with solid marketing, affordable rents, low energy bills, skilled human resources and business opportunities from the sector cross-fertilization.</p> |
| Hospitality | <ul style="list-style-type: none"> - There is little tourism development in Mafrqa due to limited marketing, little knowledge about the touristic sites among tourists and the proximity of the Governorate to the Syrian border. However, there are some ongoing initiatives to upgrade existing touristic sites [MoT&A, 12-09-2018] - Existing demands for hospitality services come from medical tourism, 'business' travelers and the ongoing business activities in the KHBTDA. The KHBTDA lacks hospitality services, whereas there is a need for the companies [Petra Engineering Co., 02-07-2018] - The market for hospitality services is small and purchasing power of youth is low, but there is a huge demand for good quality hospitality services (GFC research: feedback from local residents of Mafrqa) - Several private sector sources have confirmed the demand for temporary accommodation in Mafrqa to fulfil the demand for business visitors in the KHBTDA [SafePorts, 18-09-2018] and trainees in the KHBTDA [NET, 25-02-2019] | <p>The level of support for the project is fine (60%) and the level of interest is fine as well (60%), which places this stakeholder group just over the edge within quadrant B. The Youth Business Campus should first be constructed before GFC can move the levels of support and interest in this sector more to the right side within quadrant B. As the tourism market needs time to develop and the purchasing power of youth is low, the first step should include the development of accommodation and catering in response to existing demands. AAUC is willing to train youth for- and operate a hotel/ temporary accommodation [AAUC, 08-10-2018], while IMDAD is interested to operate catering services for the KHBTDA (see Annex 25). If AAUC does not want to operate the accommodation, another hotel operator has to be found. GFC aims for IBIS (part of ACCOR group), because of its ability to adapt to changing demands. Once the Youth Business Campus is constructed, other sectors are up and running, and people start using the Campus, it is expected that local hospitality investors can run a hospitality business. GFC has already been approached by some local hospitality owners to ask for more information about the opportunities at the Youth Business Campus. The owner of the Mafrqa-based SahabwaHattab restaurant has already expressed its intent to open a hospitality business at the Youth Business Campus (see Annex 26).</p> |
| Construction | <ul style="list-style-type: none"> - The construction sector is conservative, which means that new buildings are often constructed without thermal insulation and with regular materials (often casted concrete and sand stones). This can only be changed through demonstration of new construction methods [Royal Scientific Society, 14-08-2018] - "There will always be a demand for buildings in Mafrqa Governorate due | <p>The levels of support (100%) and interest for the project are high (90%). Already during the feasibility phase, some construction companies (TGS-Uniqa and CD20) helped GFC with the design and light engineering of the Youth Business Campus 'pro bono', while two local real estate developers approached GFC with interest to develop and build housing on the Youth Business Campus. This places this stakeholder group in quadrant B. Since energy efficiency is an interesting element for the CoE, the potential GIZ-GFC collaboration includes the training of youth on</p> |



| Sector | Main feedback | Conclusions private sector |
|---------------|--|--|
| | <p>to the population growth and expected omnipresence of the Syrian population" [GFC research in Mafraq, expressed by GFC Local Advisory Member and former employee of Ministry of Interior, 09-09-2018, GFC Mafraq office]</p> <ul style="list-style-type: none"> - The regional reconstruction of Syria and Iraq open business opportunities for construction companies with the interest to serve the regional reconstruction needs [SafePorts, 18-09-2018] - There is a growing regional need for sustainable real estate in GCC countries. This offers a market opportunity for construction companies [ROMAN ARCH Clean Energy Finance LLC, 19-12-2018; CD20, 23-01-2019] - TGS-Uniqa, a Dutch-Moldovan company, offers energy efficient wall panels for 300-700 euro/m², compatible with the Jordanian market-confirm construction price of 400-500 euro/m² [TGS-Uniqa, 21-03-2019] | <p>E&D, installation and O&M of energy efficient construction methods. Deerns, a Dutch consulting engineers group, already supported GFC and aims to provide design solutions to the sustainable mechanical, energy and water engineering needs for the Youth Business Campus (see Annex 28). TGS-Uniqa, a Dutch-Moldovan company, aims to establish an energy efficient wall panel manufacturing facility in the KHBTD A to help with the construction of the Youth Business Campus (see Annex 27). CD20 also expressed interest to construct the Youth Business Campus with its prefab construction methodology (see Annex 22). Finally, the Jordanian company BLOOMS expressed the interest in the establishment of a manufacturing facility for the implementation of green roofing- and green wall solutions at the Youth Business Campus and beyond (see Annex 29).</p> |
| Energy | <ul style="list-style-type: none"> - The limitations of the transmission and distribution grids in Mafraq hamper private sector development in the renewable energy sector. That is why innovative private sector solutions such as grid integration, distributed generation, energy storage and smart grids are required [MEI, 19-07 2018; Kawar Energy, 16-09-2018] - There is market for renewable energy solutions, but many citizens and industries in Mafraq are unaware of the benefits and co-funding vehicles for the implementation of such solutions [JREEEF & GIZ, 11-02-2019] - Mafraq is an ideal location for solar PV. It is not clear if it is the same case for wind energy, but a wind measurement campaign would help to measure the feasibility of wind solutions in the Governorate [MEI, 19-07-2018] - The German Jordanian Center of Excellence in Solar Energy aims to expand and needs private sector development to place their | <p>The levels of support for (80%) and interest (90%) in the project are very high, because the private sector is in need for solutions that increase business opportunities. The National Sector Skills Council in Water and Energy (NSSC-WE), an institution consisting of private sector representatives (supported by GIZ), voted in favor of the project after a presentation and consultation. This places this stakeholder group in quadrant B. Specifically, Millennium Energy Industries, a successful Jordanian Renewable Energy Development Company is ready to contribute to the Energy 'building block' of the Youth Business Campus (See Annex 7). Alliander, a Dutch utility company, is ready to support GFC in the rollout of a smart grid with smart-meters on the Youth Business Campus as part of its effort to support IDECO with smart-metering compliance (see Annex 46). In addition, the Jordanian start-up 'Electricity from the Sun' aims to use office space at the Youth Business Campus to do business (see Annex 30).</p> |



| Sector | Main feedback | Conclusions private sector |
|------------------|--|---|
| | <p>graduates in local jobs [NET, 21-05-2018]</p> | |
| Water | <ul style="list-style-type: none"> - It is difficult to make profit in the water sector due to fixed sales prices for water. On the opposite, Yarmouk Co. is in debt: energy bills increase due to the need to pump water from increasingly deeper levels [Yarmouk Co., 39-09-2018] - Innovation in the water sector is not stimulated due to restrictive regulations, fixed water prices and socio-cultural perceptions [Cewas Middle-East, 28-10-2018] - The market on the demand side (water saving devices for example) is interesting for the private sector, but the market of Mafraq is small and there is a low level of awareness about water saving solutions [BORDA, 11-12-2018] | <p>Barriers for innovation and profit hamper private sector investment in the water sector. Changing the sector requires long-term advocacy and success stories of sustainable, yet cost-effective water saving solutions. The Youth Business Campus aims to apply a water management system that can accelerate this change by making the water sector independent from public subsidies as a result of the cross-sectorial project approach. This approach has resulted in a high level of support (80%) and a high level of interest (80%) from private sector partners. This places this stakeholder group in quadrant B. Nijhuis Industries/ Semilla is interested to install and long-term operate (parts of) the water management system of the Youth Business Campus (see Annex 31). Water enterprises from Cewas Middle-East and Luminus Shamal Start aim to connect to the water management system. A Campus Water Development and Service Company (WADSCO) will be established to operate the water management system and help to develop institutional capacity among Jordan's water players.</p> |
| Agri-Food | <ul style="list-style-type: none"> - The Agri-Food sector is private sector driven. Stakeholders. include farmers and input suppliers. Due to changes in tax laws for farmers in the past, there is little trust among farmers in initiatives in which the Jordanian government is involved [JEPA, 31-07-2018] - The capacity of MoA to support farmers in Mafraq is limited, according to farmers of the East Mafraq Cooperative Association [East Mafraq Cooperative Association & ILO, 28-06-2018] - The Jordanian market itself is small, hence making it not an interesting market for many foreign agriculture companies and/or input suppliers [Priva, 13-09-2018] - Especially small- and medium size farmers in Mafraq suffer from low income margins. They should change to cash-crops and/or products that add value compared to the current practice, and need to learn how to work cooperatively [JEPA, 31-07-2018] | <p>The Agri-Food plans on the Youth Business Campus include developing and synergizing of a unique cooperative, post-harvesting and R&D with a focus on small- and medium size farmers. The levels of support (70%) and interest (70%) for this approach are fine, placing this stakeholder group in quadrant B. GFC was approached by several cooperatives in Mafraq to collaborate in these plans. One of them is the <i>Anakeed Al-Khair cooperative</i> in Mafraq (see Annex 32). JEPA, representing a major part of the private sector, is supportive towards the project (see Annex 31) and attended the Mid-Term workshop. HollandDoor aims to lead a consortium of Dutch partners, including GFC, to implement a project that compliments existing Agri-Food initiatives in Jordan (See Annex 34). This consortium would also include Priva (see Annex 49). Finally, Deserttulip-Jordan, distributor of the Groasis Waterboxes, aims to contribute with its technology to private sector development in the Agri-Food sector.</p> |

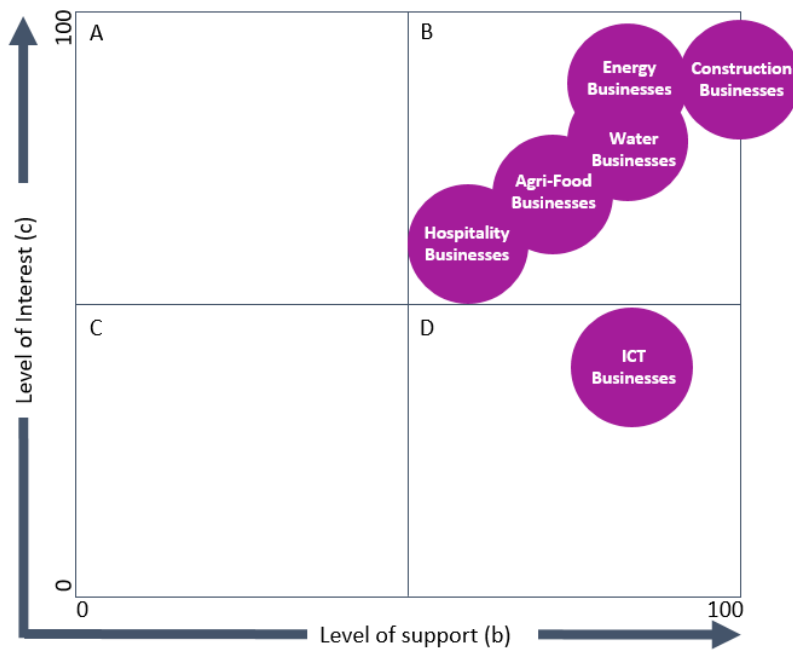


Figure 16 Position of private sector stakeholder groups towards the project.

Figure 16 shows the positions of private sector stakeholder groups towards the project after the measurement of indicators a, b and c. It can be concluded from the figure that:

- GFC has already in this stage succeeded to yield support and interest from private sector businesses, especially in the Construction, Energy and Water Sectors;
- The level of interest is highest among private sector businesses in the Construction and Energy sectors, whereas the level of support is highest among private sector businesses in the Construction sector;
- ICT businesses need to see some development steps before the level of interest of this stakeholder group will increase. Despite this, ORANGE is ready to install high-quality data- and communication infrastructure and multiple training providers are ready to develop the pool of skilled human resources. These are primary conditions to attract ICT businesses. GFC expects that the attraction of already 1 ICT company during the pop-up stage will make other businesses follow;
- Hospitality businesses need to see infrastructure and customers before their level of interest will increase. However, the combination with a clear demand for hospitality services in Mafrag, some interest to provide hospitality services and preliminary discussions with local investors indicates that the sector can develop quickly after the infrastructure is established;

3.1.4 Donors, Impact Investors and Fundraising Partners

As the project requires initial donor funding for the pop-up stage to show impact investors 'proof of concept' GFC has met several donors in Jordan during the feasibility phase. Since donor funding is essential, this group of stakeholders has a high level of influence on the success of the project and should preferably have its position in quadrant B with high levels of support and interest (above 80%). The level of influence depends on the potential contribution that the donor can make. GFC has also interacted with impact investors and funding partners. Funding partners are committed to jointly raise funds for 'building blocks' of the Youth Business Campus, which places these stakeholders in quadrant B with high levels of support and interest. Sections 3.1.4.1 to 3.1.4.3 give an overview of the search for funding and impact investment during the feasibility phase.



Only relevant donors and impact investors are included in Table 3 about the positions of stakeholders.

3.1.4.1 Donors

During the first period of the feasibility phase, GFC presented the project to donors as a whole including all its sectors. GFC found several factors that made it a challenge to generate support and interest from donors in that stage:

1. *One-dimensional focus of donors*: this means that donors often have a focus on one or two sectors or dimensions of the Youth Business Campus, e.g. only child education, only water or only renewable energy. It seemed hard to match the interests of donors to the multi-sectorial and multidimensional concept of the project. To a lesser extent, this applies to some tenders, calls or subsidy programs as well.
2. *Short-term focus of donors*: the long-term impact potential of the Youth Business Campus was supported during several donor meetings, but did not fit within the framework of short-term success stories that some donors look for- and have funding for [GIZ, 09-07-2018].
3. *Donor requirements that GFC cannot meet*: donors often set minimum requirements for grant receiving entities. This includes for example a minimum amount of operating years in Jordan, an operational track record in a certain sector, or a minimum yearly turnover. GFC was often not eligible to apply for grants due to its 'newness' as an organization in Jordan.
4. *Path dependency of donors*: some donors have predetermined pathways of spending funds in Jordan. This means that bilateral agreements or funding policies create pathways that exclude GFC from being able to receive funding, even if the project fits the interests of the donor. Examples are JICA and AFD, only funding Jordanian governmental entities [JICA, 15-08-2018; AFD, 03-02-2019]. Another example is USAID: although the project was complimented with "this is exactly what Jordan needs" [USAID, 16-10-2018], the project fits well within the policy for economic development, and USAID was presented at the Mid-Term Workshop, GFC found out that USAID only works through specific contractors: this means that around 80% of USAID's funding in Jordan goes to only four contractors [USAID, 18-12-2018]. A final example comes from The Swiss Agency for Development and Cooperation (SDC). The SDC supports the concept, but the funding for 2019 had already been allocated when GFC discussed the plans with SDC [SDC, 21-11-2018]. Although support was expressed in an e-mail "As much as I personally like your project and believe it is a very relevant and needed contribution to development in Jordan... for the time being – and for the foreseeable future – there is no budget scope which would allow for possible support". Summarizing, although there is often support and interest from donor's staff members (in the cases of USAID, SDC, AFD, JICA), the path dependency did not allow for flexibility to financially support the project.

In addition to the above points, it is also needed to reflect on the position of GFC in Jordan. One has to bear in mind that despite the widespread support for the project, the organization itself is still relatively young, while trying to 'sell' the innovative concept of the Youth Business Campus. Particularly at the start of the feasibility study, this may have raised the question among some donors: "can they pull this off?"

In order to counter these challenges and, hence, increase the chances on donor funding for the pop-up stage of the Youth Business Campus, the fundraising strategy has been updated in a number of ways:

1. *Emphasize the 'building blocks' instead of the Youth Business Campus as a whole*: GFC decided to break down the Youth Business Campus in recognizable and fundable 'building blocks' while keeping the sectorial nexus approach intact. The building blocks are the



six sectors that together form a fully-fledged Youth Business Campus. This means in practice that GFC tries to match the interests of donors with the 'building blocks': if a donor only has an interest to fund projects on Agri-Food and Water, GFC presents the content, partner consortium and cost-breakdown for the Agri-Food and Water 'building blocks' (in the form of a concept note or proposal) to the donor. However, GFC simultaneously presents the 'building blocks' in relation to the integral Youth Business Campus to show the benefits of the cross-sectorial approach in terms of impact, burden-sharing and shared facilities. This approach has the goal to ultimately create the Youth Business Campus as a whole, including all its sectors. Section 6.5 provides a more detailed analysis of this approach. It is proposed that the 'building blocks' will be presented as six pieces of the *jigsaw puzzle* during a donor meeting in which donors can decide to contribute, based on their interests.

2. *Work with partners that fulfill the requirements of donors:* GFC overcomes its lack of track record in Jordan by partnering with private sector, non-governmental, UN-agencies and other entities that have the necessary track record to fulfil donor requirements and credibility in the eyes of the donor community. These so-called 'fund raising partners' take ownership for certain 'building blocks' of the Youth Business Campus. The partnership includes joint fundraising through joint acquisition: the identification of grants and development of concept notes and proposals. This fits the project approach to attract partners to the Youth Business Campus (SDG17).

These changes in the fundraising strategy have raised the willingness to draft concept notes and proposals together with credible partners. This also changed the position of the potentially influential EU-Delegation (3) from quadrant C to quadrant A by increasing the level of interest to 60%. GFC is on speaking terms again with the EU-Delegation since the EU-Delegation joined the Mid-Term workshop, but the level of support is estimated to be low (25%). It took GFC quite some time to get around the table with the EU-Delegation, the EU-Delegation did not show up during a joint meeting prepared by MOPIC [MOPIC, 13-08-2018] and the project was not included in a list of projects recommended by the EU-Delegation to MOPIC in the early stages of the feasibility study (see Annex 5). GFC will try to nudge the EU-delegation from quadrant A to B by showing progress and results. There are some Jordanian governmental funds, such as JREEEF and JEF, that can leverage donor funding for specific aspects of the Youth Business Campus. These aim to leverage international donor funding, generate impact and have a high level of influence on the project (4), because their involvement shows commitment and support from the Jordanian government for the project. JREEEF has already verbally committed to co-fund the joint GIZ-GFC project proposal, which makes JREEEF's level of support (100%) and level of interest (90%). JEF's level of interest is high (80%), but there is no funding commitment yet, which makes the level of support reasonable (70%). This places these entities in quadrant B.

3.1.4.2 Impact Investors

After the donor funded start, the project aims for impact investment growth. It became clear that impact investors will not invest without a donor funded start and/or donor leverage to show 'proof of concept'. This implies that the level of interest could be high, but that a 90-100% level of support cannot be expected at this stage. A level of support of 100% would mean that there is an investment commitment. GFC has already yielded interest from impact investors such as 17 Asset Management (17 AM). 17 AM is an impact investment firm that invests in projects that can deliver financial returns as well as SDG-driven impact. 17 AM is especially interested in blended finance and therefore establishes an investment fund consisting of donor funding leverage and investment capital [17 AM, 10-12-2018]. 17 AM expressed its interest in the project during several occasions and in a letter of intent (see Annex 35). GFC aims to become part of this impact investment vehicle.



The potential level of influence of 17 AM on the project is high (4), especially for the growth of the Youth Business Campus after the pop-up stage. The level of interest is high (90%), because the project very well aligns with 17 AM's objectives. 17 AM is looking for projects that combine investable business cases with tangible SDG-impact. The level of support is high (75%) and could increase when the concept of the Youth Business Campus has proven itself at the level of the pop-up stage. This places 17 AM in quadrant B. Additionally, UNDP supports the project and therefore facilitates and connects the Youth Business Campus project to impact oriented investors through 17 Jordan – A Platform for Investing in Sustainable Development (see Annex 36). This will create more connections to impact investors in the near future.

3.1.4.3 Fundraising Partners

Credible partners for fundraising in the six sectors are presented in Table 3. These stakeholders have a high level of influence on the project (4) and placed in quadrant B, because they have high levels of support for and interest in the project (above 90%) and therefore dedicate time and efforts to advocate and develop joint concept notes and proposals for the project. Their high level of interest comes from the fact that they see a fit between the project and their objectives and/or mandate, the potential to access funding through their involvement, and the potential that the project can become a success story. These partners preferably take ownership of one or more 'building blocks' after being initiated by GFC. Based on the letter of intents, it can be concluded that GFC successfully attracted fundraising and prime contracting partners to access donor funding. There is the potential to develop several interesting consortia to build 'blocks' (columns) or the Youth Business Campus as a whole (see Table 3). All fundraising partners in Table 2. signed letters of intent. These letters and the overview in Table 3 indicate the areas of interest for the funding partners in relation to the project. The attraction of fundraising and prime contracting partners is a continuous process. Table 2. is therefore not complete, because it does not include potential funding partners that have not yet signed a letter of intent.

Table 3 Credible Fundraising and Prime Contracting Partners, organized per sector.

| Sector | Fundraising Partners | Letters of Intent |
|-------------------------------------|--|--------------------------|
| General or not specified yet | SPARK | Annex 24 |
| | Innovation and Planning Agency Switxboard GmbH | Annex 41 |
| ICT | Luminus Education | Annex 17 |
| | Int@j | Annex 37 |
| | RBK.org | Annex 20 |
| | Bayanat | Annex 21 |
| Hospitality | Luminus Education | Annex 17 |
| | DRC | Annex 38 |
| | AAUC | Annex 18 |
| Construction | GIZ | Annex 8 |
| | UN-HABITAT | Annex 39 |
| | JGBC | Annex 40 |
| | UNDP | Annex 36 |
| Energy | GIZ | Annex 8 |
| | MEI | Annex 7 |
| | UNDP | Annex 36 |
| Water | Luminus Education | Annex 17 |



| Sector | Fundraising Partners | Letters of Intent |
|------------------|-----------------------------|-------------------|
| | UN-HABITAT | Annex 39 |
| | Cewas Middle-East | Annex 23 |
| | Nijhuis Industries/ Semilla | Annex 31 |
| | UNDP | Annex 36 |
| Agri-Food | Luminus Education | Annex 17 |
| | WUR | Annex 16 |
| | Hollanddoor | Annex 34 |
| | Deserttulip-Jordan | Annex 42 |

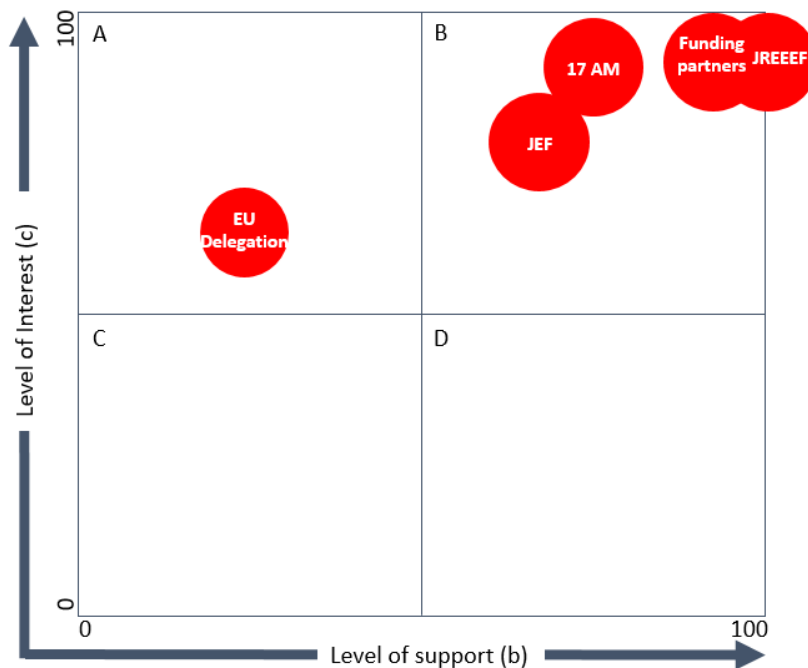


Figure 17 Position of some donors, impact investors and funding partners towards the project.

Figure 17 shows the positions of the stakeholders towards the project after the measurement of indicators *a*, *b* and *c*. It can be concluded from the figure that:

- GFC has generated the interest of partners with track record to successfully raise funds for the pop-up stage in the near future, yet GFC should continue working on the creation of ownership among some of those partners. GFC expects that ownership will rapidly grow once these stakeholders see something on the ground.
- The adapted fundraising strategy is successful in terms of stakeholders scores, but it takes more time than expected to raise funds for the pop-up stage of the project.
- GFC has generated interest among impact investors among which one has shown significant interest and support for the project.
- Figure 17 does not include donating agencies like USAID, SDC, AFD, JICA, DFID and others due to their absolute values. They either support the project 0% (no funding commitment) or 100% *(funding commitment).
- Based on the current fundraising strategy, GFC and its partners consider organizing a donor conference in Jordan with potentially matching donors, funds and impact investors to explore how the pieces of the puzzle can be laid. This is further discussed in section 8.3.



3.1.5 Local Residents

Local residents are key as they can make or break the project, but local residents within the target group (5) are more important than local residents out of the target group (4). The levels of support and interest should be very high (above 80%) and the group should be placed in quadrant B. It is essential to build trust among this group and their families to be able to attract and commit male and female youth to the Youth Business Campus. When talking about the involvement of young women, one automatically talks about the involvement of their male family members. On the positive side, local residents can stimulate youth to live, learn and work at the Youth Business Campus. On the negative side, local residents can stop youth from participating in the project. A bad reputation of the Youth Business Campus due to stories of harassment or cultural disrespect would violate the trust of the local residents, potentially resulting in rejection, distance or even physical violence against the project's assets and staff. Another bad case could be that powerful community leaders complain to the Governor's office, decreasing political support for the project or even worse; becoming a factor in the permitting process.

GFC actively consulted local residents during the course of the feasibility phase. For the sake of this analysis, local residents are divided in two groups (see Section 3.1).

a. Target group

The levels of support and interest were reasonable, high or very high among youth of the target group, which places them in quadrant B. During the consultations, GFC found a small difference in the levels of support and interest between four distinguished youth groups: Syrian women, Syrian men, Jordanian women and Jordanian men. The levels of interest were highest among Syrian women (100%), followed by Syrian men (90%), Jordanian men (80%) and Jordanian women (70%). Interest by youth within the target group was expressed through active engagement in focus group discussions, requests to become part of the Youth Business Campus community or become engaged as a volunteer. The levels of support are almost equal among the four groups, but women (90%) seemed slightly more supportive during the feasibility research than men (80%). Support of youth was expressed verbally during focus group discussions, individual interactions with youth, interactions with youth associations and through letters of support from the main involved youth associations during the feasibility phase (see Annex 44 and Annex 45). In addition: young people from Mafraq expressed their support and contributed to the feasibility study through the AABU design competition (see Section 5.3).

The differences between the four groups can be related to a few factors. First, the high level of interest among Syrians comes from the potential to get any decent learning, working and living opportunity. Syrians in Mafraq told GFC they struggle to access any opportunity, even more than Jordanians. In addition, Syrians are less deeply rooted in Mafraq than Jordanians, which makes them more flexible and able to *live* on the Youth Business Campus. Second, many young residents expressed the wish for more involvement in decision-making processes in Mafraq. They also expressed the wish for a fair environment in which youth gets the chance to show itself and rewarding is based on performance, not on *wasta*⁶. This wish came especially from Syrians, women and "minorities" in the society of Mafraq, such as Christians and Jordanians with a Palestinian background. This is also a factor to clarify the slight differences between the scores between young men and young women, and between Syrian youth and Jordanian youth. Third, GFC assumes that Jordanian men score higher than Jordanian women due to the men's interest in the employment

⁶ *Wasta* is the Arabic word for nepotism. This means that jobs are obtained through family and other networking relationships rather than through performance.



opportunities. GFC research in Mafrq shows that men are more focused to the obtainment of jobs than women. From observations in Mafrq it can be stated that young women are generally more active with volunteering in their community than young men.

The level of support from young women is highest: GFC held many focus-group discussions with young women in collaboration with- and in full support by the Mafrq branch of the General Federation of Women Union (see Annex 43). In the course of these focus-group discussions, GFC found many young Jordanian women interested to learn, work and live at the Youth Business Campus. They are well aware that they would need support from GFC and partners to convince their families, especially if they want to *live* at the Youth Business Campus. After consultations of UN-WOMEN and hundreds of young unemployed women, GFC research indicates that 85% of the consulted women approved the GFC plans and 80% of their male family members would allow their female family members to learn and work at the campus when specific conditions are met. Main conclusions from these consultations are that young women were supportive towards the project, because of the self-development, training and job opportunities, potential to be more creative, to be more self-independent, to be more self-reliant, save time and money on transportation, and be in an attractive environment close to their family homes. The specific *women oasis area on the YBC (see Section 5.5.8 and further)* was a clear request from both young women and men. This would help GFC to shape the right conditions for young women on the Youth Business Campus.

Acceptance for *living* on the Youth Business Campus for young women highly depends on the following conditions:

- Physical women-only living area (learning and working can be mixed);
- Strict policies and means of enforcement for security, privacy, safety, anti-harassment, anti-bullying, respect (especially for Syrians) and comfort, without controlling liberties. This would also give the Youth Business Campus the essential good reputation in Mafrq. Examples are female security surveillance, security cameras (supervised by female security personnel only), female security personnel at the entrance of the campus, fingerprint control at entrance of women-only area and hotline or phone application for emergency calls/notices. It should be avoided that people can use mobile phones to take photographs of young women who dress freely and that men can enter the women-only area without prior announcement. Access to the campus for family members should be permitted, but only at specific times so that young women can prepare.
- Clean environment and non-smoking areas;
- Facilities: good internet connection, childcare facility, gym, café, park / public space, beauty salon, clothing shop, nutrition clinic and transportation from the campus to other areas in Mafrq and Jordan. Local research has shown that the proposed location of the Youth Business Campus already fits within existing transportation routes to Mafrq governorate, Al al-Bayt University, Irbid, Zarqa and Amman.

All input from these consultations support the idea that within 5-7 years, over fifty percent of the campus dwellers can be young women, significantly increasing female labor participation in Mafrq. The strategy for the inclusion of young women includes the women-only area ("women oasis"), the use of female ambassadors from Mafrq (trusted women from the community) in key positions on the campus, the creation and utilization of female role models, and physical as well as non-physical measures to receive specific acceptance from male family members. Section 8.1 will elaborate further on the community mobilization strategy to guarantee the involvement of young women in the project.



b. Local residents (out of target group):

The level of support for the project from residents out of the target group (older than 35 years old) was generally high as well (80%), because many see the need for job creation in Mafrq Governorate and support initiatives to help the community. The ultimate support of the council members of the Mafrq Decentralized Council (see Annex 11) strengthens the point that the majority of local residents from Mafrq support the project. The measured level of interest depended on the person (50%), placing this stakeholder group in between quadrants B and D. Syrians tend to be slightly more supportive and interested in the project than Jordanians, but there is no difference between women and men. It must be mentioned that these residents are not part of the target group and are therefore no direct beneficiaries of the education- and job creation activities. However, they are direct beneficiaries of many services offered from the Youth Business Campus and they are free to enter the public areas.

Another significant reason for the level of interest (50%) comes from the decreased trust in international aid projects. Many residents and the council members of the Mafrq Decentralized Council expressed that such projects had promised change and raised expectations, yet not fulfilled and hardly any tangible results. Residents expressed their frustration about the trainings of NGOs that did not result in jobs. "They just come to train, take a picture for the donor and leave", said Hisham Al-Shdeifat, active community member of Mafrq. "We need something long-term", he concluded. When asking residents to name projects that gave them hope, many named projects that include infrastructure development and job creation. They expressed to like such projects, because it offers them something tangible. The position of local residents (out of the target group) in between quadrants B and D implies that they support the objectives and approach of the project, but that they do not believe in 'words' and need to see something on the ground before they would get really interested. GFC did pick up such critique to a lesser extent from young residents within the target group.

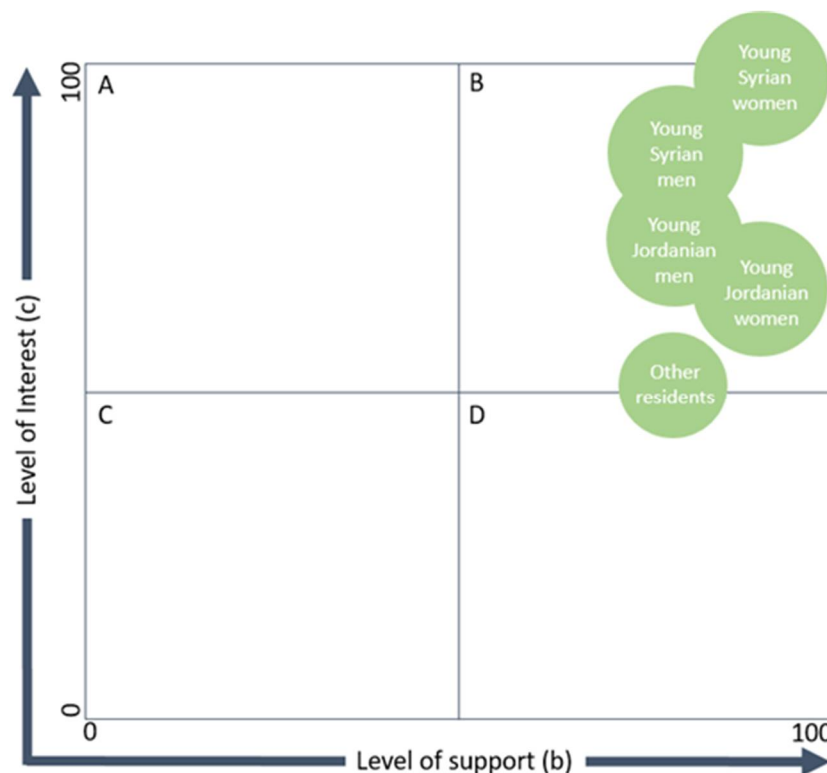


Figure 18 Position of local residents (within target group and out of target group) towards the project.



Figure 18 shows the positions of local residents within and out of the target group towards the project after the measurement of indicators *a*, *b* and *c*. It can be concluded from the figure that:

- GFC should rollout a community engagement and mobilization plan to actively inform and attract youth in the near future (see Section 8.1);
- From the perspective of the local residents, it is expected to be easier to attract Syrians than Jordanians to learn, work and live at the Youth Business Campus. It is also expected that it will be easier to attract young men over young women, when looking at the socio-cultural dynamics in Mafraq Governorate.

It will be important to involve the whole family rather than the individual and work with local ambassadors to be able to attract young women.

3.1.6 Advocacy Entities and Interest Groups

This is an ambiguous group with entities that can also be placed within other stakeholder groups, such as the private sector, funding partners or Jordanian public sector. In general, stakeholders in this group should be placed in quadrant B or D, meaning that they have high levels of support, and medium to high levels of interest in the project. The entities in this group have high levels of interest and support if they represent entities with high levels of interest and support for the project. The level of influence of advocacy entities and interest groups for the project is low to medium (2-3), but can be higher, depending on the entity and level of involvement in the project.

3.1.6.1 ICT & Hospitality

Int@j is the private sector association for ICT businesses in Jordan. Int@j advocates at MoICT for ICT sector needs, connects ICT sector with other sectors to stimulate cross-fertilization, helps to create an enabling business environment for the ICT sector, helps in the development of an excellent pool of human resources in the ICT sector and stimulates entrepreneurship in the ICT sector with an incubator [Int@j, 03-06,2018]. The level of support for the project is very high (90%) (see Annex 37). GFC and Int@j have organized a joint workshop with ICT businesses and Int@j opened doors for GFC to meet with private sector entities. The level of interest is high (80%), since the project objectives are aligned with the objectives of Int@j. The level of influence of Int@j on the project is medium (3): they will help to attract companies to the Youth Business Campus and consider to operate an incubator at the Youth Business Campus. This places Int@j in quadrant B. GFC has not found an official advocacy entity or interest group for the hospitality sector. However, since GFC works together with credible Hospitality Education Partners such as Luminus Education and AAUC, GFC is confident that these entities are able to develop a youth and gender-friendly hospitality environment on the Youth Business Campus. GFC's Advisory Board also includes the owner of the Landmark Hotel in Amman, a hotel that contributes with social projects to the empowerment of women.

3.1.6.2 Energy, Water & Construction

EDAMA is the private sector sustainability association for businesses in Jordan. They have research and lobbying capacity within MoE&MR, MoW&I and MoTransport [EDAMA, 24-02-2019]. This makes EDAMA's level of influence on the project high (4) with their help for the implementation of innovative renewable energy and water solutions on the Youth Business Campus. EDAMA's level of interest is high (80%), because they want to contribute to capacity- and policy development in the energy- and water sectors. EDAMA's level of support is high (80%): they will probably take part in the GIZ-GFC project (see Annex 6). This positions EDAMA in quadrant B. Since the Construction Sector is all about energy saving, EDAMA can also advocate for the Construction activities of the project. If this would not be sufficient, GFC partners with JGBC (see Annex 40). JGBC has a low level of influence on the project (2). JGBC supports the project (80%) and has a high level of interest to



execute joint projects (90%). Since JGBC spreads awareness about the green built environment, JGBC is a proper advocate for the Construction activities of the project. GGGI is a global institute that advocates for green growth and supports MoE in Jordan with their green growth agenda (MoE, 26-11-2018). GGGI focuses on six sectors: energy, water, waste, transport, tourism and agriculture. Since the Youth Business Campus can become a green growth example, the level of interest is very high (90%) (see Annex 12). The level of support is reasonable (70%): GGGI believes that the Youth Business Campus project should be included in the NAPGG, but is not entitled to help GFC to raise funds for the pop-up stage [GGGI, 18-03-2019]. The level of influence on the project is currently low (2). This places GGGI in quadrant B.

3.1.6.3 Agri-Food

Since GGGI also focuses on the agriculture sector, it can advocate as well for the Agri-Food activities of the project. FAO is a UN-agency that supports MoA to build coalitions for impact in the Agri-Food sector. Hence, FAO facilitates Jordan's Agri-Food sector to move in the right direction. The level of influence of FAO on the project is low (2). However, this can become higher when joint projects will be proposed. The level of support for the project is high (85%): FAO provides GFC with data and invites GFC to several coordination meetings. However, the level of interest to tangibly collaborate is low to medium (40%). It came to the attention of GFC that FAO was told by NARC (and thereby by MoA) that it does not support the Youth Business Campus project. This places FAO in quadrant D and continues to play its role as endorser. JEPA is the private sector association of fresh fruits and vegetables producers and exporters in Jordan. The level of influence of JEPA on the project is low (2). The level of support is high (80%), expressed in a letter of support (See Annex 33). The level of interest is low to medium (40%). This can become higher when members of JEPA become involved in the project. JEPA has helped GFC with the provision of data during the feasibility phase. Discussions with exporters during a meeting were positive and a few exporters expressed the interest to use the Youth Business Campus in case the outputs from the Agri-Food intervention would be interesting for them. However, they need to see something on the ground in order to increase their level of interest. This places JEPA in quadrant D, which makes it an endorser of the project.

Figure 19 shows the positions of advocacy entities and interest groups towards the project after the measurement of indicators a, b and c. It can be concluded from the figure that the advocacy entities and interest groups support the project, but the ones in the Agri-Food sector need to see something tangible on the ground to increase their level of interest.

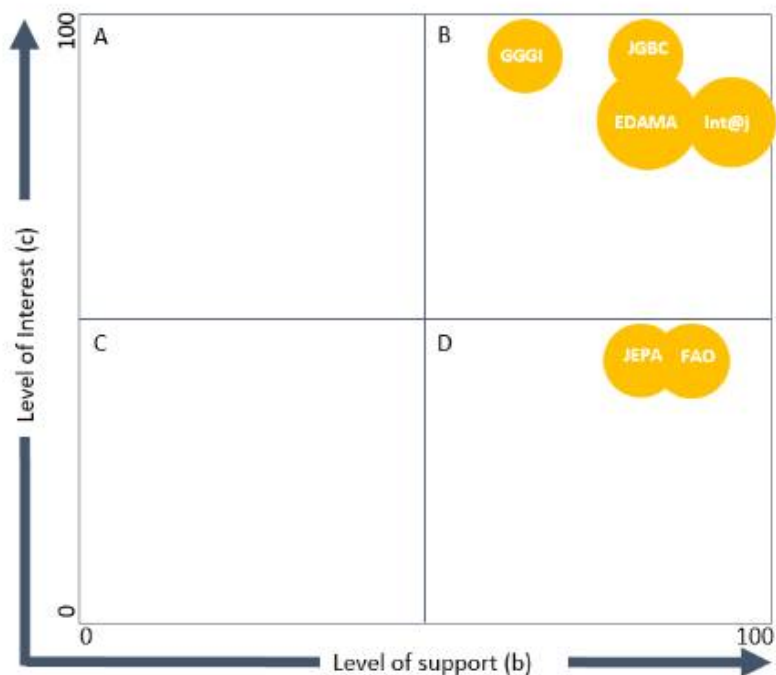


Figure 19 Position of advocacy entities and interest groups towards the project.



3.1.7 Overall Results

Figure 20 presents the overview of the scores of all stakeholders and stakeholder groups. Due to the active stakeholder interactions during the feasibility study, GFC has been able to develop and adapt its partnerships, fundraising and implementation strategy. This has resulted in an overall good score among the different stakeholder groups, referring to the density of stakeholders in quadrant B. The second densest quadrant is D. This quadrant consists of endorsers of the project. This quadrant also includes entities that have no objection against the project, but do not see an opportunity for collaboration.

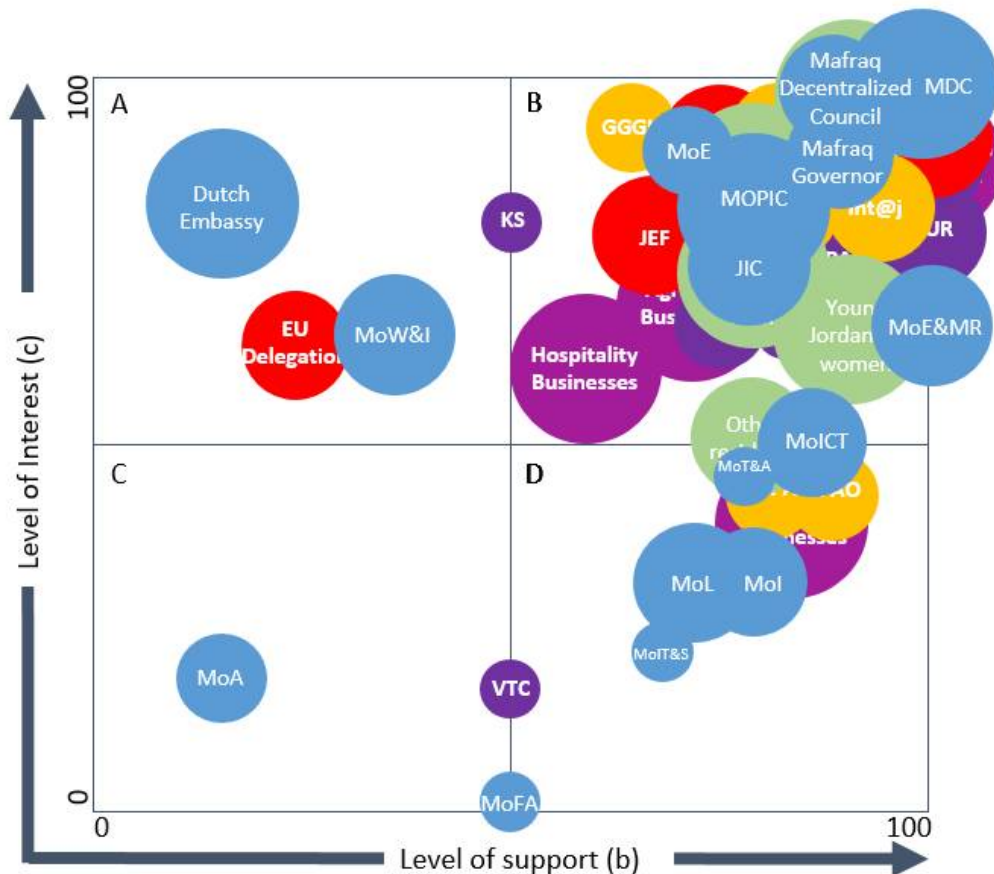


Figure 20 Position of all Stakeholder and stakeholder groups.

There are a few exceptions, located in quadrants A and B, that require attention:

- MoA is strongly linked to NARC (quadrant C). Abdelkarim Fardous, former Director General of NARC and member of the GFC Advisory Board, will try to align the strategy of the Youth Business Campus with the strategy of NARC;
- MoW&I (quadrant A) is on its way to quadrant B or D, but should be kept closely informed about the plans and achievements of the project. In addition, GFC will work closely with employees of MoW&I to ensure compliance to the ministry's policies and regulations;
- As an 'opinion maker' the score for the Dutch embassy (quadrant A) is a potential risk for the project. GFC will, together with the embassy and the Ministry of Foreign Affairs, explore how this score could be improved.
- GFC will share major achievements of the project with The EU Delegation (quadrant A) to try increase EU confidence that a YBC in Mafrqa can work, and consequently move the EU from quadrant A into quadrants B or D.



3.2 Stakeholder Analysis Netherlands and the EU

GFC identified the main stakeholders for the pilot project in the Netherlands and the EU and categorized them in six groups. Per group of stakeholders the relevance for the project is explained. Categories of stakeholders include:

1. **Public Sector:** important category as they are responsible for addressing challenges society is facing (i.c. the migration challenge). In general, they represent the public interest for the Netherlands.
2. **Universities & Think tanks:** these stakeholders are a source of information, excellent knowledge and a pool of talented students.
3. **Utilities: Energy and Water companies:** apart from knowledge, utilities also have hands on experience with building and operating sustainable infrastructure.
4. **Private sector:** the Dutch private sector in most of the sectors selected is innovative and delivers high quality products and services with a high degree of sustainability. Companies are generally interested in expanding their business. From a policy point of view export and sustainable trade can go hand-in-hand.
5. **Donors and Impact investors:** these stakeholders are key for funding, financing and, hence, for realization of the YBC.
6. **Others.**

In the next sections these stakeholder categories will be analyzed, assessed and discussed in more detail.

3.2.1 Public Sector

The public sector category has many stakeholders. Authorities are a special subcategory as they usually consist of three parts: the political institutions such as Parliament and the Senate, the Government (ministers and prime-minister) and the Civil servant organization. They do not always have the same agenda or position: MPs outside the governing coalition will frequently have differences, though on the migration issue differences are remarkably low (see Section 6.9.2.). Government (i.c. Cabinet) and Civil Servant (CS) organization should ideally be the same, but may differ in a specific moment of time because of shifting political opinions. In this analysis, these groups of stakeholders will be treated in their own right, where relevant for the purpose of this analysis.

Another reason why authorities are special in the framework of this study is because of what GreenfieldCities sets out to do: create safe, sustainable cities in home regions of refugees (in this case the YBC) to help reduce migration into the EU while at the same time economically strengthening the host country and reducing the push factors for migration. Without agreements between authorities of donor-country and host country, it is impossible to make sure the public money invested serves its purpose, safety is guaranteed and other EU values can be upheld. In short make sure the (public) money is well spent.

The scores for the stakeholder analyses: a (Level of influence), b (Level of support) and c (Level of interest) are briefly explained in the list of public sector stakeholders:

- **Members of Parliament (MPs);**
As MPs are elected by the people, they have (formally) a lot of power in a democracy; they check and may change the government's policies and regulations. Migration is high on the political agenda (60%) and a majority in parliament wants reception in the region of origin. This was one of the results of the political assessment as discussed in Section 6.9.2. On average, a support of 60% for the GFC initiative may be assumed. The influence is significant but not all



out decisive because there are always differences in opinion or political “games” between opposition and coalition parties (even if they agree) that diminish the influence of this stakeholder group. The general interaction strategy for this group is: keep them informed through newsletters and/or website.

A subgroup of the MPs are those who take part in the governing coalition of parties (MPs govt Coalition). These MPs have much more power (5). GFC has met with 'migration' specialists in parliament of all the parties currently in the coalition: the interest proved to be high: solutions for migration mentioned in the coalition agreement include investing in reception in the region to fight root causes (80%). Support for the initiative is also high: 90%. The Interaction strategy for this sub group is to actively maintain relationships.

- Ministry of Foreign Affairs / Directorate Stability and Humanitarian Aid (MinBuZa/DSH CS); This organization carries out the policy as outlined in “Investing in Global Prospects” [Ministry of Foreign Affairs, 2018]. DSH is supplier of the grant for this feasibility study: level of interest 90%; DSH has consistently said from the start of the study that GFC should find funding from other sources. On the other hand, they informed GFC for tenders and contributed with feedback to the concept-note of the MADAD fund. Hence, the level of support is scored at 60%. The influence of DSH is large. GFC will endeavor to intensify the relationship.
- Dutch Embassy in Jordan; This stakeholder is already assessed in the stakeholder analysis for Jordan (see Section 3.1.1).
- Ministry of Defense (MinDef) MinDef is renewing and re-investing after years of budget cuts. Under the program "Adaptive Force", MinDef intensifies the collaboration with public and private sector partners. Civil Military interaction and sustained civil impact also become more important in International missions. GFC received support for 1CMI command with location selection and development of the (campus) proposition. The level of interest scored at 60%, and is growing. Also the willingness to support and be involved is high and scored at 80%. As migration has strong links with security, the level of influence is relatively high (3) Collaboration between GFC and MinDef continues.
- Ministry of Economic Affairs and Climate (MinEZK); This ministry has two obvious stakes: Export and Climate. Additionally, MinEZK supports innovative Dutch start-ups such as GFC. Export is the most important stake in this case, though looking at potential export volumes, the stakes in this area are not very big (see Section 6.8). Jordan is not on the list for a Partner in Business program. However the sectors selected for YBC are very relevant (water, agriculture and maybe ICT); hence, the score for Level of interest is 70%. Level of support: 50% (neutral) Level of influence is estimated to be 2. The relationship with MinEZK should be further explored in the next stages.
- Ministry of Security and Justice (MinV&J); MinV&J is responsible for the policy of asylum seekers and more specifically for their reception in the Netherlands and processing requests for admittance. Their interest is to keep the figures low and steady as the costs of scaling with shockwaves of refugees are extremely high. MinV&J is interested in circular migration and region of origin concepts and has labeled GFC as innovative. They score 60% in terms of interest. MinV&J has offered strong in-kind support in term of networking and advocacy for GFC leading to a score of 70%. The level of influence is significant and scored at 2.5. GFC will keep points of contact (PoCs) informed about progress.
- Central Agency for the Reception of Asylum Seekers (COA); Is an ams-length agency under responsibility of MinV&J primarily responsible for managing the reception centers for asylum seekers.. They have hardly any interest in the YBC. COA may become more interested in region of origin solutions and recently appointed a member of staff



responsible for international affairs. COA has been fairly supportive as they are also interested in turning refugees that have arrived in the Netherlands into active participants of Dutch society. This aligns well with the GFC activities in the Netherlands. The level of interest is scored at 40%, level of support at 60% and the Influence on GFC is rated as relatively small. GFC will keep know staff informed about progress.

- Ministry of Social Affairs and Employment (MinSZW);
Interest is significant (scored at 80%) as up to half of non-western immigrants in the Netherlands develops a live-long dependency on state hand outs. Therefore region of origin solutions, activation strategies, and circular migration are relevant topics. There is limited (50%) support up until now, but the previous minister (Asscher) has made the introductions to MinBuZa and EU Commissioner Timmermans. Influence on the project is rated medium to low with a score of 2. GFC will keep points of contact informed about progress.
- Netherlands Enterprise Agency (RVO, with a.o. DRIVE program);
RVO runs subsidy programs for various ministries (MinBuZa/BHOS, MinEZK, and more). Their interest through a few subsidy programs for which Jordan is an eligible country is limited (DRIVE, support for SMEs, (60%), while their level of support is at a low level of 20%. The influence of RVO is small (1.5), but they may be able to operate as a co-funding partner. For EIA studies for instance. GFC will actively monitor opportunities and keep relevant staff informed.
- EU Brussels (a.o. MADAD fund, SME instrument);
DG-NEAR has a high interest in region of origin solutions, but there is a big distance between the Brussels bureaucrats and the action of a single project. Therefore, the level of interest is rated at 60%. DG NEAR referred GFC to the EU Delegation in Amman. Support is rated as neutral (50%) DG NEAR could be(come) fairly influential as a policy preparing agency. GFC will re-engage with DG-NEAR after publishing this report.
- German Federal Ministry of Economic Cooperation and Development (BMZ);
The interest in GFC type concepts is growing. Guenter Nooke, the personal Representative of the German Chancellor for Africa in BMZ, is a supporter of GFC. He tells GFC "The debate about Cities instead of Camps has started and I am interested in pushing this discussion in a constructive direction." [Nooke, 8 April 2019] BMZ is a potentially important partner and GFC and BMZ will explore opportunities together.
- German Members of Parliament (MPs Bundestag);
Migration is at least as big of a topic in Germany as it is in the Netherlands. The GFC PoC is Kees de Vries (CDU) who is positive and tries to have ministries and ministers interested in the idea. GFC will continue the discussion with Nooke and de Vries and a joint project with GIZ will give this stakeholder relationship momentum.
- Dutch Municipalities;
Municipalities only have an indirect interest in the YBC. GFC tries to reduce the number of migrants and hence help avoid issues around integration. GFC also activates refugees already present in the Netherlands which is a direct interest and area of responsibility of municipalities. The level of interest is still scored low (40%) as the Mafraq core focus of GFC is a disqualifier for all but the largest municipalities/cities. Tangible support for GFC was strong in 2016 and 2017 (80%). Basically GFC would not exist if not for the contribution of the Municipality of Arnhem. Support for the idea is still strong, but less tangible now given the less acute refugee situation in the Netherlands. The influence on development and building the campus scores medium (2). GFC will most likely target some specific municipalities based on their interest in mutually helping each other forward with migration impact.
VNG-i.
VNG-i has a high interest in the region and executes "region of origin" projects in Jordan as



well. VNG-I has expressed that they are not interested in GFC and that the GFC concept is not in alignment with the VNG-I vision. Therefore the interest rating is a neutral 50% and the support rating is a low 10%. VNG-influence on YBC realization is very small (1), but could be growing. Based on the outcomes of this study, GFC will continue to seek collaboration.

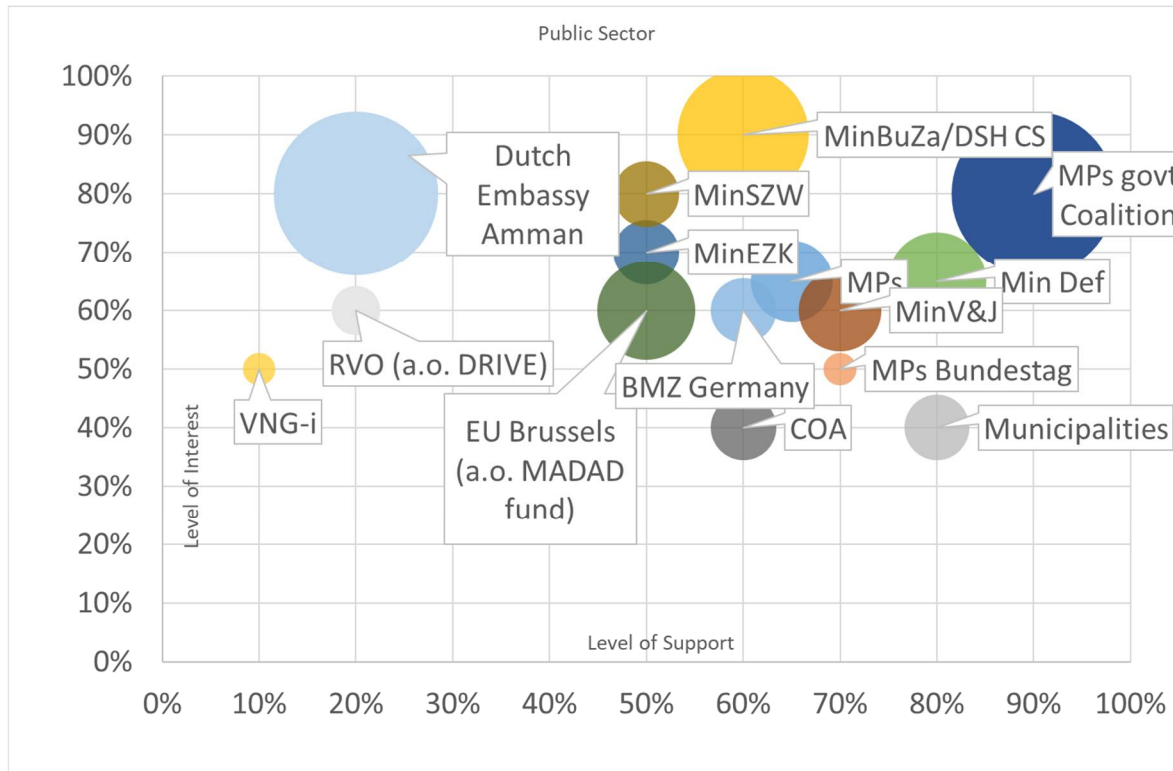


Figure 21 Stakeholder scores for the public sector.

Figure 21 presents the scores for organizations in this group of stakeholders. Many public stakeholders are neutral or supportive to the YBC. The civil servant organization of MinBuZa/DSH has a high level of interest, a lot of influence and is just supportive. The DSH grant has been a main enabler for GFC, but operational interaction with DSH could be improved. The aligned and high level of interest would make continued collaboration a logical goal (see under the category donors). The MPs that are part of the governing coalition are highly supportive, have a high level of influence and score high on level of interest as well. Interestingly, German public stakeholders appreciate the project as well. From an EU perspective this is promising and should be further explored. The Netherlands and Germany could be leading countries within the EU politically and financially supporting innovative pilot projects to help curb migration.

In general, the level of support from the Dutch public sector stakeholders is not as high as in Jordan. Obviously, the level of stakeholder communication, interaction and relationship management was less intensive than in Jordan. The relative complexity and innovative character of the YBC concept and the required are probably also reasons for lower scores. In addition, the project will be implemented in Jordan and that is where the (positive) impact of the YBC is easiest to imagine.

3.2.2 Universities & Think tanks

The category Universities & Think tanks includes the following stakeholders:



- WUR: as a stakeholder, WUR has already been analyzed and described in Section 3.1.4.3. Level of interest, level of support and level of influence are all high as it is a fundraising partner in key areas of the YBC.
- Radboud University: support has been high (80%); Initially, healthcare was included in the scope of the study. When plans were scaled down to campus level, the need to include healthcare was not a priority anymore (Level of interest: 10%). When the campus will grow into a sizable district this score can be expected to rise.
- The Hague Center for Strategic Studies (HCSS): support is fairly high (80%). HCSS CEO, Rob de Wijk, who can be seen as an opinion maker, wrote a column in the newspaper Trouw in which he expressed his support for GreenfieldCities as solution for the refugee crisis [De Wijk, 2016]. Hence, the Level of influence is 3.

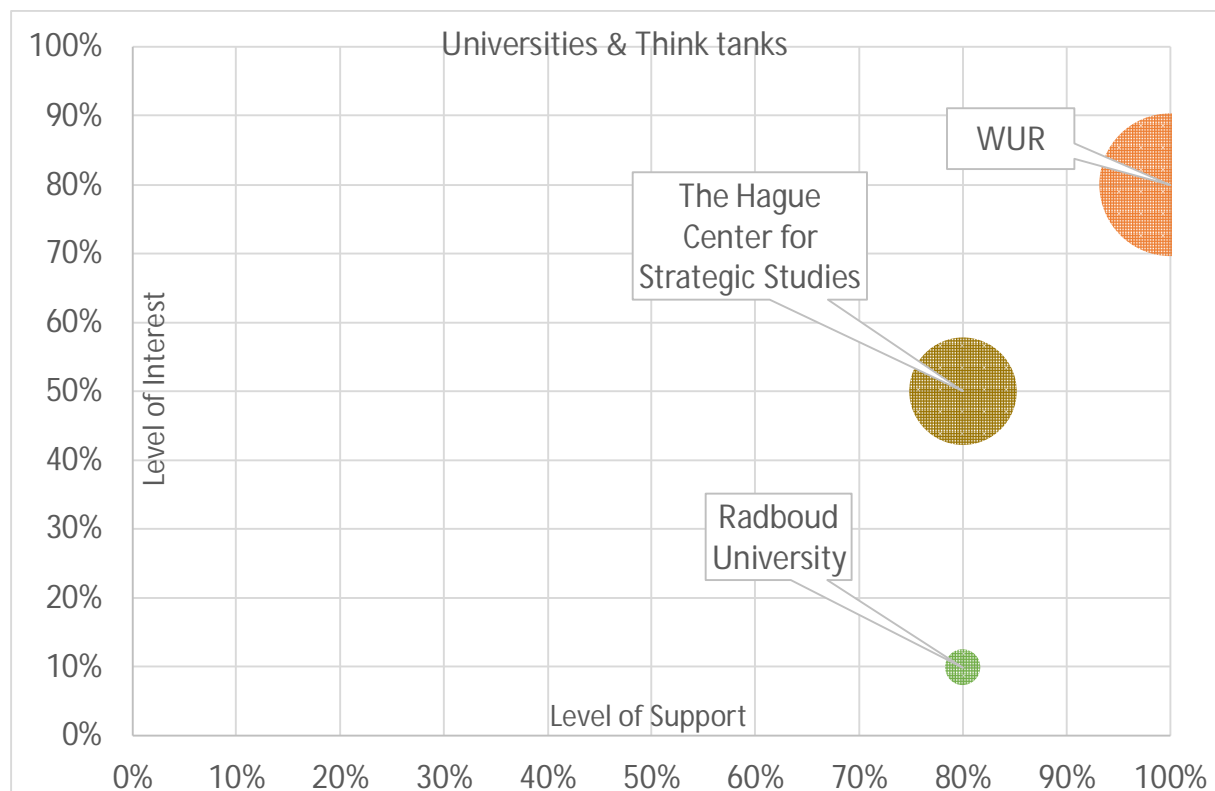


Figure 22 Stakeholder scores for Universities & Think tanks.

Figure 22 presents the results for the category Universities & Think tanks. The number of organizations in this category is low. Partly because many contacts with Jordan universities were made and partly because healthcare is not theme for the campus. However, for the sectors energy, construction and for architecture and engineering as well, there many shared interests with the Technical University Delft (TUD) as well. GFC will start building relationships with TUD for the next stage.

3.2.3 Utilities

The category Utilities includes the following stakeholders:

- Energy companies:
 - Alliander: one of the national grid companies. Alliander has extensive knowledge about sustainable area development and has shared this with GFC [Alliander DGO, 2018]. They have offered help in making the campus energy neutral including building up a smart grid



on campus. GFC has introduced Alliander to the Jordan utility IDECO for the (paid) roll-out of a smart meter project work in the region.

- TenneT: Dutch national transmission grid operator. They are an early sponsor of GFC and have limited interest because of the scale and scope of the project. GFC can use them to make introductions to other (Jordan) utilities.
- Water companies:
 - World Waternet (WWN): they offer sustainable, integral water solutions and have extensive and integrated knowledge in water management and waste water treatment. WWN has experience in Jordan and even in Mafraq. World Waternet supports the GFC idea, but prefers to work directly with water utilities on a larger scale.
 - Dutch Water Authorities: ambition to work more internationally, and still developing international strategies and policies. First projects are being prepared with partners that are well known to them.

Figure 23 presents the outcomes of the utility stakeholder analysis. Level of interest is limited for all these utilities for various reasons. The core business of these utilities obviously lies in serving the Netherlands, however World Waternet does international development projects. All utility stakeholders, however, are supportive towards the YBC (60% to 80%: quadrant D) These utilities have relatively small influence on the realization of YBC.

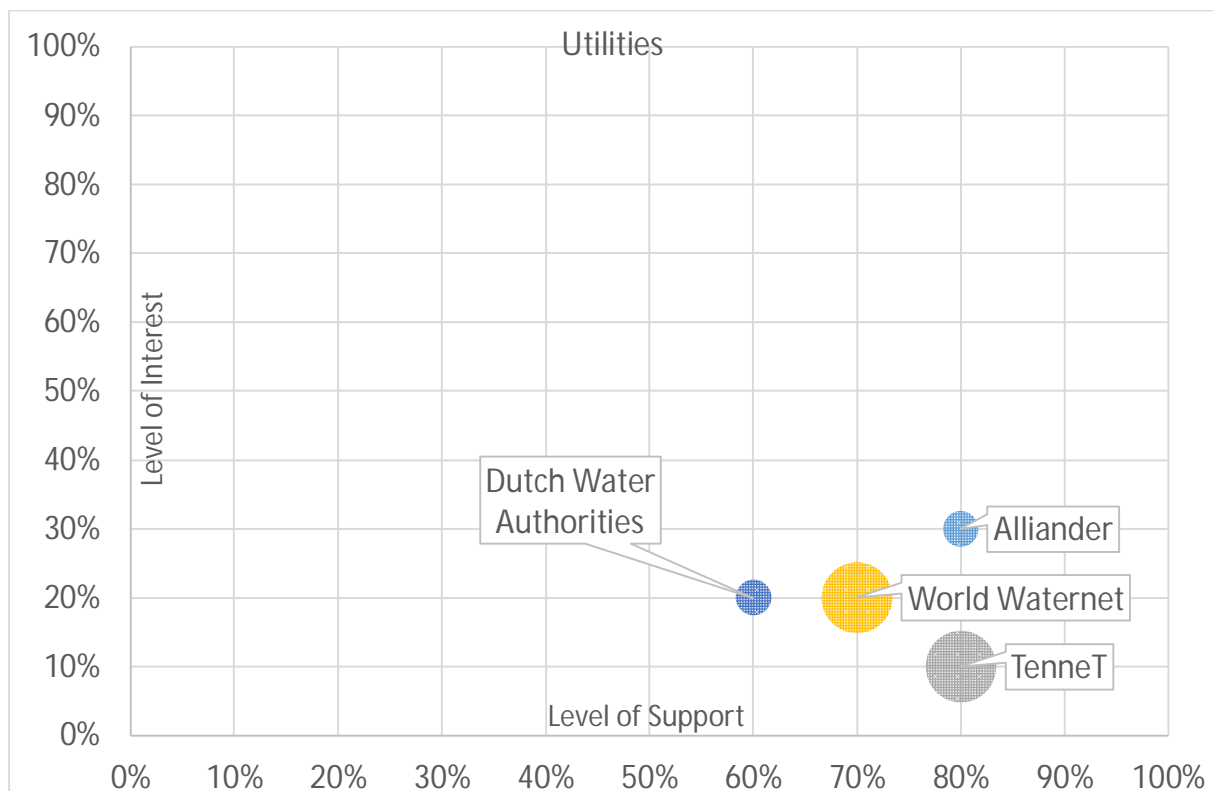


Figure 23 Stakeholder scores for Utilities.

3.2.4 Private sector

The private sector category includes:

- MVO Nederland: network of sustainable, export oriented member companies. Very sympathetic towards GFC concept and plans.
- ICT sector:



- VANAD Group: this company has export oriented interests. They see opportunities in e-health in the MENA region;
- Nederland ICT: many of their members are not interested in the MENA region. Their driver is a shortage in skilled ICT people. If and when the YBC is delivering in that area, it is expected, interest levels will rise.
- Agri-Food sector:
 - HollandDoor: is looking for agri-food project assignments in the region; they want to cooperate with GFC. The MENA region is a known market for them. See also Section 3.1.3 and the Lol in Annex 34).
 - Priva: is a high-tech company that develops hardware, software and services in the field of climate control, energy saving and optimal reuse of water for horticulture, indoor and city farming with potentially a good fit for the agricultural part of the YBC. Jordan is a small market for Priva, however Priva pledged in-kind support to GFC (See Annex 49).
 - TGS Business Consulting: strong in hydroponics/aquaponics in difficult business environments. MENA is an interesting market for them.
 - Livingstone Ventures: they are looking for innovative opportunities for Bamboo value chains.
- Energy sector:
 - Alfen: this company is mainly interested in sales of off grid systems.
 - Lagerwey Windturbine / Enercon: this innovative Dutch entrepreneur is now part of Enercon. Any business development is likely to go through Enercon. This could be a good match with the GFC-GIZ proposal for the energy & construction building block (see Section 6.4.4)
- Construction & Engineering: sector
 - Nezzt: supplier of pop-up, energy efficient apartment buildings and offices. For them the Jordan is too small; they are more interested in United Arab Emirates and the Kingdom of Saudi Arabia.
 - TGS-Unica: a Dutch-Moldovan company, offers energy efficient wall panels for 300-700 €/m², compatible with the Jordanian market; will consider starting a factory in the Free Zone in a couple of years if YBC has been built, see also the Stakeholder Analysis for Jordan: Section 3.1.3).
 - Deerns: , a Dutch consulting engineers group, see also the Stakeholder Analysis for Jordan: Section 3.1.3).
- Water sector:
 - Nijhuis Industries: Potentially very interesting market for Nijhuis Industries. GFC has to develop the relationship further.
 - Semilla; manufacturer of a closed wastewater treatment unit, using advanced space technology to convert sanitary wastewater into clean water and fertilizers for food production. It is the right scale solution, and the company is highly interested in Jordan. The Semilla water solution has not been proven yet in operational settings.

Figure 24 presents the outcome of the Private sector Stakeholders. All are supportive to very supportive to the GFC project and plans (60% to 90%). Level of interest is for 8 companies 50% or more up until 80% for both TGS ventures. However, some companies' interests are only slightly aligned with the YBC interests. This category is not very influential overall because these are relatively small companies on their own. As a branch organization, having many members MVO Nederland can exert more influence though. GFC should explore ways to bundle these private sector 'supporters'.

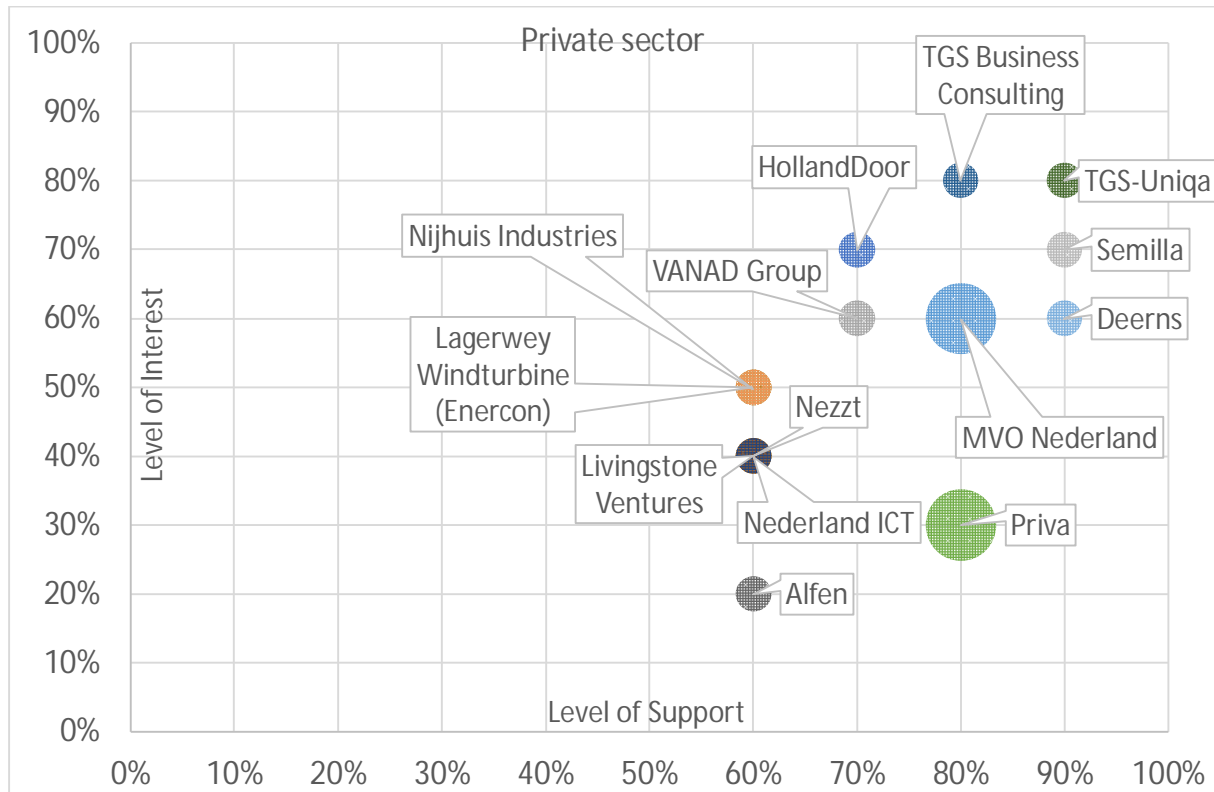


Figure 24 Stakeholder scores for Private sector stakeholders.

3.2.5 Donors and Impact Investors

Donors and Impact investors:

- MinBuza / DSH CS: is already analyzed and discussed in Section 3.2.1.
- EU Brussels / DG NEAR: have active plans and policies in place for Jordan. The MADAD fund was a quick response answer to the Syrian crisis but the current status is unclear at the moment. DG NEAR referred GFC to the EU delegation in Amman
- Nuffic: finances education programs. Nuffic cannot fund the YBC directly but parts of it, in particular those related to training programs may be eligible for funding. The relationship GFC has with Nuffic is promising and can be developed further.
- Foundations:
 - Triodos Foundation: Loyal sponsor who is sympathetic to the GFC concept. May at a later stage become interested in impact funding.
 - DOEN Foundation: Only wants to match other funding one on one. DOEN is risk averse for reputation and marketing-communication purposes. The GFC concept matches well though. Therefore, the relationship may well develop. Strategy is to land a small project with DOEN and execute it well.
 - Rockefeller Foundation: GFC does not stand out yet. No warm contact beyond standard contact options
 - Maatschappelijke Alliantie: Have organized multiple meetings and made valuable introductions (see Annex 47)
 - Marion Rockefeller-Weber sponsored privately through her Flow Fund.
- Impact investors:



- Open Society Foundations (OSF): Exploring Impact Investments. GFC has warm contacts with OSF and they are open to explore collaboration with us in due time.
- Ikea Foundation: Exploring Impact Investments. We have a warm contact, but they are repositioning themselves, so not engaging in new projects at the moment
- Porticus: Emerging Impact Investor. Sympathetic towards GFC but not ready to commit
- Adessium: emerging Impact Investor. Sympathetic towards GFC but not ready to commit
- Dutch Development Bank (FMO): Want projects in the regions; Considered /considering to (co)-fund a smart metering project with Alliander & GreenfieldCities IDECO;

Figure 25 gives a graphical presentation of donors and impact investors. Many donors and impact investors like to see a large donor in the lead; especially in early stages of a project. Both support and interest is generally growing in this stakeholder group. GFC and MinBuza might do more to align and get more stakeholders in this group to commit.

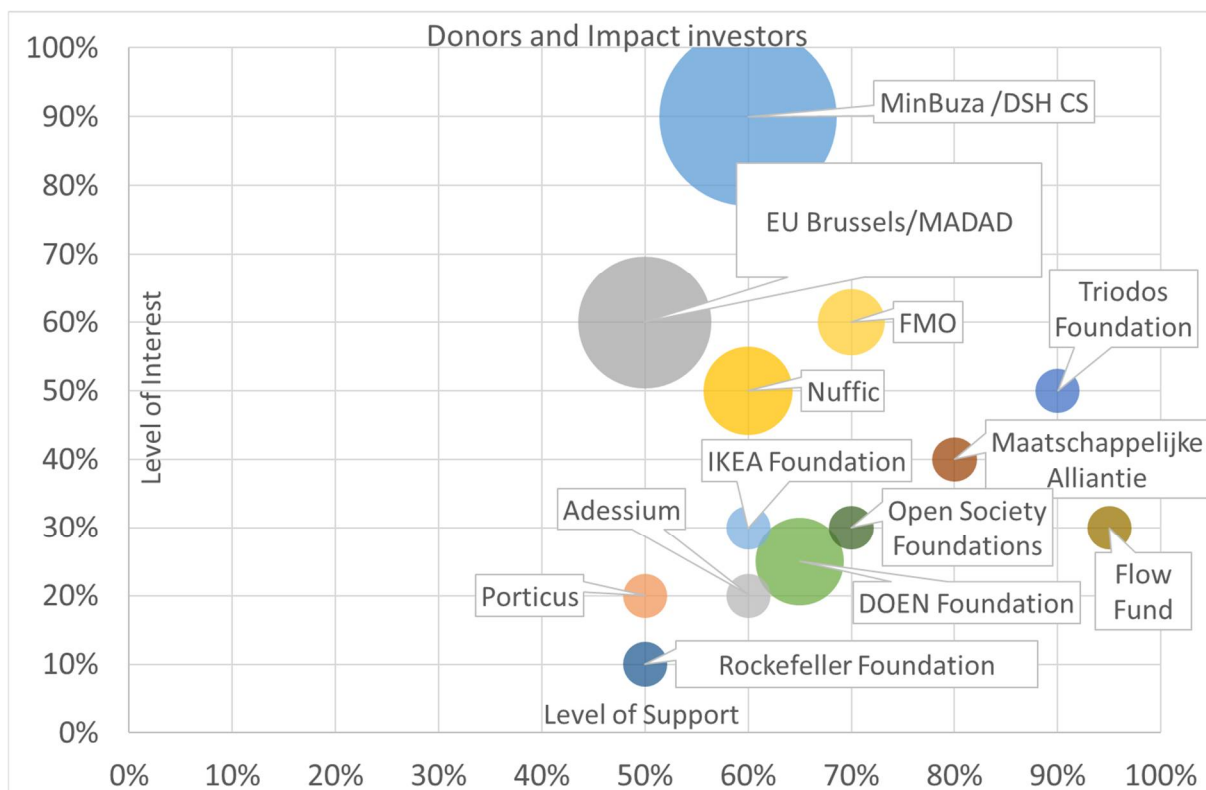


Figure 25 Stakeholder scores for Donors and Impact investors.

3.2.6 Other Stakeholders

The Others category includes:

- Future citizens and refugee contributors (Syrians): most of the people in this group are Syrian Refugee Status Holders. They bring the perspective of "users" including a local perspective. Any investment in their home region is applauded and there is a strong desire to support their compatriots at home
- Dutch Coalition for Humanitarian Innovation (DCHI): Interest lies in closing the gap between humanitarian aid and development. They invite GFC for their meetings, also to discuss collaboration.
- Society Impact: core focus is development innovation. Society Impacts sees GFC as a promising initiative.



- Spark: Is looking for more long term business models for themselves. In that sense GFC is interesting for them to watch. Spark is a trusted implementing agent and therefore an interesting project partner for GFC.
- FUTURABILITY (formerly known as Zatopia): Denise Harleman has a small budget from DOEN to prepare an arts project in Mafraq. GFC and FUTURABILITY are preparing a joint project (see Annex 48).

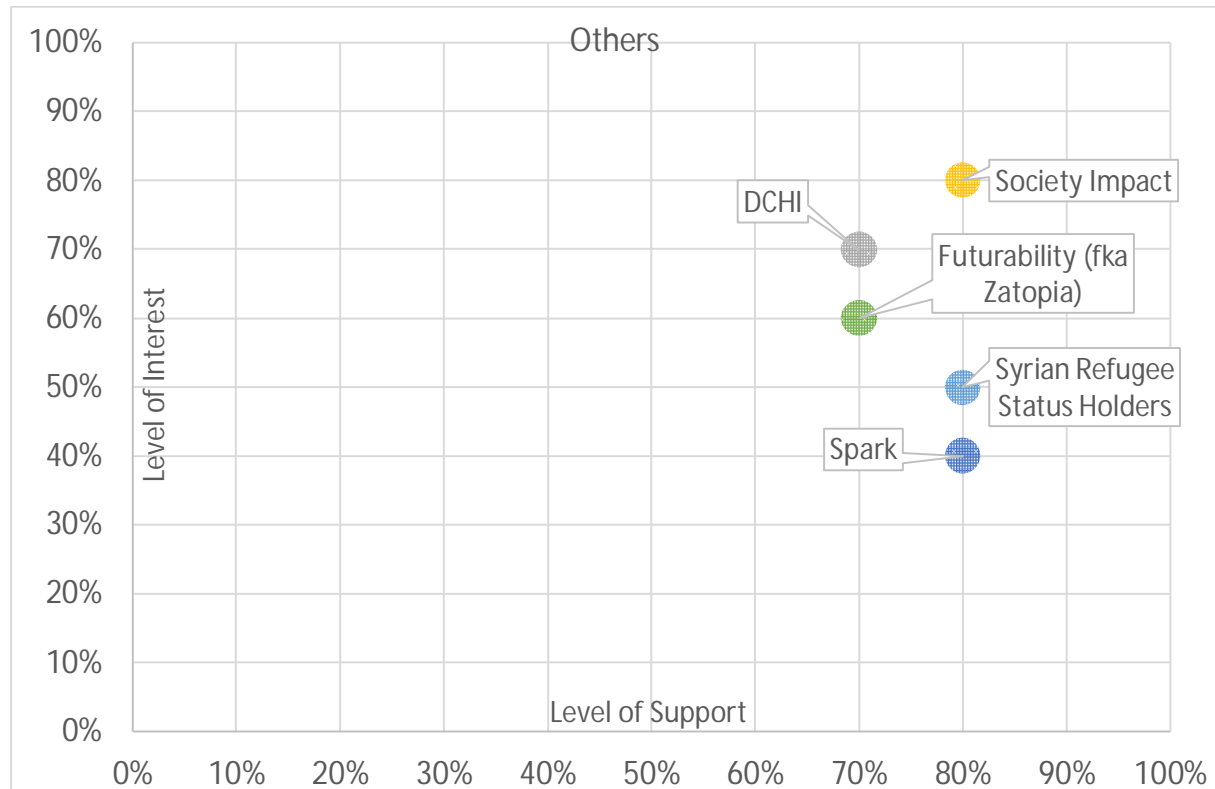


Figure 26 Stakeholder scores for a miscellaneous category.

3.2.7 Overall Results

Figure 27 presents the scores for all stakeholders. Most important stakeholders at this stage are public sector (also as potential funder for the development and building of the campus) and Dutch organizations that will benefit from the YBC. Notably, these are private sector parties and knowledge institutions that can increase their turnover by exporting products and services. The majority of Dutch stakeholders involved, support the concept of the YBC strongly to very strongly. The level of interest at stake for most of the stakeholders is high but not all stakeholders are aware of the GFC project. This is partly caused by the limited amount of time GFC has spent interacting with Dutch and EU Stakeholders. Naturally, this will improve during the development, building and engineering stage. More time has been spent in Jordan because the YBC has to be built there. After all, the need and necessity of and priority for alignment of Jordanian interests through stakeholder interaction is key for the success of the project and ultimately its feasibility.

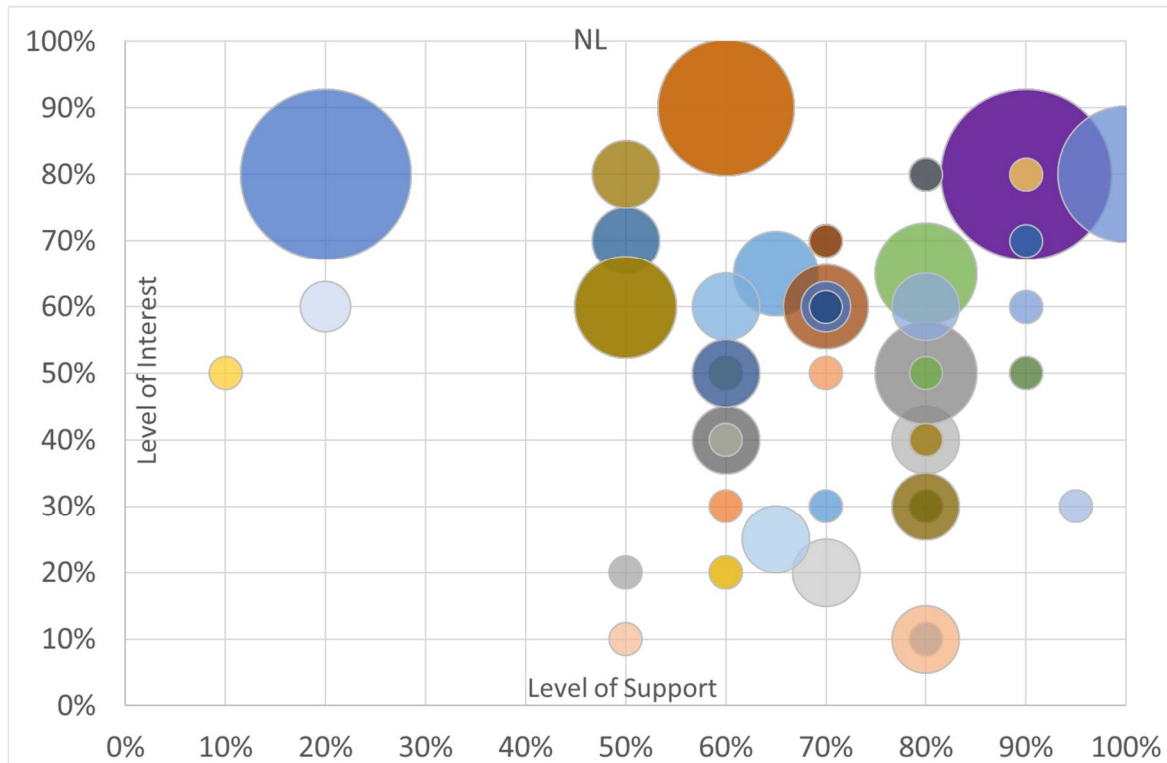


Figure 27 Stakeholder scores for all categories.

The level of influence on the project, in particular of many private businesses, is on the whole still fairly low. GFC will seek forms to bundle their power, and seek contact with their representing bodies. By contrast, public sector stakeholders such as MinBuZa and MPs in the Dutch government coalition show very high levels of interests in the project and clearly understand the high value at stake.

3.3 Midterm Workshop and Conference

Interaction with key stakeholders has happened continuously and intensely in 1-on-1 meetings, focus group meetings and workshops focusing on one of the sectors selected to be part of the business campus. In the proposal for the feasibility study, two important events were foreseen for key stakeholders:

1. A workshop to present the preliminary results and ask input and feedback on the GFC plans;
2. A conference of enabling parties to present the end results and have Lols signed.

Due to the summer holidays, the workshop was scheduled later than foreseen. Consequently, the results of the study presented had more depth than the feasibility scan and in part was already close to the quality of the in-depth feasibility study. GreenfieldCities therefore decided to invite more influential stakeholders and people with more responsibilities in their organization (Ministers, Ambassador, CEOs). The high turnout of around 90 workshop participants, including high-level representatives (see Section 3.4) resulted in what was in fact an interactive conference event. This event, including most of the feasibility aspects of the campus is described in detail in the “Workshop Report Midterm Results Feasibility Study Youth Business Campus Mafraq” [Van Beek et al., 2019]. The highlights and outcomes of the workshop are described in Section 3.4. The increased size and scope of the successful workshop made an additional conference as a means to present the end results superfluous. The Lols have been signed already and are part of this final report (see Section 7.1. The need for finding funding for the development and building of the pop-up stage is



unabatedly high. However, it became very clear that it is too early for impact investors to fund the project at this stage as they need 'proof of concept' before they step in. To have the development and building of the pop-up stage funded, GFC wants to organize a conference for donors interested in one or more specific building blocks (sectors) of the YBC. The interest of the donors invited will cover all building blocks thus enabling making the (funding) jigsaw puzzle of the YBC as a whole (as analyzed in Section 3.1.4).

3.4 Highlights and Outcomes Workshop Midterm Results

In November 2018 GreenfieldCities organized a large stakeholder workshop in Amman. The slides presented at this workshop are available in Annex A. Highlights and outcomes include:

1. The workshop saw almost 90 active participants including the minister for ICT, H.E. Mothanna Gharaibeh, the ambassador of the Netherlands, H.E. Barbara Joziase and the distinguished members of the Advisory Board of GreenfieldCities. Participants included representatives from the public sector, private sector and major NGOs in Jordan. There was also remarkable presence from private ICT sector parties considering to do business from the Youth Business Campus in Mafrq: MonstarLab, a Japanese IT company with around 1.500 employees and RBK.org, an ICT-company that trains Syrian and Jordanian software engineers through *American Extreme Learning* concepts (Hack Reactor) for about 100 international hiring partners such as *Amazon* and *Expedia*. A list of participants is added as Annex B.



Figure 28 Impression of workshop participants on November 18th 2018.

2. Workshop objectives included:
 - a. To present and discuss preliminary results of the feasibility study including the sketch design of the Youth Business Campus.
 - b. To ask feedback and input for the follow-up stage.
 - c. To check and probe whether the Youth Business Campus has sufficient support from key stakeholders.
3. By starting small and scaling up step-by-step, GreenfieldCities has raised the credibility for key stakeholders (see Section 2.2).
4. GreenfieldCities studied the feasibility for the realization of a relatively small scale Youth Business Campus that generates regional impact. The workshop participants stated that the pragmatism, long-term vision and the implementation-focused approach is a key fit for Jordan.
5. A specific part of the workshop consisted of break out sessions. There were break outs for each of the different focus sectors for the Youth Business Campus and a special "Road to Value"



break out group focused on the best way forward for the project. All these break out groups consisted of specialists for each sector and stakeholders with specific ties to specific sectors. The break out groups helped to identify specific recommendations and to create sector specific support for the project. The break out-group results can be found in Annex C.

6. Workshop participants broadly suggested that the necessary €10-€14M public investment:
 - a. Is reasonable for launching an innovative approach that can showcase how to reduce Jordan's dependence on donor aid and support the transition to higher labor productivity based on international impact investment.
 - b. Is a relatively small amount in the broader national and international public spending on development support and the mitigation of migration.
 - c. Is low risk in the sense that sponsors and investors can closely monitor whether the first stages generate the expected impact before deciding on committing more investment.
8. During the workshop, many Jordanian and international stakeholders confirmed their strong support for GreenfieldCities. Many of these supporters are mentioned in this report. GreenfieldCities is aware that expressing support is not the same as committing tangible resources to the project, but the workshop and other meetings created pathways towards funding that could be converted successfully within 2 years after the feasibility study ends.



Figure 29 The GFC Advisory Board during the panel discussion about the Fast Track to Realization.

9. The most important recommendations and action statements by the participants of the workshop can be summarized as follows:
 - a. GreenfieldCities needs to ensure that the plans for the Youth Business Campus become institutionalized as a priority in local- and national plans. Many participants pledged to help GreenfieldCities to realize such formal anchoring or to become champion for the project.
 - b. GreenfieldCities needs to translate its local feasibility research into a community engagement plan for the next phases to ensure that the Youth Business Campus fits the local cultural context. GreenfieldCities will focus on building community based ownership through local youth working groups during the development stage of the project. In addition, GreenfieldCities will start small to test the response of the local community to the concept.



- c. GreenfieldCities needs to show strong financial modelling to attract impact investors. However, donor funding remains needed for the start, because impact investors would probably not pay for the start of the pilot without 'proof of concept'. In that light, GreenfieldCities should become part of donor and government priorities.
 - d. GreenfieldCities has done much local feasibility research, but should actually just start implementation as soon as possible in order to prove the potential of the project to the local community and other key stakeholders. The hardest element of a project in Jordan is to start realization. If stakeholders on local and national level see the value of the project, the next steps would follow easier. That is why GreenfieldCities should start as small as possible.
10. In the weeks after the workshop, GreenfieldCities has followed up on a number of recommendations. This resulted in:
- a. A formal project adoption process with the Ministry of Planning and International Cooperation (MOPIC), the Ministry of Environment and the local authorities in Mafraq;
 - b. A support letter from the Mafraq Development Corporation to the Prime Minister's office and a support letter from the Prime Minister's office that yielded supportive replies from the Ministry of Interior, Ministry of Planning and International Cooperation, Ministry of Industry and Trade, and (Jordanian) Ministry of Foreign Affairs;
 - c. Outspoken support by Jordanian parliament members from Mafraq;
 - d. A solid and substantial emerging funding process with the Green Climate Fund, based on a request by the Ministry of Environment;
 - e. A joint proposal with GIZ on collaboration between the GFC Youth Business Campus and the German Jordanian Center of Excellence in Renewable Energy, especially related to activities around renewable energy and energy efficiency ;
 - f. Outspoken interest during several meetings by UNDP and 17 Jordan, a Jordanian affiliation of US-based 17 Asset Management, with the initiative to direct impact investment capital to Sustainable Development Goals driven initiatives in Jordan. The idea is to leverage a donor funded start of the GFC Youth Business Campus with impact investment from 17 Asset Management;
 - g. Follow up meetings to explore and solidify collaboration with USAID, SDC, UNDP, SPARK, JGBC, GIZ, JREEEF, Ministry of Environment, Cewas, EFE, Luminus Education, Wageningen University & Research, RBK.org, Millennium Energy Industries, Catalyst Group, JIC, the Mafraq Decentralized Council, the Mafraq governor, the Ministry of ICT, Sevens World, the Ministry of Labor and others;
 - h. A more detailed sketch design and input from local and international suppliers and engineers on costs, and energy and water solution realization.



4 Youth Business Campus Location

After market research, interviews with Jordanian stakeholders and three months of strategizing with expert officers of the Dutch Civil-Military Interaction Command, GFC selected the location for the Youth Business Campus. It is the area West of Damascus Highway in the Mafraq Special Economic Zone: the King Hussein Bin Talal Development Area (KHBTDA) in Jordan.

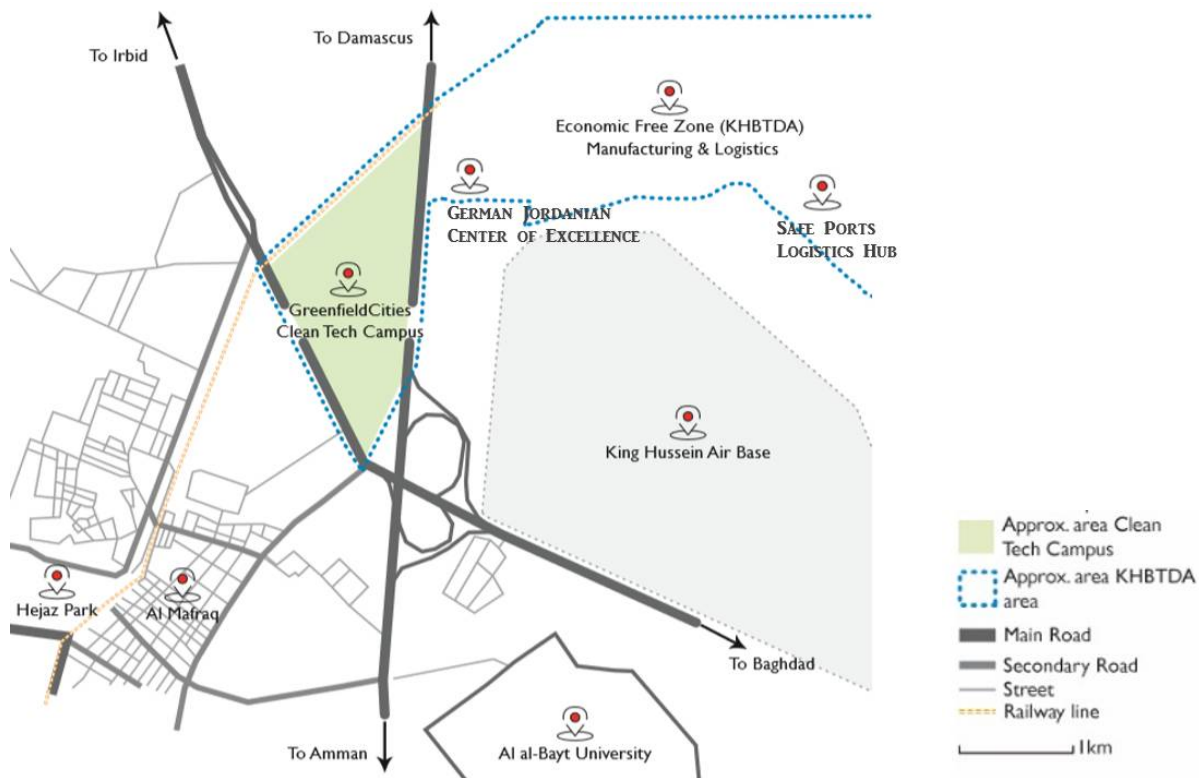


Figure 30 The Youth Business Campus Location in the KHBTDA Free Zone.

4.1 Mafraq

As part of GFC's mission, the GFC Youth Business Campus aims to tackle Mafraq's (future) root-causes of migration. Mafraq governorate runs a high risk for future migration due to a protracted and structural pressure on the availability of decent jobs and climate-sensitive resources. There are several other needs and opportunities in Mafraq that have contributed to the decision to make this the so-called 'beach head market':

- Mafraq scored relatively positive regarding the security situation, stability of the government and stability of the regulatory system. The above elements are bottom-line conditions to avoid risks that would in any case make this pilot project impossible from materializing.
- Security issues are the main reason why countries like Syria, Iraq or Libya have not been selected for this pilot. However, Mafraq can, due to its location, serve some of those countries. The site for the Youth Business Campus in the Mafraq Special Economic Zone is excellently connected via a road (and potentially via a future railway) network to Irbid, Amman, Damascus, Baghdad, Saudi Arabia and the Gulf Countries.
- Mafraq, with the presence of around 288.000 Syrians⁷ (inside and outside of Za'atari refugee camp) is the most affected Jordanian governorate by the Syrian refugee crisis. Currently, around 88% of the total population in Mafraq governorate is Syrian, including Za'atari refugee

⁷ <https://www.albawaba.com/news/syrians-make-88-jordan%E2%80%99s-mafraq-population-663034>



camp. In Mafraq city itself, around 50% of the inhabitants is from Syrian origin. Pressure on basic services, costs of living and availability of jobs is immense.

- Mafraq has a growing young Jordanian and Syrian population (Jordan's annual growth rate is 2.5%⁸ (2017)). Mafraq has the highest fertility rate (4.2) and one of the highest household size (6.6) of the country⁹. Jordanian and Syrian youth between 18-35 years, GreenfieldCities' target beneficiaries, count for 30-35% of Mafraq's population. Additionally, more than 65% of Mafraq's population is below 35 years old (more than 75% in Za'atari refugee camp) and Al al-Bayt University (Mafraq's university) educates 20.300 students, a promising pool of future 'citizens' of the GFC Youth Business Campus in Mafraq.
- Jordanian and Syrian youth are frustrated due to the lack of valuable employment opportunities in Mafraq. The prevalence of long-term unemployment among Jordanian youth, already omnipresent before the Syrian conflict, was aggravated by the large influx of mainly poor Syrian refugees to the governorate. Currently, Mafraq governorate has a youth unemployment rate of around 21% according to online statistics, but media and Mafraq's citizens believe that this number is much higher (more than 50%). There is near complete absence of private sector employers (other than retail, some factories and non-private sector opportunities in the army, public sector and education) and therefore no sustainable and valuable job opportunities, especially for young women. Mafraq has one of the lowest female labor force participation rates in the world (around 16% for Jordanian women and 6% for Syrian women).
- Mafraq city once was a thriving trading hub where groundwater came to the surface. Currently, there is an alarmingly growing water shortage (aquifers are rapidly being depleted) in Mafraq that could become an existential problem if no measures are taken within the next decade and thereby force people from the governorate to migrate.
- If business conditions are improved, the Mafraq Special Economic Zone can help Jordan making the necessary energy transition by becoming a regional energy hub. Currently, there is already more than 200 MW solar power installed.
- Although Mafraq is, after the Jordan Valley, Jordan's second producer of fresh fruits and vegetables and accounts for 18% of the Jordanian tomato production, small- and medium size farmers in Mafraq suffer from water scarcity and the closure of the borders with Syria and Iraq; the latter caused a substantial decrease in the available markets and reduction of wholesale prices.
- The Mafraq Special Economic Zone offers incentives for investors, eases permitting processes and makes use of the Relaxation of the Rules of Origin for trade with the EU (since 2016). Despite this relaxation, the quota for Syrian labor are the same within a Special Economic Zone as outside (Ministry of Labor, 2018).
- In addition, there are existing initiatives in the Mafraq Economic Free Zone that GFC aims to collaborate with: the German Jordanian Center of Excellence in Renewable Energy, the SafePorts Logistics Hub, and solar projects.

⁸ Horticulture in Jordan. A sector in danger? (De Groot et al. (2018)

⁹ https://www.ilo.org/beirut/publications/WCMS_364162/lang--en/index.htm



Figure 31 Mafraa's many faces: from left to right: historic Hejaz station, solar PV development and, Saleem's metal shop in Za'atari.

4.2 Mafraa Development Corporation (MDC) in the Free Zone

On behalf of MDC, HE Nayef Al-Bakheet, CEO of this organization, has endorsed the plans of GreenfieldCities from the very start. MDC is the master developer of the King Hussein Bin Talal Development Area (KHBTDA or Free Zone) and has the task to maximize the zone's economic potential. According to Mr. Bakheet [p.18-19: Van Beek et al., 2019]

"the Youth Business Campus fits the vision of MDC to complement existing manufacturing activities in the Free Zone with green infrastructure and services. The location of the campus in the Free Zone will be beneficial for the development of the zone by making the physical connection between the Free Zone and the city of Mafraa. In addition, the campus makes the Free Zone better visible, thereby helping to promote the Free Zone on a national- and international level. The new services and inclusiveness of the GreenfieldCities Youth Business Campus for the Free Zone and the youth of Mafraa will make the King Hussein Bin Talal Development Area a distinguished Special Economic Zone in the Kingdom. This different positioning will therefore help to attract more and more diverse investments to the Zone that will create the so much needed high-end private sector jobs in Mafraa."



Figure 32 The master plan of the King Hussein Bin Talal Development Area (KHBTDA) and GIZ's German Jordanian Center of Excellence in Renewable Energy.

Together with the Jordan Investment Commission (JIC), MDC is responsible for the land lease agreement with GFC and approves the masterplan and activities in the KHBTDA. The mutual goals between the JIC, MDC and GFC are [p. 19: ibid]

"to attract direct foreign investment to the Kingdom and create jobs for young people in Mafraa. Next to an ideally connected location through major highways and a future railway system, MDC



offers investors basic infrastructure, attractive tax exemptions (such as the Relaxation of “Rules of Origin” and access to EU on zero tariff basis), Investment Law incentives and simplified licensing processes. The GreenfieldCities Youth Business Campus would create additional attractive conditions (incentives) to help attract private sector investment to Mafraq and therefore help to create jobs. Examples of these additional incentives are reliable management with a long-term commitment, infrastructure that is affordable, reliable, sustainable, good quality, energy- and water efficient, skilled human resources trained up to market standards and business services (such as marketing, branding, HR, administration and project management). MDC and GreenfieldCities are working together to create 3000 jobs in Mafraq within 5-7 years with help of the GreenfieldCities Youth Business Campus.”



5 Sketch Design

This chapter describes the sketch design of the Youth Business Campus. First, the design and development brief is discussed; then the design process is outlined. The next section describes how the local and user perspective is integrated in this process. Analysis of the location, the context and the challenges have resulted in the concept and the design strategy. In the Synthesis all the key layers of the design process are brought together ultimately leading to the two key results: (1) the urban planning of the site for the YBC and (2) a more detailed 3-D design of the first phase of the YBC (pop-up).

5.1 Design and Development Brief

The GFC Youth Business Campus has to be designed as a sustainable environment where young people can live, learn and work under enabling conditions to shape their own perspective for the future. As described in Section 2.1 the campus will house six different focus sectors creating these enabling conditions: ICT, Energy, Hospitality, Construction, Agriculture and Water. The intended location for the YBC is in an Economic Free Zone (KHBTDA) just North of the city of Mafraq close to the Syrian border.

As stated in Section 2.2, to mitigate risks and to allow GFC designers, developers, and management to learn, GFC decided to develop, build and manage the Youth Business Campus in a step-by-step, three staged approach:

- I. *Pop-Up*: offers places to work, learn/study and live for approximately 100 to 250 young Jordanians and Syrians. To enhance flexibility and to mitigate risks even further, it will be easy to move infrastructure developed in this phase of the campus to another location. The Pop-Up stage, serves as a proof of principle for the concept that has been developed in this study.
- II. *Touch-Base*: offers places approximately 500 to 1000 young Jordanians and Syrians.
- III. *Fully Developed*: offers places or approximately 1500 to 2500 young Jordanians and Syrians.

Even in the pop-up stage the Youth Business Campus will be big enough to mimic the economic bustle of a city, creating regional impact.

The design parameters are specified in Table 4. Clearly, the functions are a mixture of the living, learning and working environment the YBC has to be and the various focus sectors. All sectors benefit from shared functions and facilities.

Table 4 Design parameters per function for the Pop-Up stage.

| Functions | Required area | People (Approx.) |
|--------------------------|---------------------|------------------|
| Housing | 2320 m ² | 145 |
| Education | 1200m ² | 100 |
| Hotel & Restaurant | 1350m ² | 45 |
| Offices/Retail/workshops | 2400m ² | 200 |
| Greenhouse | 1000m ² | |
| Food fields | 2500m ² | |
| Public park | 1000m ² | |

5.2 Design Process

Any urban design process starts with collecting data on the basis of the design brief. Apart from desk research and multiple site visits, Student groups of two Jordan Universities were closely involved in data collection, urban planning and pre-design assignments; this is described in more detail in Section 5.3. Excursions were made to Dutch companies specialized in pop-up building



concepts while maintaining or even gaining in high sustainability levels (NEZZT / De Meeuw and TGS/Unica). Alliander's business unit Sustainable Area Development shared their knowledge and insights how to ensure maximum sustainability from an energy perspective (Voskuilen, 2018). The extensive data and knowledge base has led to the first version of the Sketch design as presented to fellow architects¹⁰ and on the workshop presenting the midterm results. Feedback and new input has in a continuous process of convergence and divergence led to adaptation and improvement of the design, see Figure 33.

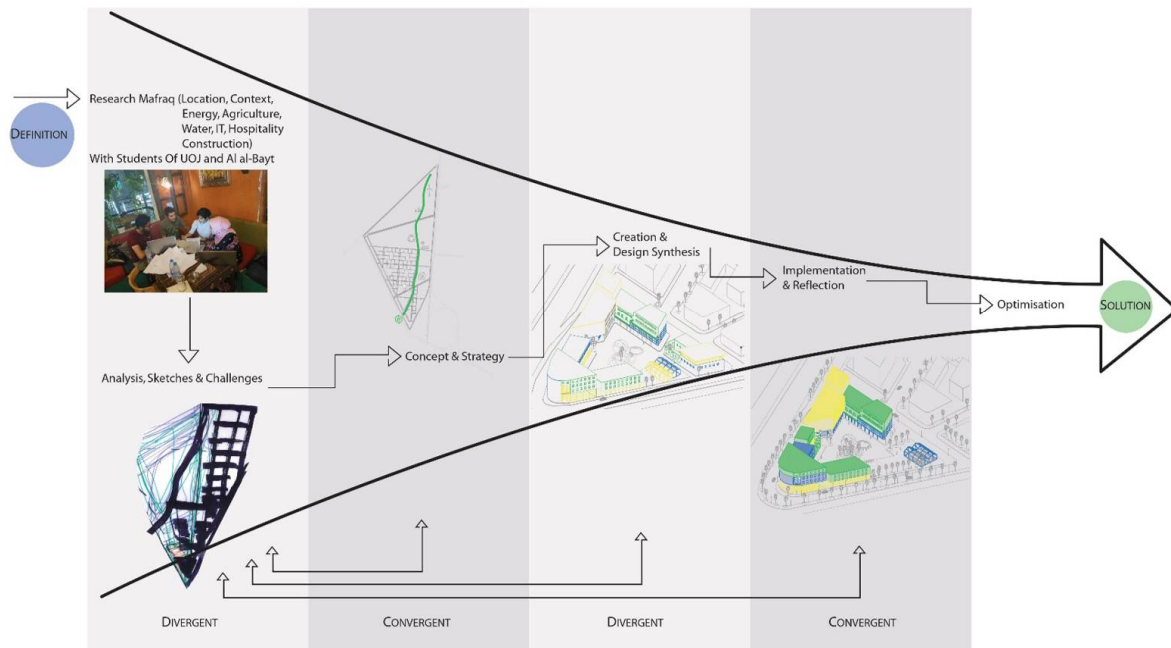


Figure 33 Design process in a cycle of divergence and convergence due to input, conceptualizing, feedback and adaptation.

Sustainability is not just a factor, neither an aspect, nor a layer. Crucially, it requires an awareness, or even better, an alertness during the design process to take sustainability into account in every design step undertaken. Section 5.6 gives the overview where and when this sustainability has materialized in the design (urban planning and architectural design).

5.3 Bringing in the Local and User Perspective

Students from the University of Jordan (UoJ) were involved through a summer course focused on urban planning of the YBC. In addition, a design competition was organized at the Al al-Bayt University (AaBU) where students from architecture, energy and IT formed design teams. Both groups had detailed design guides including many research questions related to urban planning and the design (Benninga et al., Nabeel al Kurdi and Mo'ayyad Shawaqfah et al, 2018). In Text Box 1 the key part of the brief is shown of one of the design guides.

¹⁰ Paola Fusco who made the precursor of the sketch design and Florentine Visser, a Dutch architect based in Jordan.



- "The assignment of the competition design for the Mafrq campus consists of two levels:
1. *Urban planning/ design level* including sustainability integration, infrastructure (energy, water, IT), public space and (potential) links to Mafrq town, the al Al-Bayt University and other functions in the environment. The full-fledged phase is the focus for this design assignment.
 2. *Smart neighborhood (Ensemble level)* including sustainability, integration of infrastructure (energy, water, IT), public space and (potential) links to Mafrq town, the al Al-Bayt University and other functions in the environment. The pop-up phase is the focus for this design assignment.

This Full-fledged campus should be integrated in the wider Mafrq environment and make use of the possibilities that the environment offers. You should start to design the masterplan of the whole campus first before designing the pop-up campus in more detail to ensure that the pop-up campus integrates well with the whole campus. The sketch design for the Mafrq campus does not only result in designs, but also in many data for the development of programs on the campus. Research is therefore an essential part of this assignment and will eventually result in a better design.

Additionally, a design is key in mobilizing expert-knowledge, political- and financial support. Key design parameters and functions for the campus will be given in this guide, but these should develop along the design process as well, depending on your research findings."

The groups were supervised by university tutors and the GFC lead architect, who stayed in Jordan for a two-month period. During this period, a huge amount of relevant data and information was collected and turned into invaluable knowledge and insights for both urban planning and design.

Working with students from Jordan and the Mafrq region had additional advantages: bringing in the local perspective and making sure the campus will have enough attractiveness for youths. As the students in the future may learn, live and work on the campus, the user perspective is also taken into account in a natural way. Through questionnaires among participating students, typical user aspects were explicitly addressed.

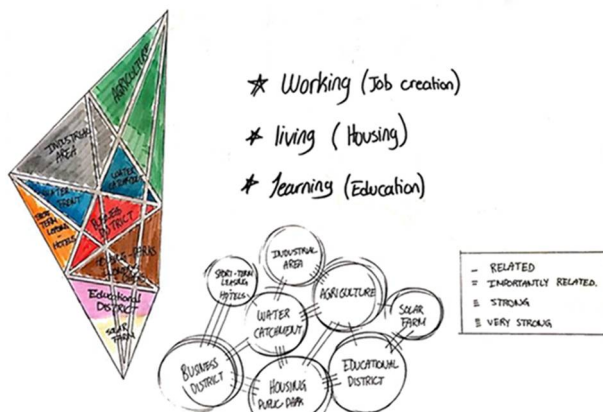


Figure 34 Example of students' work (Ghaida Jarrar, Banah Muti and Lubna Saleh).

connect with one another in the quickest and most efficient way.

Syrian staff members, including the ones with experience in the building industry, were regularly asked for feedback during the design process. Workshops about many design aspects were organized with the Arnhem GFC team. For instance, how to best connect Mafrq city and YBC. The



perspective of young potential users with innate knowledge of culture and regional architecture has been integrated in the design from the start.

5.4 Analysis

In Chapter 4 the selection of the location is described. This section builds on the arguments used and gives a thorough analysis of the location, context, and its challenges from the design perspective. From this analysis a design concept and strategy will be developed. In Section 5.5 the concept and strategy is synthesized for the various design layers by using all data and information analyzed.

5.4.1 Location: Youth Business Campus Plot

Al Mafraq is the capital of the Mafraq Governorate. It is situated in between Irbid, Damascus and Amman. Its area is about 26 km² of which only 11 km² has a formal, municipal spatial plan (Municipality of Mafraq, 2009). The Mafraq city has currently a population of almost 200.000 people; the number of inhabitants have quadrupled because of the influx of Syrian refugees. Mafraq lies around 675 to 750 meters above sea level and has overall a flat surface. It has two main seasons, a hot dry summer with a maximum temperatures around 37 °C and a harsh cold winter with a minimum temperatures around 0 °C. Mafraq is on the edge of the arid Eastern part of Jordan [Sqour, S. M., Rjoub, A., Tarrad, M. 2016].

The city became more known by the construction of the Ottoman Hejaz railways (currently not operating), which went from Istanbul to Medina. It used to be a connection between many cities in the Middle East. Mafraq is surrounded by some special sites and institutions as shown in Figure 35.

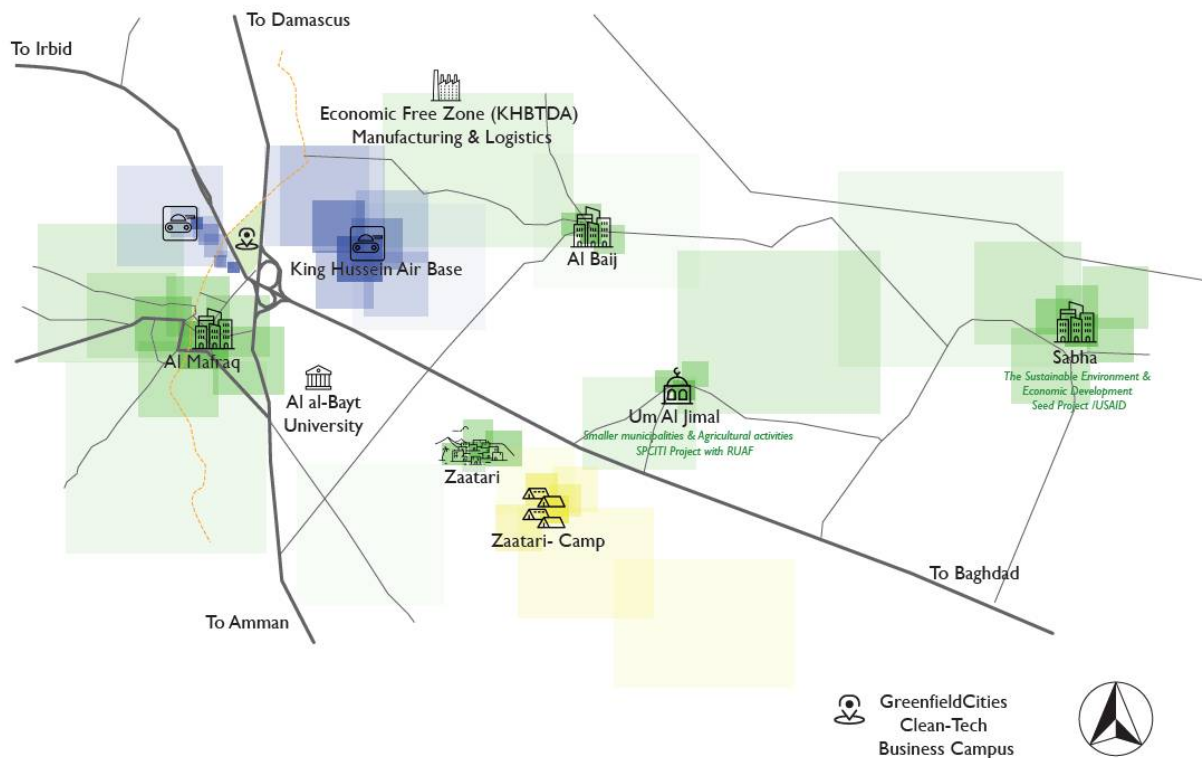


Figure 35 The city Al Mafraq and its surroundings.



At a distance of 15 km to the east of Al Mafraq the Nabatean historical site of Um Al Jimal is situated. Also very near to the east is the Al-Za'atari Refugee Camp which was founded in 2011 after the Syrian civil war broke out and many Syrians fled their country and came to Jordan. It inhabits a population of almost 80.000 Syrian refugees. Closer to the site is the Al al-Bayt University, which attracts students from all over the country. The 3rd division of Jordanian army and the airbase of the Royal Jordanian Air force (King Hussein Airbase) are both located in Mafraq as well. Around the airbase, the Economical Free Zone (KHBTD) was formed in 1983, which aims to attract foreign investments in industrial activities and commercial services. The GFC YBC plot is situated in the south of the Free Zone and lies north of the city Al Mafraq.

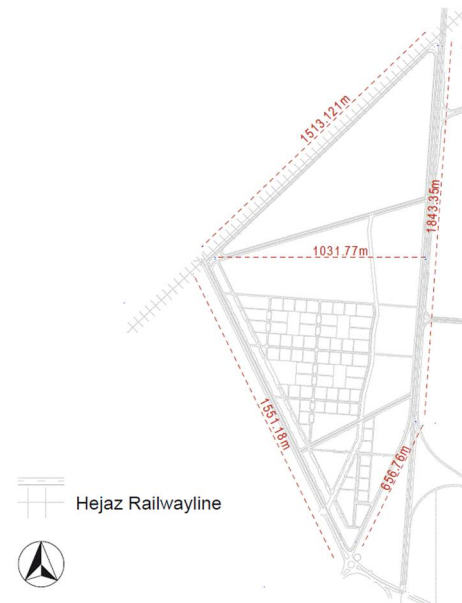


Figure 36 Dimensions of the GFC plot.

The YBC plot has a triangular shape defined by the crossroads on east and west, which run respectively from Amman to Damascus and from Irbid to Baghdad. The Southern side of the plot connects to Mafraq city through the so-called Tank Circle roundabout. In the north, the site is bordering the Hejaz Railway. The King Hussein Airbase is in the east; westward are military camps including a prison. The East-West “width” of the triangle is about 1 km whereas the North-South “height” of the plot is about 2.5 km (see Figure 36).

5.4.2 Context

As said, the city of Mafraq grew rapidly recently and had to deal with a dramatic increase of its population due to Syrian refugees coming to the city. The city is seeing constant traffic jams in the town center, lack of public services, desertification and an unhealthy living environment (lack of trees, exhaust fumes, sandstorms, and traffic jams). The region lacks surface water and it receives only 80-150 mm of precipitation per year, the lowest of any major city in Jordan. Its main water resource is ground water extracted by very deep aquifers (up to 600-700 m). The lands to the west of the city can be used for winter cultivation and for growing crops and trees while the city's eastern side is dry and not suitable for any agricultural vegetation unless it is irrigated. The city is growing westwards (Sqour, S. M., Rjoub, A., Tarrad, M., 2016). Besides the environmental issues, the city also faces a high rate of unemployment and a gap between what companies require in experience and training and what is present. For cultural reasons it is especially difficult for women to get a job (see also Section 6.2 where this is discussed in more detail).



5.4.3 Challenges

Besides the environmental and contextual challenges as mentioned in section 0 and in Chapter 4, the YBC faces challenges with regard to its specific site. The plot's triangular shape is wedged between the highways on east and west, which run respectively from Amman to Damascus and from Irbid to Baghdad. They connect the site on a regional level but disconnect it from a local perspective.

The highways causes air and sound pollution. In addition, the military camps surrounding the GFC site can cause nuisance because of the height of the buildings or noise pollution.

In the north, the plot is bordering the Hejaz Railway that does not provide any connection to Mafraq city as it has stopped operating regularly since 2012s. The only connection the site has with the city of Mafraq is through Tank circle on southern edge. Another challenge is



the lack of surface water on site, which is quite common in the region (see also Section 5.4.1). The site is quite flat with few vegetation and trees on it (see Figure 37).

The synthesis stage of the design (Section 5.5) takes the challenges described into consideration and aims to directly and indirectly tackle these.

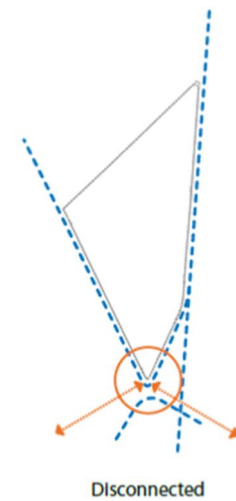


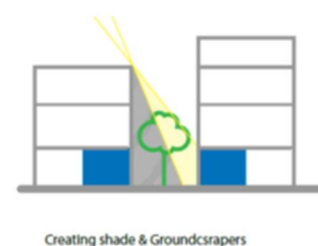
Figure 37 Site of the Youth Business Campus.

5.4.4 Concept

The key concept of the YBC is to create a place where young Jordanian and Syrian men and women could live learn and work. Naturally, the design includes therefore multi-functionality. It should also be as future proof as possible because the environment is demanding and dynamic. The required flexibility is best served with a repetitive pattern and modular design (grid, building blocks and pop-up concept), which could be applied anywhere in Mafraq no matter the exact location (even elsewhere).

To create a healthy, sustainable and comfortable environment aspects to take into account in the design include:

- Orientation;
- Wind direction;
- Size of the neighborhood;
- Width of the streets;
- Height of the buildings;





- Shading of streets in summer;
- Provision of well distributed, public services;
- Creation of multifunctional areas and buildings;
- Connecting the Campus with the city and the KHBTDA I Free Zone without losing its identity and inclusiveness, see Figure 38.



Multifunctional

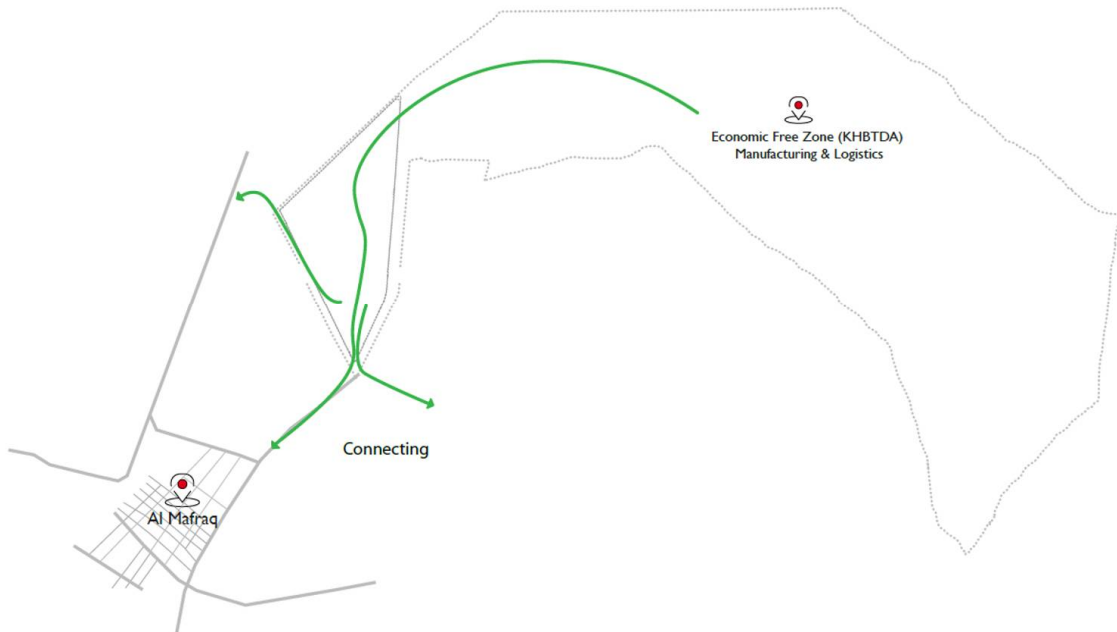


Figure 38 Connecting YBC with the Economic Free Zone and the City Al Mafraq.

5.4.5 Design strategy

As the multi-functionality is key in the design, the design strategy is to create axes and/or roads connecting different functions with one another; the campus will also grow and be developed along these axes, going through the 3 different stages as time passes by. Figure 39 illustrates the growth: starting small in the South corner of the plot with the pop-up stage (green), growing into the Touch-base (blue) and finally ending up in the Fully-developed stage of the plot (yellow).

The 3 key connection axes are:

1. The Business axis or road: placed on the west side of the plot; the (mostly) 4 story buildings will function as a sound barrier against the noisy highway; it protects the campus visually as well from the Military barracks and the prison on the east side. The Business Road is planned on the edge of all the built area, so business visitors and retail clients can easily visit that part of the YBC without impacting the more quiet living areas.
2. The Green axis or road. This forms the spine of the Campus, emphasizing the significance GFC gives to green development and sustainable agriculture. It also forms the entrance to the Campus. This line connects the Farmer Field School, greenhouses, food fields and the wind turbine in the North.

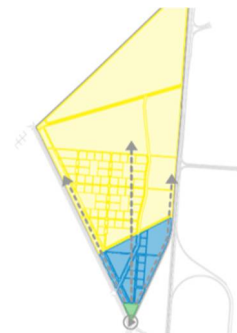


Figure 39 Growth and development of the YBC in three stages.



3. The Education axis or road. This forms the amplifier of the spine and underlines the importance of education on the Campus. It connects all workshops spaces and educational centers.



Figure 40 Design Strategy: growth and development through 3 axes.

These 3 lines are the keys axes along which the campus will grow. They grow linearly with the growth of the YBC from the main connection point with the city, the Tank Circle as a starting point.

As said at the beginning of this section, another key element in the design and development strategy is the 3 staged approach: from small size neighborhood into a mini sized city. Because of the step-by-step approach and reflecting on it after every step, mistakes can be avoided and risks reduced (learning by doing).

5.5 Synthesis

This section explains the process of getting towards the intermediate results of the urban planning design for the YBC. It will outline and explain how the YBC concept (goals), the contextual realities and the design strategy are integrated. The urban plan consists of many layers, which are interconnected. It ranges from infrastructure (water, energy and construction) to buildings and usage. Layers include:

1. Sketching;
2. Topography;
3. Sun path and wind direction;
4. Infrastructure including roads, parking, energy, water and ICT;
5. Zoning;
6. Public parks and green nodes;
7. Hospitality;
8. Women oasis;
9. Morphology including building blocks, neighborhood, streets and grid;
10. Mixing type of buildings and functions;
11. Agriculture.

The importance and positioning of these layers in the masterplan are explained in the following sections.



5.5.1 Sketching

To interconnect all the dots and layers relevant to the design and to weigh them up and balance them with a critical eye, to integrate them according to the concept and the strategy, sketching is used as an essential design tool¹¹. This first result of the design process is illustrated in Figure 41. As shown, the sketches give insight in the scale, the connection between functions and all the layers. Invariably, these first sketches form a basis whereupon the actual design can be built.

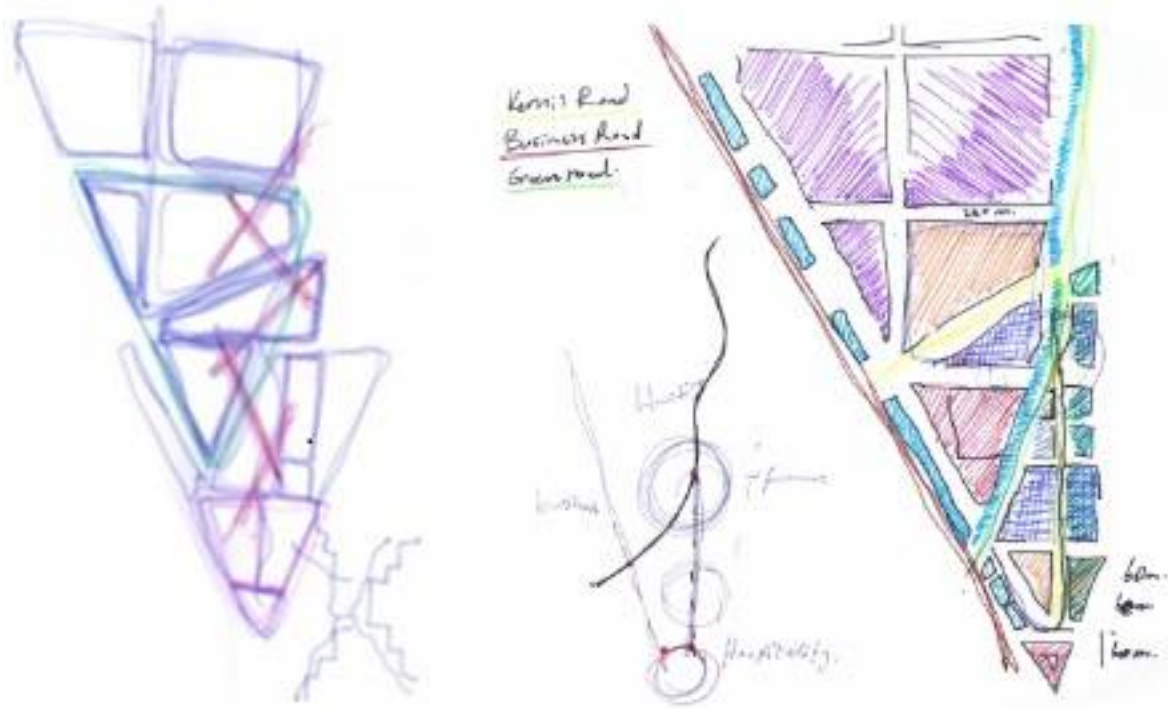


Figure 41 Sketching as first step in the design process.

5.5.2 Topography

The site has height difference of 7 m; contours of equal height are shown in Figure 42. The highest point is at the west of the site it descends towards south and north. Thus, the water collection spot is placed to the south for the Pop-Up stage and to the North for the realization of the Fully developed plan. The morphology has also influenced the zoning of the women oasis (in particular in the Touch-base stage): it is put on a higher point in comparison with the men studios, to provide the privacy required. The agricultural zone starts south-east in the pop-up stage and stretches towards North as the campus will

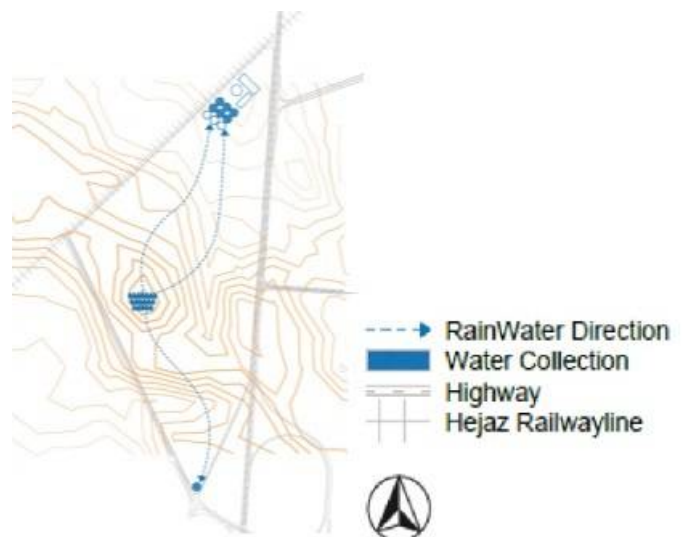


Figure 42 Contours of equal height and water flow.

¹¹ Sketching is like scribbling down of ideas which are interesting, important, of need or in some cases not even relevant to the project. As Juhani Pallasmaa states: "the hand has its own intentionality, knowledge and skills" (Pallasmaa, 2009).



grow. After all, north is the lowest part, hence relatively water rich part of the plot.

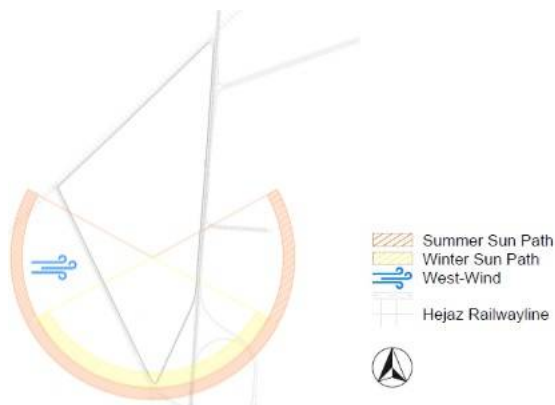


Figure 43 Sun path and prevailing wind direction.

5.5.3 Sun path and wind direction

Mafraq has as mentioned before two main seasons, a hot dry summer with daylight duration of 14 hours and a harsh cold winter with a daylight duration of 10 hours. The most prevailing wind direction is west, see Figure 43.¹²

To create a sustainable neighborhood the sun-path and wind direction play an important role. Avoidance of sun in summer and creating well-ventilated buildings is essential for a comfortable environment. Creating microenvironments through the application of a grid allows the sun and wind direction be manipulated on a smaller scale. In the

layer "Neighborhood" more information is provided about the size and orientation of the grid in relation to wind and sun. During the hot and long summer ample shading is key; this will be worked out in detail in the architectural design of each building block and the public spaces.

5.5.4 Infrastructure

5.5.4.1 Roads and Parking

The YBC site is surrounded by highways. Speed-inhibitors should slow down drivers when they enter the campus area. The ring road around the campus is an effective way to reduce the speed relative to high-way speed, while at the same time enabling people to go relatively quickly from one side of the YBC to the other without having to enter the built environment and without bothering pedestrians and other means of slow traffic. The ring roads give access to the main roads: the green and the business roads are in turn diverted and further branched into smaller and narrower streets and eventually to pedestrian roads as is shown in Figure 44. A bus service will connect the YBC with Al Mafraq city and the Al al-Bayt University.

Parking (s)lots are laid out only on the main streets and the ring road and not in the various building blocks.

¹² <https://www.suncalc.org/#/32.3656,36.2243,12/2019.12.26/06:36/1/0>

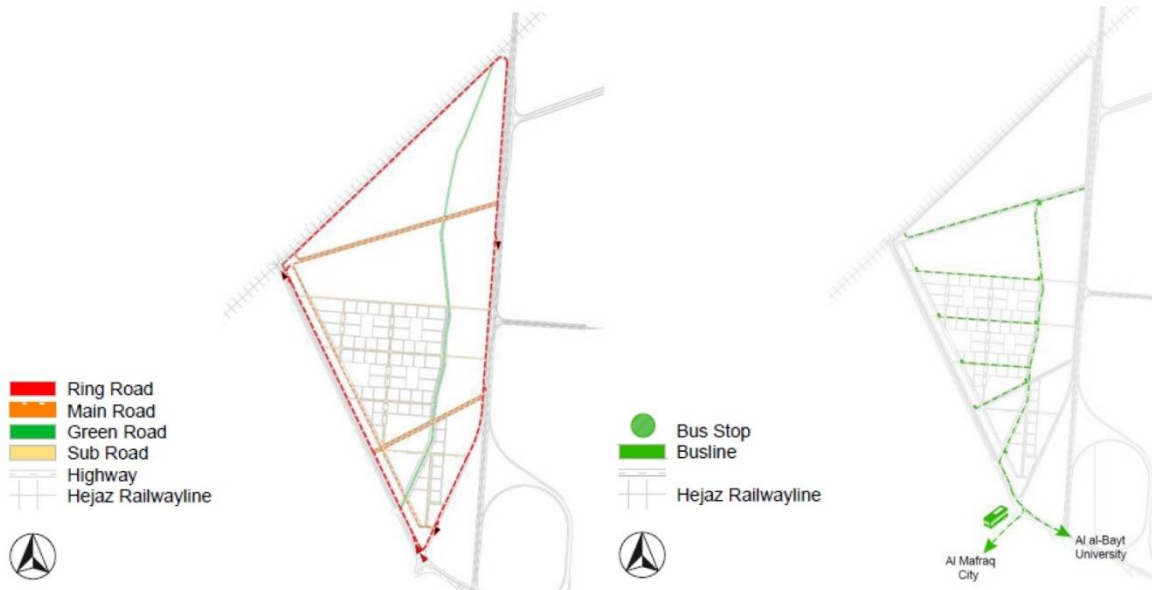


Figure 44 Network of roads and bus connections.

5.5.4.2 Energy

The main source of energy will be solar panels (PV), solar hot water systems and a wind turbine (see Section 6.4.4.1). Solar appliances will be predominantly placed on rooftops and maybe above parking slots or lots. The wind turbine will have the highest yield in the Northern part of the plot because of the openness of the terrain and the absence of obstacles (buildings, trees). Situated in the North, it will mark the edge of the GFC plot. At the same time this location will ensure the distance to noise nuisance sensitive destinations like houses is big enough. For the pop-up stage of the campus a wind turbine of 160 kW is selected. A zone around the wind turbine of 300 to 400 m should be kept free for housing to prevent nuisance of noise, shade of rotating blades and safety issues (see Figure 45).

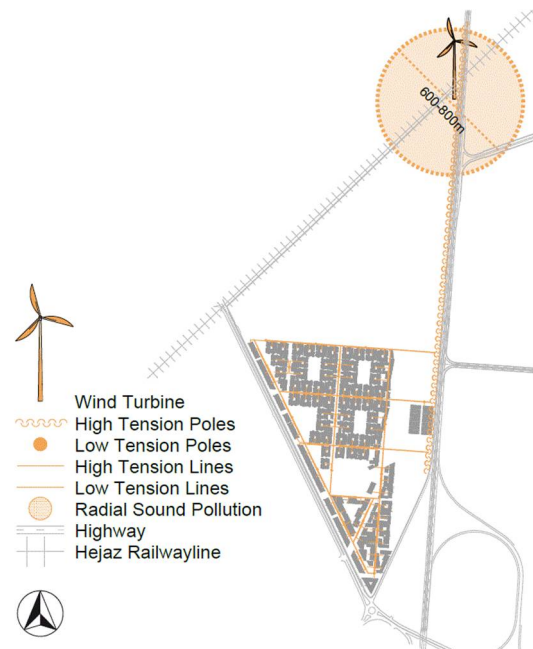


Figure 45 Electricity grid and position wind turbine.

5.5.4.3 Water

The Water management facilities are placed on the southern and northern end of the plot, as the site height descends towards these ends as mentioned in the layer topography (Section 5.5.2).

5.5.4.4 ICT

Obviously, ICT is part of the infrastructure of the campus. Additionally, it is a key sector to be developed having presence in the shape of space for education, training and offices.

5.5.5 Zoning

5.5.5.1 Access Site

The site can be accessed from different points from the highways, see Figure 47. The Tank Circle on south of the plot is the only connection the plot has with the City Mafraq. Because connecting the



YBC with the city is seen as key, the main access to the GFC plot is close to this roundabout. Apart from this access point, there are several more points where one can enter and exit the plot.

5.5.5.2 Zoning



Figure 47 Access Points to the YBC site.

Women oasis is placed here as well due to its higher position, as explained before. In the east there will be the green road which grows from the south-east to north. In north it creates a buffer zone between the wind turbine and the built area. The last road which grows linearly from the Pop up stage into the Fully developed stage is the education road. This also defines the place of many functions such as the farmer field school, it is part of education yet it needs to be part of agriculture as well; so it is placed east. This way the other functions are

The zoning is based on the 3 phased growth (as mentioned in section 5.1). As said, it is key for the campus to be connected to the city. Hence, the Pop up stage, which forms the basis of the linear growth of the Campus, will be placed as near to the city as possible: the vertex of the plot, in the south by the Tank Circle. To attract people to the YBC the buildings needs to be designed and built as eye-catchers, making it an attractive place to work, live and learn while at the same time attracting visitors. From the southern point, the three strategy lines with the functions connected to it will continue north wise with the growth of the Campus. Thus, in the west there will be the Business road, which will create a buffer between the military zone and the YBC. The



Figure 46 Growth of the Education line through the 3 development stages.

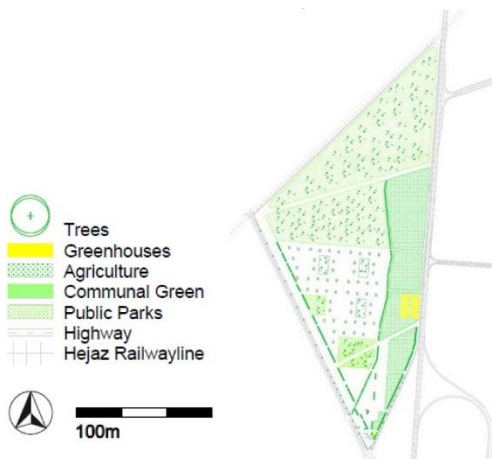


Figure 48 Parks, agriculture and green places.

distributed according to their relevance with the strategy roads.

Figure 46 illustrates the linear growth of the Education line.

5.5.6 Public Parks and Green Nodes

Greenery and inclusiveness within a neighborhood: each plot dedicates at least 25% of it to communal spaces in the form of parks. Greenery is used as a pull



factor and a place for recreation. It will create places to interact and hence liveliness on each plot throughout all the stages of the project.

In between the Touch-base stage and the Fully developed one, a big public park is placed, as a connection and a subtle division between the "busy" side of the campus and the area where mostly living is projected. These green nodes are also meant as crowd pullers, where people will meet, exchange knowledge and play.

5.5.7 Hospitality

The hotel is at the vertex of the site (closest to the city) and is positioned there and designed to function as an eye-catcher and pull visitors to the campus. It accommodates guests for short and long stays and provides cafes, some retails and a wedding hall. It is an important part of the pop-up stage as well as the final fully developed plan as it creates liveliness on the YBC.

5.5.8 Women oasis

Based on extensive field research it was concluded that a place only for women ("Women oasis") is essential (see Section 3.1.5). This area will be an entity which can run on its own. It includes women-only spaces for living, working and learning. In the Popup stage it will be connected to the hotel (Hospitality). In layer Topography (Section 5.5.2) the positioning of the Women oasis has been explained.

5.5.9 Morphology

5.5.9.1 Building Blocks

The sizes of the building blocks are kept small to create communities within the same buildings. The small size and orientation will make sure the prevailing wind has many pathways to enable maximum ventilation, minimum cooling load and optimal access of daylight at the same time. The widths of the blocks vary from 6 m. to 9 m. to max 12 m. The other option, which is also applied frequently, is creation of broken courtyard buildings, wherein couple of buildings form pleasant, shaded open spaces (see Figure 49).

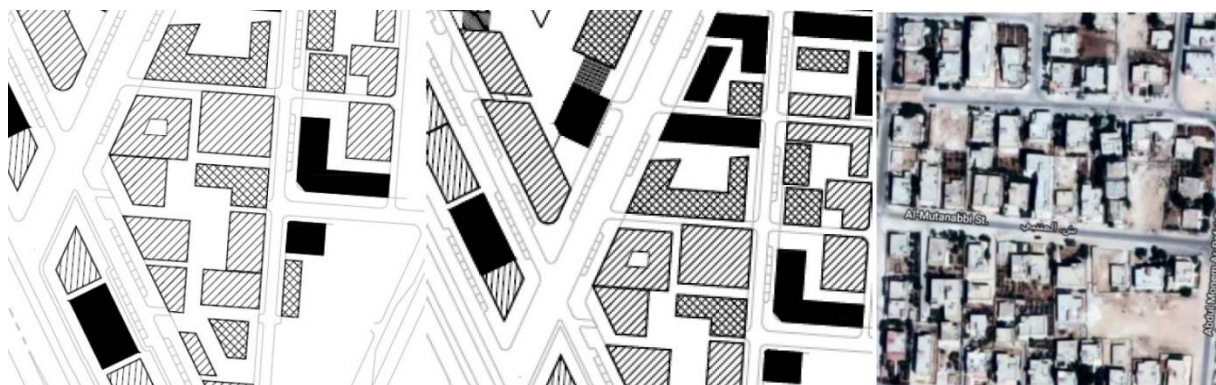


Figure 49 Various sizes of building blocks on the campus.

5.5.9.2 Neighborhood and Grid

The neighborhood size is kept small, so most of the needs can be obtained on foot. The size of each neighborhood or plot is 240 m. by 240 m. and it is further divided in 16 blocks of 60 m. by 60 m. This grid is shown in Figure 50. A neighborhood includes a variety of functions and people can find communal spaces, shops maybe even education centers. The neighborhoods are kept car-free. The pop-up stage is smaller than the neighborhood-size mentioned above due to its triangular shape.



Figure 50 Neighborhoods and grid size.

5.5.9.3 Streets

Streets are kept narrow, especially the pedestrian ones, so people can walk in shaded streets. By creating small plots (neighborhoods) while including necessary services on every plot, will encourage people to do their groceries on foot instead of using a car.

5.5.10 Mixing Type of Buildings and Functions

When buildings or neighborhoods have mono functionality such as exclusively for living, they tend to be empty when people go to work. If a neighborhood only includes offices, it is a dead space during evening and night hours, and during the weekends. Mixing type of buildings and functions enhance liveliness on the campus. This is another design element for pulling crowds to the campus.

5.5.11 Agriculture

The site has a high-quality soil which will be good for agriculture under the condition of using an advanced water management solution. The agricultural parts of the campus are shown in **Error! Reference source not found..**

5.5.11.1 Farmer Field School







The Farmer field school is an important part of the project, where farmers learn how to deal with the scarcity of water, and to grow crops and develop them to different products and brand them.

5.6 Sustainability in the Design

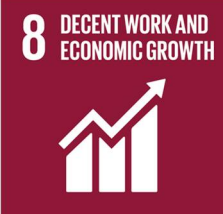
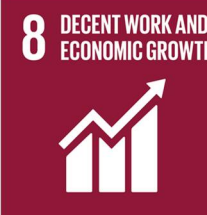



As said sustainability has been an integral part of the design. Table 5 presents an overview of design steps and aspects that have led to a contribution in making the YBC sustainable. The relevant SDG(s) is listed as well.



Table 5 Overview of contributions to sustainability in the design.

| Contribution | SDG(s) |
|---|--|
| <p>Use modular sizes walls and floors in the pop-up stage. These can be reused relatively easily elsewhere.</p> |  |
| <p>Reduce transport demand by designing:</p> <ul style="list-style-type: none"> ▪ A place where people can live and work. The commuting need is near to zero. The same, albeit to a lesser extent, goes for education and living as well as education and working (trainee ships); ▪ Neighborhoods including retail shops such as small supermarkets. |  |
| <p>Reduce emissions from transport by:</p> <ul style="list-style-type: none"> ▪ Organizing public transport services to the city Al Mafraq and AaBU ▪ Discouraging using the car by keeping cars on the main roads at the edges and prevent them going into the neighborhoods, hence stimulating going on foot or by bike. | |
| <p>Size and orientation of the grid used: maximum ventilation, minimum cooling load, minimum use of artificial light.</p> |   |
| <p>Using very energy efficient sandwich panels as walls and ceilings/floors reducing heat demand in winter and cooling demand in summer.</p> | |
| <p>Assessment possibilities for renewable energy options using Alliander's method of Sustainable Area Development: solar power, solar hot water systems on rooftops and wind power. Selecting locations with maximum yield and minimum negative impact (sound, safety, shade from rotating turbine blades).</p> | |
| <p>The design includes women friendly spaces such as the women oasis and childcare facilities promoting gender equality.</p> |  |
| <p>Maximum usage of catching rain and usage of rain by agriculture and parks by using height contours (topography) in urban planning.</p> |  |
| <p>Maximum usage of rainwater in design by catching all the water falling on rooftops and on paved roads.</p> | |



| Contribution | SDG(s) | |
|--|---|---|
| Creation of a small scale sustainable circular economy. |  | |
| Selecting a wind turbine site enabling agricultural usage in the sound and safety zone. | | |
| Creation of a sustainable place to live, learn and work for refugees. |  |  |
| YBC is designed as a small-scale sustainable city or settlement that is inclusive, safe and resilient (projected lifetime 50 years). |  | |
| The enclosed spaces, the size of the neighborhoods, the parks and green nodes, promote community building. | | |
| Green nodes and parks are part of the YBC plot; this will enhance flora and fauna in the area and prevent desertification. |  | |

5.7 Key Results Synthesis

5.7.1 Urban Plan for Three Stages

Figure 51, Figure 52 and Figure 53 present the results of the synthesis for the three stages.

Obviously, the design of the planning is made from the final stage zooming in in two steps to the plan for the pop-up stage. The last one is the most detailed.



Figure 51 Urban plan for the Fully Developed stage of the YBC.



Figure 52 Urban plan for the Touch-base stage of the YBC.



Figure 53 Urban plan for the Pop-up stage of the YBC.



5.7.2 Three-Dimension Sketch Design Pop-up Stage

A full 3-D sketch design has been developed for the pop-up stage based on the design brief and the urban plan. The result is presented in Figure 54 in a bird's-eye view. A detailed description of the function, position and interaction of the six building blocks (sectors) is provided in Section 6.3 and Section 6.4.

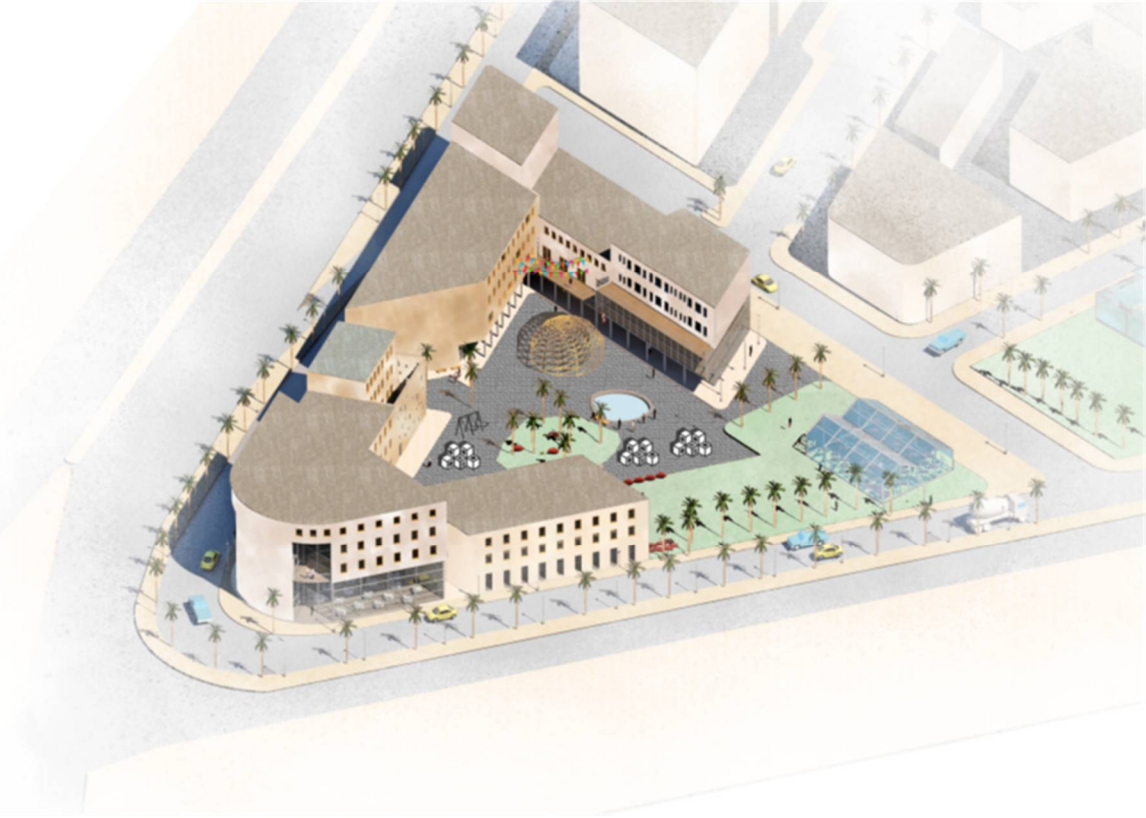


Figure 54 Bird's-eye view of the pop-up stage of the campus.

For 3 positions (A, B and C, see Figure 55) 3-D renderings are made to show how the first stage of the YBC will look like on ground level. The results are shown in Figure 56, Figure 57 and Figure 58.

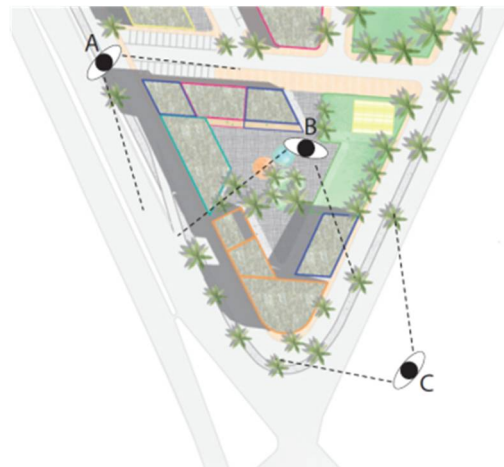


Figure 55 Viewing positions on ground level.



Figure 56 View on the Youth Business Campus from position A.



Figure 57 View on the Youth Business Campus from position B ("court yard").



Figure 58 View on the Youth Business Campus from position C (from Damascus highway).



6 Results Feasibility Study

This chapter gives the in-depth analyses of all aspects of the feasibility of the YBC. It includes:

- Jordan and Mafraq Economy;
- Education;
- Concept, design including the business model used;
- Six sector business cases including impact in SDG format;
- Spatial planning and legal aspects;
- Export potential;
- Political assessment;
- Risk assessment.

6.1 Jordan and Mafraq Economy

In this section, the impact of the state of the local economy on the goal to develop the Youth Business Campus and create jobs in Mafraq is analyzed. More precisely, the relevant task in the feasibility study proposal was to explore the needs and potential for jobs in five pre-selected sectors for sustainable economic development of Mafraq region. The goal of the Mafraq Youth Business Campus is to help attract and create 250 jobs within two years and 1500 jobs for Jordanian (50%) and Syrian (50%) youth, both women (50%) and men (50%), within five years after construction of the campus. These jobs need to be new, sustainable, locally relevant and valuable and are linked to the education component of the business campus (see Section 6.2).

There are several imaginable approaches to grow the number of jobs ranging from attracting existing national or international companies, attracting and incubating startups, providing training and incentives or establishing service companies among others. What the most effective methodologies for job creation are, differs per focus sector and depends strongly on the overall state of the (local) economy.

Jordan is classified by the World Bank as an "upper middle income country". The Heritage Foundation's Index of Economic Freedom, scores Jordan as the #53 country in overall economic freedom¹³ in 2019. The highest ranked countries in the MENA region are the UAE (9th) and Qatar (28th). Jordan ranked 73rd on World Economic Forum's Index of Economic Competitiveness¹⁴ out of 140 countries, outcompeting some Southern European countries. When zooming in however, several challenging areas of the Jordanian economic landscape become visible that keep the country from performing even better. The main areas that are mentioned for needed improvement are the Macro-Economic Environment (vulnerabilities), Labor Market inefficiencies and lack of widely accessible quality Education.

¹³ <https://www.heritage.org/index/ranking>

¹⁴ <http://reports.weforum.org/global-competitiveness-report-2018/country-economy-profiles/#economy=JOR>



Jordan

73rd / 140

Global Competitiveness Index 4.0 2018 edition

Rank in 2017 edition: 71st/135

Performance Overview 2018

Compare with No comparator



Figure 59 Competitiveness Jordanian Economy, Source WEF, Global Competitiveness Report 2018.

Such compounded indexes tell only part of the story. The subsequent graphs are taken from the 2019 Index of Economic Freedom as published by the Heritage Foundation. They compare Jordan to the UAE in a number of sectors of their respective economies that score significantly different from each other.

PROPERTY RIGHTS



Figure 60: Heritage Foundation 2019 Index of Economic Freedom.



Property rights are significantly better protected in the UAE than they are in Jordan as a part of a long term UAE strategy to attract and retain more long term human and financial capital.

JUDICIAL EFFECTIVENESS

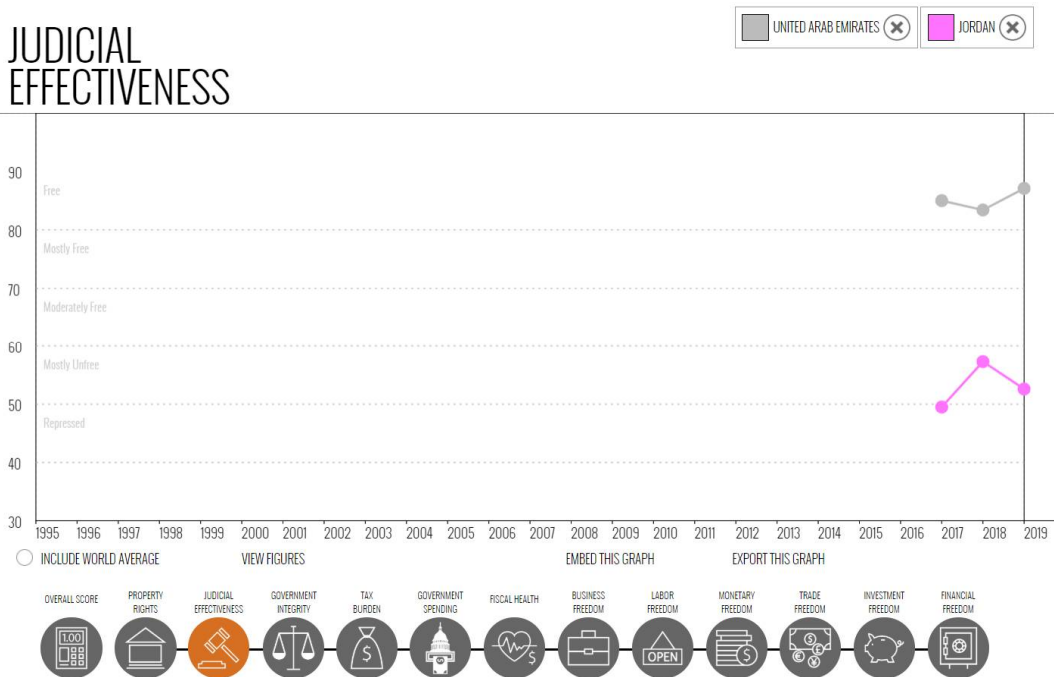


Figure 61 Heritage Foundation 2019 Index of Economic Freedom.

The difference in property rights security may be connected to difference in Judicial Effectiveness. Both in reports as well as from own and anecdotal evidence, it is evident that the Jordanian Judicial System is slow, unpredictable and unreliable, in the sense that favoritism and corruption are part of the system.

GOVERNMENT INTEGRITY

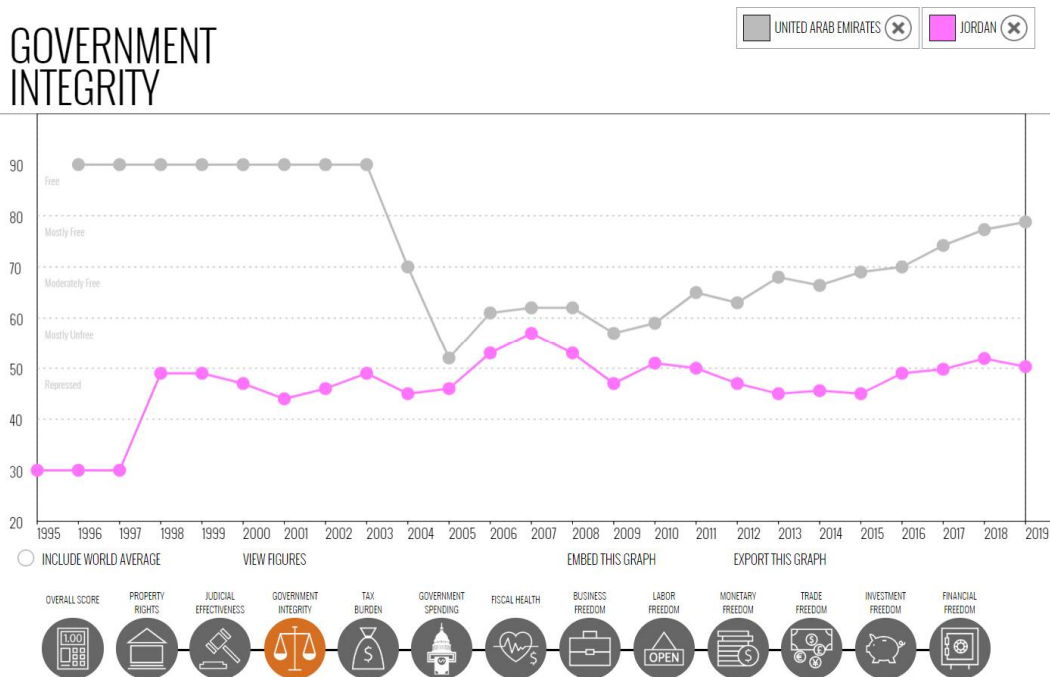


Figure 62 Heritage Foundation 2019 Index of Economic Freedom.



Jordan has a very high number of people working in its public sector. The Economic and Social Council's (ESC) "Jordan Competitiveness 2015", reports that "the size of the Kingdom's public sector is the largest in the world given its ratio to population, in addition, the sector is inundated with red tape, low productivity and *wasta* (favoritism) that hinder the Kingdom's competitiveness", ESC said¹⁵. Private sector entrepreneurs interviewed by GreenfieldCities confirm this statement, and GreenfieldCities also itself experiences on a daily basis that public institutions do not perform as intended. The Jordanian public sector strongly needs reforms, but regularly changing governments and quick rotation of key civil servants in a bid to divide and control the power structure in the country make this practically difficult.

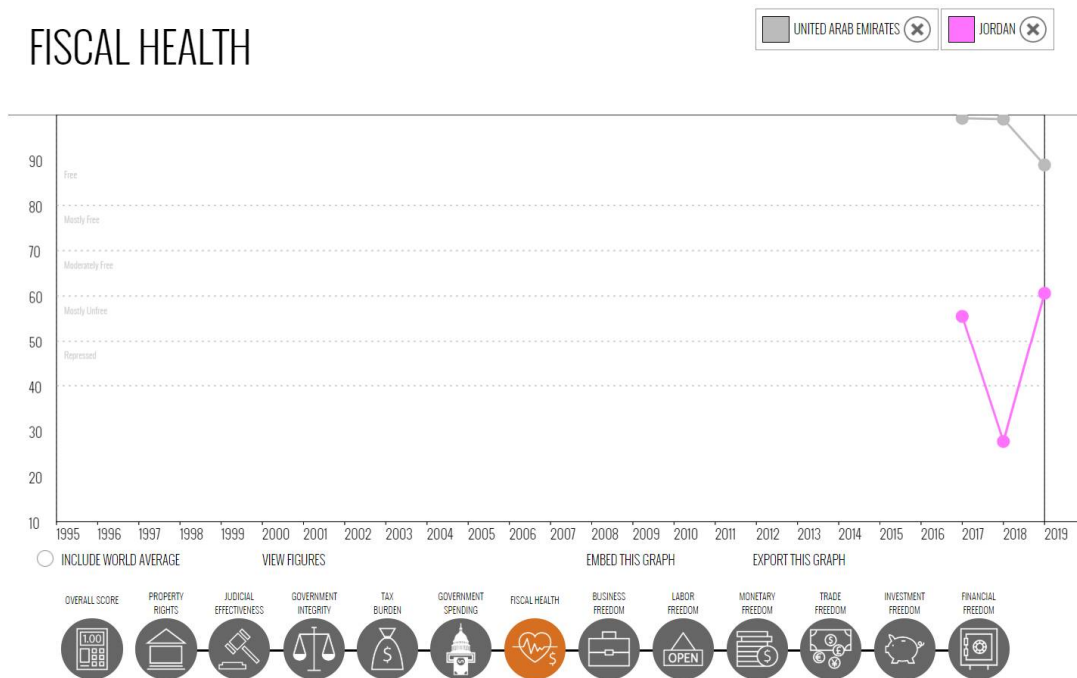


Figure 63 Heritage Foundation 2019 Index of Economic Freedom.

The Jordan government normally runs budget deficits and due to the long standing practice of subsidizing primary goods (food, energy, water), its bloated public sector, and its geographical position, the country is very vulnerable to external shocks. The debt to GDP ratio is close to 100%. In addition, the population is generally already unhappy and finding it hard to make ends meet every month. Therefore, the government has very little practical space to implement reforms that would make their economy more competitive.

The problematic fiscal situation is also an indication that the way forward is through private sector driven growth. Since Jordan is not very likely to suddenly attract large sums of foreign direct investment it will need to rebuild trust gradually. The most promising way forward is to empower the young generation and try to create the conditions to attract capital and retain human resources is through small-scale successes.

¹⁵ <http://www.jordantimes.com/news/local/jordan%E2%80%99s-public-sector-largest-worldwide-relative-terms%E2%80%99>



BUSINESS FREEDOM

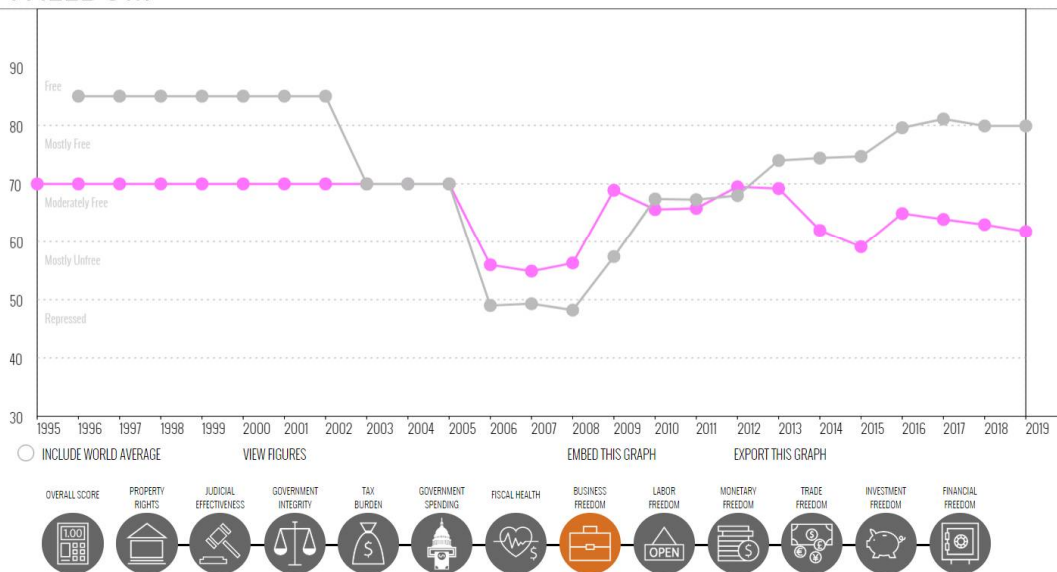


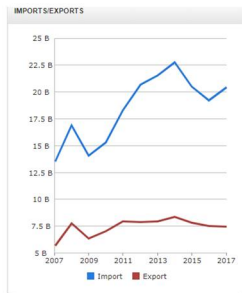
Figure 64 Heritage Foundation 2019 Index of Economic Freedom.

While on paper, it takes only 11 days in Jordan to register a new business, in reality, it can take a year or more. Additionally, it is difficult to obtain licenses, especially for companies that work in more than one sector.

The Jordanian business climate is seen as “weak and unpredictable”¹⁶. It ranked 113 out of 189 countries in the Doing Business ranking for 2015, down from 107 the year before (World Bank PID). These scores resonate well with qualifications that GreenfieldCities hears from Jordanian private sector partners. Business owners complain to GreenfieldCities about red tape, corruption and high taxation. A practical license to operate in Jordan depends of building strong relations more than on regulatory compliance.

Jordanian businesses struggle to be competitive regionally and globally. This is amongst other reflected by the import and export figures that are structurally showing gaps. Especially thanks to the Free Trade Agreement with the US, Jordan exports garments to the US. Other export products are minerals, medicaments, cables and agricultural products. Energy, cars, machines, food and form the biggest part of the imports. Income from tourism (est. \$4B in 2017) and international remittances (est. \$3.7B in 2017) only partly offset the large trade gap. There are signs that the Jordanian economy is getting less competitive compared to for example the UAE. The once booming medical tourism sector shrunk with 40% in 2016 and 2017 as many clients chose Dubai over Jordan. High cost of living in Amman and the Jordanian Dinar being pegged to the US Dollar make the need for higher labor productivity even bigger.

¹⁶ [University of Birmingham 2016](#)



| TOP 5 PRODUCTS EXPORTS IMPORTS AT HS 6 DIGIT LEVEL | | | | | |
|--|--------------------------|--------------------------|---|--------------------------|------------|
| Exports (US\$ Thousands) | | Imports (US\$ Thousands) | | | |
| ① | Garments of cotton, ... | 803,824.90 | ① | Automobiles with rec ... | 975,612.08 |
| ① | Unground natural cal ... | 434,394.94 | ① | Petroleum oils and o ... | 913,560.31 |
| ① | Mineral or chemical ... | 425,597.24 | ① | Natural gas, liquefi ... | 903,551.25 |
| ① | Other medicaments of ... | 408,261.90 | ① | Petroleum oils, etc, ... | 815,364.35 |
| ① | Garments of other te ... | 366,625.97 | ① | Durum wheat | 425,900.25 |

LABOR FREEDOM

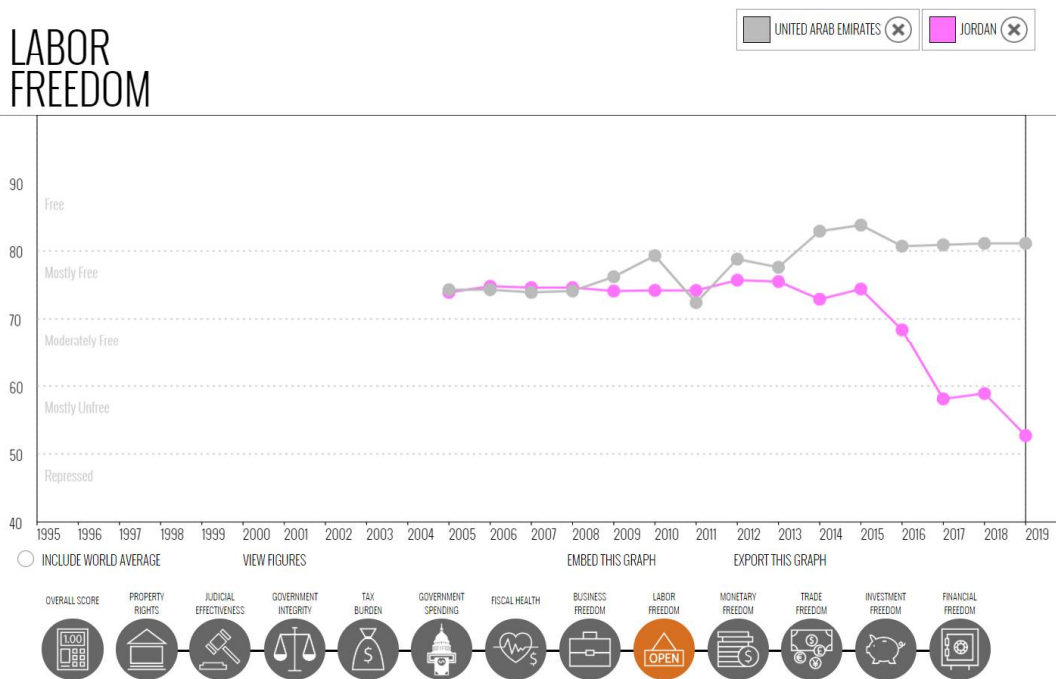


Figure 65 Heritage Foundation 2019 Index of Economic Freedom.

The labor market situation in Jordan is difficult. Even while unemployment is high, the ratio between labor productivity and wages is unfavorable. Especially human resources with strong professional skills are hard to find as these people tend to leave the country.

According to Numbeo's 2017 statistics¹⁷, Jordan ranked 12th in the average monthly net salary ranking among the Western Asian region with \$637/month, followed by Turkey (\$575), Armenia (\$303), Georgia (\$270), Azerbaijan (\$250) and Syria (\$94). The report showed that only five Arab countries have an average monthly net salary lower than Jordan, namely Morocco (\$402), Algeria (\$295), Tunisia (\$286), Egypt (\$161) and Syria (\$94). The figures also estimated the monthly expense for a single person in Jordan at \$676 and \$2,468 for a family of four members, excluding rent. The Economist Intelligence Unit reported in March 2017 that Amman, along with Milan, ranked 29th internationally in the Worldwide Cost of Living Report 2017, which also ranked the Jordanian capital as the most expensive Arab city to live in.

Labor market inefficiencies are another challenge. Unemployment figures are high for Jordan overall. The World Bank reported overall unemployment at 18.4% in Q1 2018, up from 18.1% a year

¹⁷ <http://www.jordantimes.com/news/local/kingdom%E2%80%99s-average-monthly-salary-stands-637-%E2%80%94-report>



earlier. Youth unemployment is even over 35%. This is a sign that wages – although not enough to cover daily expenses – are too high relative to the labor productivity performance. In other words, companies perceive Jordanian labor as expensive (regionally). Last not least, UNDP reports in 2015 that labor force participation rates among women are among the lowest in the world, despite Jordan being a relatively liberal country in this sense and women expressing seeing the value of employment.

Research indicates that a part of the unemployment is caused by a mismatch between the output of the education system and labor market demands. Jordan Invests heavily in its educational system and receives significant international support in this field. USAID writes in 2016. “Despite many achievements, the Government of Jordan recognizes that the quality of education remains uneven and not competitive by international standards, particularly in poorer urban and rural areas. Low early grade reading and math literacy rates impair later academic success and completion. Poor learning environments, particularly in boys’ schools, exacerbate an already underperforming school system. Pressures of a growing, young population, migration from private to public schools, and an increasing Syrian refugee population put additional stress on the public system’s facilities, particularly in disadvantaged areas.” GreenfieldCities experiences these different issues clearly in day to day operations. In joint research projects, we notice the large difference in the academic performance and level of aspiration between universities and even while hiring well educated and experienced Jordanian staff, the initial professional skills are less than expected, and less than needed for Jordan to be competitive vis-à-vis neighboring countries.

Lastly, it is generally not easy in Jordan to lay off staff without severance payment or legal disputes.

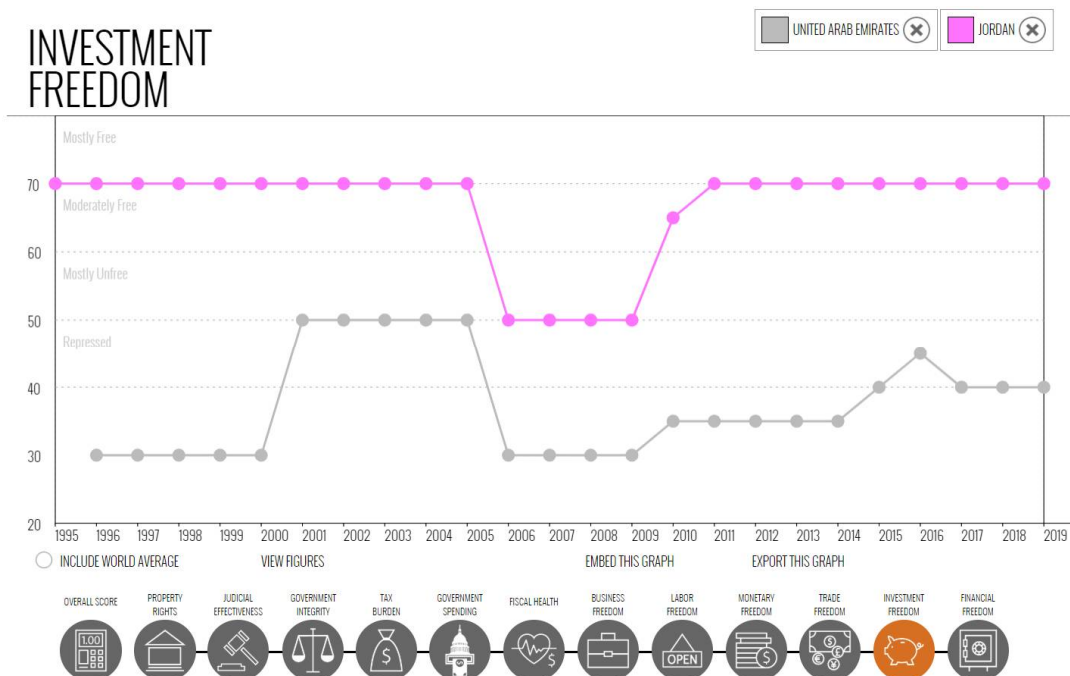


Figure 66 Heritage Foundation 2019 Index of Economic Freedom.

In general, foreign and local investors are treated equally under the law. In this sense Jordan is an open economy welcoming foreign investment and allowing for capital to flow relatively freely.



In April 2018, The World Bank summarizes the state of the Jordan Economy as a whole as follows:

“Jordan’s economy remains in a low growth scenario. Improvements in tourism and mining and quarrying are expected to have driven timid improvement in growth in 2017; however, the economy remains burdened with ongoing uncertainty in Syria, slow revival of economic cooperation with Iraq, and economic slowdown in the Gulf Cooperation Council (GCC). In addition, the economy is subject to a slow pace of structural reforms that is impeding a strong recovery in growth”.

In October 2018, the World Bank states:

“Moving forward, it will remain critical for Jordan to continue diversifying its energy supply in the medium term in order to reduce its macroeconomic vulnerabilities. Further sound economic policies and the quick implementation of key growth-enhancing reforms will also be necessary to reduce the country’s sensitivity to external shocks and help reinvigorate the economy. Finally, creating conditions for increased private investment and improved competitiveness will remain indispensable for Jordan to stimulate job-creating growth. Apart from energy vulnerability, adverse regional developments, in particular the Syria and Iraq crises remain the largest recent shock affecting Jordan. This is reflected in an unprecedented refugee influx, in disrupted trade routes, and in lower investments and tourism inflows. Continued regional uncertainty and reduced external assistance will continue to put pressure on Jordan.”

While these recommendations sound plausible, the reality is that the Jordanian government has little room to maneuver for pushing through its on-going reforms. Remittances from the GCC fall and in general, citizens perceive stagnant wages and rising costs of living.

A strong signal that the government cannot push the (austerity) reform buttons much harder are unprecedented signs of unrest and protest by Jordanians as a response to proposed government reforms in June 2018. These protests indicate that the Jordanian population does not accept any more changes in prices for basic life expenses.

Summarizing the top challenges for the Jordanian economic system at national level, GFC concludes:

- Macro-Economic vulnerabilities are a threat. GFC cannot change these external factors, but GFC can protect the campus from some of its potential negative impacts. For example by building energy and water efficient assets and by looking for businesses with varied product market portfolios for example.
- Labor market inefficiencies, the weak business climate and education challenges can be more characterized as weaknesses that GFC needs to address at the level of the Youth Business Campus. To be able to define approaches for such improvement activities however, we need to have a closer look at the economic system in our focus area, Mafraq.

While only 60 kilometers apart, the economic realities in Mafraq are almost incomparable to those in Amman. While, also as a result of regional tensions, Amman has attracted capital, relatively wealthy refugees, international agencies, Mafraq has been on the receiving end seeing its population double with mostly poor Syrian refugees. The business climate is also incomparable: Amman has a lively private sector including all kind of private and public support services while Mafraq’s economy is suffering from the loss of access to its most vital trading partners. An example of the impact of the Syrian influx comes from a focus group session, that GFC held with the General Federation of Jordanian Women, Mafraq in June 2018 (see also see Figure 67):

“The unemployment rates among Jordanians have increased since the influx of Syrians who took over jobs for lower wages. Additionally, the pressure on the housing market has made housing more expensive. The office of the General Federation of Jordanian Women in Mafraq (3 rooms, 1 salon



(living room) and 2 bathrooms (of which one is the kitchen)) was 100JOD/month before the Syrian crisis, now it costs 250JOD/month. The average price for a small apartment (3 rooms/ 70-80m2) costs 150JOD/month.”



Figure 67 Focus group session with the General Federation of Jordanian Women, Mafraq in June 2018.

The Mafraq Governorate Development Program, 2017-2019 (MOPIC) and the Local Economic Development Strategy For Mafraq Governorate 2016-2018 (ILO) and our own research provide telling facts and figures about the challenges in Mafraq:

- Poverty levels are higher than the national average. Almost 20% of the families live below the poverty line.
- Official unemployment levels are published at 15% versus 11.9% nationally. The World Bank puts national unemployment levels at 18.4%. Also GFC's local observations indicate that the official numbers are under-estimating reality. Some sources report youth unemployment levels over 40%¹⁸. Interviews with graduates from Al Al Bayt University is that labor markets cannot absorb the large supply of young people entering the labor market after graduation. Danish research¹⁹ from 2018 and ETS research from 2014²⁰ confirm this trend also nationally.
- In the Mafraq Governorate, a dominant 63.4% of the workforce is concentrated in the public sector, defense and education.
- The public sector itself is financially weak. After deducting their own salary costs from their budgets, Municipalities have around 55 JOD per year per Mafraq Governorate citizen to spend on public services. The Mafraq municipalities are also heavily indebted as a result of the Syria crises, so there is no spare financial room to maneuver. These facts are consistent with observations that citizens in Mafraq feel the public sector underperforms.

¹⁸ <http://www.jordantimes.com/news/local/jordan-needs-include-its-youth-job-market-politics-ngos>

¹⁹ Danish Trade Union Council for International Development and Cooperation, Labour Market Profile 2018

²⁰ [ETS Report, 2014](#)



- Despite the dire employment situation, Mafraq (and Jordanian) job seekers are picky in terms of the sectors they want to work in. The common opinion is the “jobs in the hospitality, agriculture and construction sectors are too basic for Jordanians”.

Dr. Ismael, Dean of Faculty of Scientific Research of Al Al Bayt University likes the involvement of Syrians on the campus. He suggests that Syrians have better work ethics than Jordanians from Mafraq. The citizens of Mafraq are Bedouins/nomads who are not used to work in regular jobs, especially not for others. Syrians have to prove themselves to survive and therefore are more successful in the establishment of businesses. Mafraq city center is now full of shops established by Syrians. Simultaneously, Egyptians and other foreigners fulfil jobs in the hospitality and construction sector. Jordanians want a “real job”: an office based job in which they can give orders. Serving others is not what Jordanians want to do. Dr. Ismael hopes that the Syrians will change this challenging mind-set of Jordanians from Mafraq.

The relative “boom” in Amman creates a brain drain from Mafraq. GreenfieldCities interview based evidence suggest that young people that can go to Amman do so. However, many (especially women) are culturally barred from making such a step

Unemployment rates in Mafraq are very high, especially among youth and women, while life is perceived as expensive and governmental services as insufficient. Additionally, Jordanian citizens in the Northern governorates, including Mafraq region, feel the pressure of the Syrian refugees on the availability and accessibility of jobs and resources. Adding Mafraq’s scarcity in essential resources such as water, food and energy, this creates a dangerous mix of factors that is already leading to an ongoing brain drain and migration of youth to Amman, Jordan’s capital. Not tackling these factors locally in the upcoming years will increase tensions and migration. The Jordan economy has to develop resilience for the future, rapid action is needed.

Despite all the challenges and the public sector dominance in Mafraq Governorate, there are also relative strengths and opportunities:

1. Mafraq is a traditional trade hub and the existing Mafraq Free Zone is well positioned to become a regional logistics hub, including assembly, manufacturing and other added value services.
2. The Mafraq Governorate is traditionally also a center of agriculture. Around 20% of the Jordanian agriculture production comes from Mafraq and the sector is an important (informal) employment opportunity for Syrian refugees.
3. Mafraq also offers opportunities for tourism with several religious, archeologic and landscape features that have touristic value. The air in Mafraq (Badia) is said to be very clean and Mafraq is already a destination for medical recovery (after receiving treatment in Amman).
4. The governorate is also interesting to become an energy hub for the country. There are already large solar parks around Mafraq, and in the very east of the Governorate, there are the Risha gas field and power plants. Between Risha and Amman, along the existing transmission line, there are areas that combine space with strong wind energy resources.



- Finally, there are opportunities for the extraction industry in the Governorate, especially in basalt, Zeolite Tuff and Natural Building Stones as is illustrated in Figure 68.

Most of these opportunities are further discussed in the relevant business cases for the Youth Business Campus.

For this feasibility study, GFC gave specific attention to the opportunities for so-called Green Growth. This work was in part performed by Mrs. Ruba Al Zu'bi, member of the GreenfieldCities Advisory Board. She is the architect of the Jordanian "Free Zone" legislation and the former director of EDAMA, the Jordanian Private Sector driven Institute for Sustainability. Green economic

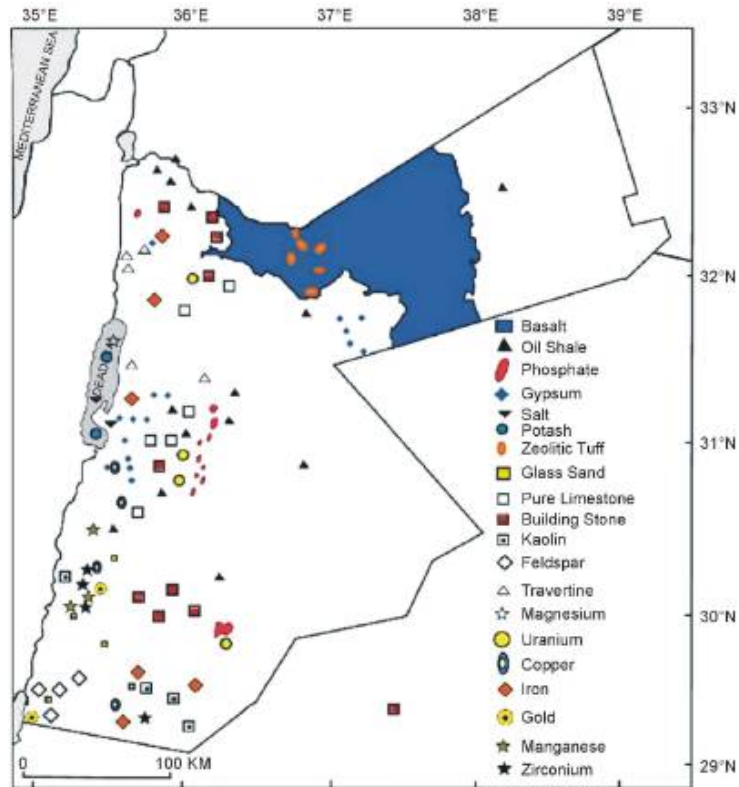






Figure 68 Mining opportunities in Jordan.

growth is both a local necessity and opportunity for sustainable economic resilience of Mafrq governorate. As we speak, Jordan is developing initiatives, such as the National Green Growth Plan (NGGP) and the National Action Plan for Green Growth (NAPGG), to foster green economic growth in the Kingdom.

| | New Jobs Created | Foreign Direct investment (USD Billion) | Annual Government Savings (USD Million) |
|--|------------------|---|---|
|  Renewable Energy | 7.507 | 1.7 | 296 |
|  Energy Efficiency | 5.142 | 0.4 | 30 |
|  Water Management | 2.593 | 0.5 | 28 |
|  Waste Management | 3.669 | 0.3 | 12 |
| Total | 18.911 | 2.9 | 366 |

Source Jordanian Competitiveness Plan Analysis, USAID 2015

Figure 69 The Jordanian Green Tech Opportunity according to the Jordanian Competitiveness Analysis.

These studies and plans indicate a significant green growth and jobs potential. Ruba Al Zu'bi however states that many strategic plans and aspirations exist in Jordan, but that moving to successful implementation is a long-standing challenge.



All the mentioned opportunities for Mafraq, whether “green” or not have in common that they will only come to fruition by increasing the level of professional skills in the Governorate, improving connectivity and by adding high quality production assets and complementary services.. This is ultimately a joint public-private sector challenge that can be supported by the activities on the Youth Business Campus.

The GreenfieldCities Youth Business Campus in Mafraq is a step by step growth model that increases the chance of strategic national plans to be successful and opportunities to materialize. The Youth Business Campus helps to localize *and* convert national plans to short-term and long-term local needs and opportunities in Mafraq. GreenfieldCities reaches this by studying and aligning local needs and opportunities for (green) economic growth, through its continuous presence, local consultations and a strong network in Mafraq itself. This is crucial to be able to generate and sustain local ‘green’ impact.

6.2 Education

This section explains the needs and potential for education in the Energy, Construction, ICT, Hospitality, Water and Agri-Food sectors for sustainable economic development of Mafraq Governorate. To be able to explain this, this chapter provides some background about the challenges of education in Jordan and Mafraq Governorate in particular.

6.2.1 Jordan Educational System

The Jordanian education system consists of²¹:

1. Pre-school education/ kindergarten (no childcare)..... Age: 4-6 (2 yrs)
2. Basic compulsory education (primary education) Age: 6-16 (10 yrs)
- 3a. Secondary education (general)..... Age: 16-18 (2 yrs)
- 3b. Secondary education (vocational)..... Age: 16-18 (2 yrs)
- 4a. Bachelor (university education) Age: 18-22/24 (4-6 yrs)
- 4b. Intermediate diploma/ technical (Community College) Age: 18-20/21 (2-3 yrs)
- 5a. Master (university education)..... Age: 22-24 (2 yrs)

Figure 70 presents the relationship between the educational levels and occupational levels.

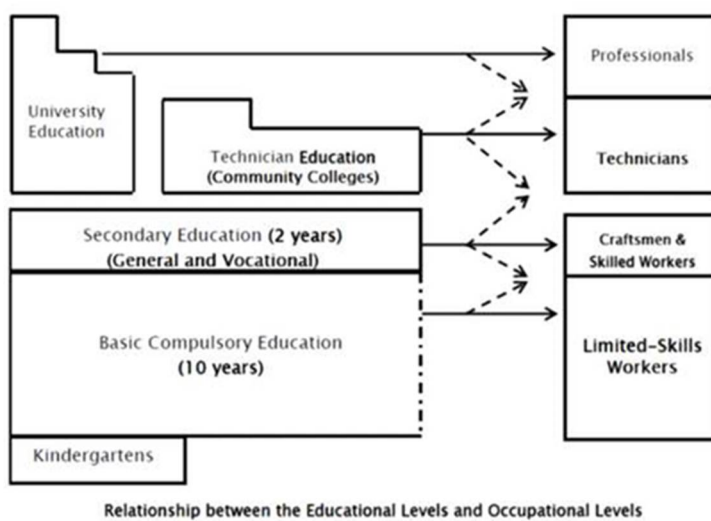


Figure 70 Traditional relationship between educational levels and occupational levels [Alsaaidh 2016].

²¹ Nuffic: Education system Jordan described and compared with the Dutch system [Nuffic, 2017]



For primary education, Jordan has governmental (free, 70% students) and private schools (school fees, 30% students). Secondary education has two streams; general secondary education (75% students) and vocational secondary education (25% students), both concluded with a national final exam. Students from the vocational secondary education stream often continue with higher education in a (public or private) community college, but the vast majority of students enters university education at one of Jordan's universities. Currently, around 87% of the Jordanian students is enrolled in an academic university program, compared to 13% in vocational- and/or technical training programs [NET, 25-02-2019]. Mafrq Governorate has one university, the Al al-Bayt University with around 20.300 students (3 km from GFC site) and some universities in the proximity like JUST and Hashemite University (both 30 km from GFC site). The Governorate furthermore offers the Vocational Training Institute (3 km from GFC site), a Knowledge Station for ICT training (5 km from GFC site, monitored by Ministry of ICT) and the German Jordanian Center of Excellence for Solar Energy (CoE), a training center of National Employment and Training (NET) in the King Hussein Bin Talal Development Area (1 km from GFC site).

6.2.2 (Mis)Match Educational System and Market Demands

In general, many outputs of Jordanian universities do not align with the needs of the labor market. Each year some 40 000 students graduate from Jordanian universities. However, only 30% of the new jobs created are occupied by university graduates, while the remainder are largely taken by workers with a high school education or lower, many of whom are migrant workers. Consequently, around 15 000 new university graduates enter the ranks of the unemployed or economically inactive every year. The improvement in educational attainment is leading to an increase in the proportion of unemployed persons with university degrees and a growing mismatch between the output of the educational system and labor market demand [National Employment Strategy, 2012]²². Despite the large amounts of university graduates, it is remarkable that private sector employers complain that they cannot find suitable Jordanian candidates for their vacancies [Int@j, 23-04-2018].

It is known that there is a much larger market demand in Jordan and Mafrq Governorate for vocationally and technically skilled people than for academically skilled people [NET, 25-02-2019]. Research conducted by the ILO²³ and GIZ²⁴ respectively shows that unemployment among youth with a university degree is larger than the youth's average and that unemployed people with a higher education certification have the least chance to find a job in the labor market. Some vocational- and technical training institutes educate for employment, thereby delivering market-driven outputs. This means that students who graduate from such institutes have a much higher chance to get employed than students from a university. However, most of the TVET programs in Mafrq stay behind in comparison to Amman and do not fit the needs of the sector²⁵ and lack quality in both assets and the trainings themselves [Mafrq Directorate of Education, 10-07-2018]. This means that in Mafrq Governorate evidently faces a mismatch between university and TVET graduate skills on the one hand and labor market demands on the other.

²² 2014, ETF, Employment Policies in Jordan, Thoraya El-Rayyes

²³ https://www.ilo.org/beirut/publications/WCMS_364162/lang--en/index.htm

²⁴ <http://www.dajaniconsulting.com/EchoBusV3.0/SystemAssets/PDF/GIZ%20EPP-Trends%20in%20local%20job%20markets%20in%20Jordan-2017.pdf>

²⁵ https://www.ilo.org/beirut/publications/WCMS_364162/lang--en/index.htm



Many private sector employers complain about a lack of practical skills like professional-, language- and technical job specific skills among university graduates, depending on the sector [Int@j, 23-04-2018; SPARK, 10-04-2018]. GFC research among university students and university graduates of AABU indicates that most of the young people are aware of these shortcomings. They say that university curricula are outdated, remain merely theoretical and fail to address the practical (on-the-job) skills needed for jobs outside the governmental sector. In general, professional skills are skills needed to behave well in a private sector working environment; e.g. how to work in a team or how to address problem solving challenges. These skills are sometimes called: soft skills or life skills. Language skills mainly relate to basic English language skills, but also to be able to write formal Arabic. Job specific technical or practical skills are skills that are need to perform the content of the job well; e.g. how to apply theoretical knowledge in a practical situation or how to develop a business case for a client. To be successful in many private sector jobs, graduates need to possess a combination of those skills.

During the feasibility study, GFC had a small team of university graduates and students from Mafraq continuously conducting research, learning and developing the concept of the Youth Business Campus. This work requires an academic thinking level. GFC's experience working with them yielded the understanding that they are not used to work in teams and take decisions independently. The teacher-student relationship is traditional in the sense that classroom teaching consists of a speaking teacher and listening students, in addition to that teachers tell students what to do and students are not used to express themselves critically versus the teacher. This means that graduates do not sufficiently develop skills like proactivity and independent thinking. Int@j calls this a lack of 'self-actualization'; the inability of youth to develop and trust in their own ideas and solutions to problems.

6.2.3 Cultural Causes for Gaps between Education and Market Needs

The lack of technical and English language skills among youth relates to the educational system and the lack of private sector activity in Mafraq. Although these factors also relate to the lack of professional skills, the gap in professional skills can also be partly assigned to the cultural barriers for youth in Mafraq Governorate to develop themselves professionally or kick-start a career. For this cultural analysis, GFC makes a distinction between young women, young men, Jordanian *bedouins*, Jordanians with a Palestinian background and Syrian refugees.

First, there is a dominant perception among many Jordanians that jobs in the governmental sector are better due to their security and stability compared to private sector jobs. This is reflected in the 63.4% of Mafraq's workforce that is working in the ministerial departments, police, army and public education [GDP, 2019]. This mentality trickles down to young people who are either not stimulated by their families or do not believe that it is needed to develop private sector skills. However, one has to make a distinction between different groups of people in Mafraq. While young Jordanians prefer salaried jobs over self-employment, young women tend to be more open to self-employment [SPARK, 10-04-2018]. In addition, Syrians and Jordanians with a Palestinian background have much less access to positions in the public sector than *Bedouins* (original Jordanians). This makes them more motivated to develop private sector skills [Landmark Hotel, 21-10-2018]. It is widely known that Jordanians with a Palestinian background only had education as a way out of their situation as Palestinian refugees. Education was therefore highly stimulated within Palestinian communities. This implies that these people tend to have other working ethics than original Jordanian youth who can rely more on *wasta* (the Arabic word for nepotism) and access to governmental jobs. "The citizens of Mafraq are *bedouins* who are not used to work in employee-employer settings. Jordanians want a "real job", an office based management job in which they can



give orders. Serving others is not what Jordanians want to do" [Al al-Bayt University, 11-04-2018]. This is also reflected in the shaming of people who work in the hospitality sector, because this sector is all about 'serving people'.

Second, many students believe in the concept of '*wasta*'. University staff of the Al al-Bayt University stated that graduation projects are the key to prominence for students, but that students often buy or bribe the graduation project or copy existing work without adding anything new [Al al-Bayt University & Int@j, 04-07-2018]. This implies that some students do not feel the urge to work hard and develop themselves during their period at the university, because they know that they can get a job anyway through their family network. This applies especially for youth from large Jordanian families. On the other hand, there is also a group of students without such connections knowing that it will be very hard for them to find a job after graduation. This decreases trust of students in a sustainable perspective in their region. Many students, and especially female students, expressed during meetings with GFC staff the wish for a fair system in which perspective and opportunity are based on performance, not on connections.

Third, the institution of the family is very powerful and considered as 'sacred' [Women Committee of Jordanian Parliament, 11-12-2018]. This implies that students are certain of family protection, food and other basics during their studies and the years until marriage, which gives a type of security that does not encourage them to develop themselves professionally rather than just following classes and doing exams. The conservative expectations about individual roles within families do not stimulate young people, and especially young women, to develop themselves professionally. In general, young women with professional ambitions need help to break through the barriers that families put around them regarding professional education and work.

Fourth, there is a dominant perception among youth and their families that university education is better than vocational education, not looking at the job potential after graduation [NET, 25-02-2019]. This is reflected in the much higher number of university students compared to students doing vocational education. The negative perceptions among youth towards work in specific sectors, such as agriculture, hospitality and construction also affects the demand for vocational- and technical trainings in these sectors. Jordanians link a dominant representation of foreign labor in these sectors to lower wages, which makes it unattractive for young Jordanians to enter educational programs in these sectors. This is why TVET providers need to deliver quality (in terms of programs and educational environment), options for youth to grow, and job guarantees to attract young people [Luminus Education, 18-04-2018]. GFC research shows that the family- and perception barriers of Syrians are affecting youth to a lesser extent due to less strict family ties and a higher need and wish for real opportunities.

6.2.4 Current Education and Skills

More than 65% of the total Mafrq population is below 35 years old. The YBC target group comprises of around 30-35% of Mafrq's population. The young Jordanian community in Mafrq Governorate is higher educated than the Syrian community; four times more Jordanians have had post-secondary education. While 32% of all Jordanians aged 15 and above have successfully completed at least secondary education, about 12% of Syrian refugees have done the same (see Table 6). In general, most of the Jordanians (above 60%) and Syrians (above 80%) have only up to basic education. Very few Jordanians (around 15%) and Syrians (around 5%) have an academic degree, and around 15% of the Jordanians and 10% of the Syrians have a vocational diploma [Mafrq Directorate of Education, 10-07-2018].



Table 6 Educational backgrounds Syrians and Jordanians (age 15 and above) in Amman, Irbid and Mafraq Governorates.²⁶

| | Syrian refugee community outside camp | | | | Jordanian host community | | | |
|---------------------------------|---------------------------------------|--------------|--------------|--------------|--------------------------|--------------|--------------|--------------|
| | Amman | Irbid | Mafraq | All | Amman | Irbid | Mafraq | All |
| Never attended school | 7 | 10 | 17 | 11 | 5 | 8 | 11 | 7 |
| No level completed / elementary | 46 | 49 | 53 | 49 | 20 | 18 | 22 | 19 |
| Basic / intermediate | 26 | 25 | 19 | 23 | 30 | 36 | 36 | 33 |
| Secondary / vocational | 12 | 11 | 8 | 10 | 22 | 17 | 16 | 20 |
| College / university | 8 | 6 | 4 | 6 | 24 | 20 | 16 | 22 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Sample size | 1 269 | 1 689 | 2 063 | 5 021 | 1 416 | 1 853 | 1 845 | 5 114 |

Many Syrians of 18 years and older had to abandon their education after fleeing to Jordan and are now earning income for their families instead of pursuing their education [UNHCR, 19-06-2018]. Looking at the main occupations of Syrians prior to the Syrian war, one can say that Syrians possess skills in construction, trade, manufacturing, crafts, transportation, agriculture and services in the retail and hospitality sectors. Syrians are to a lesser extent skilled in academic work, technical work or clerical support work in comparison to Jordanians. This is reflected in the representation of a majority of Syrians in the crafts and trade industry, followed by services, sales and factory work, elementary occupations and white-collar jobs [ILO, 05-06-2018]. The entrepreneurial spirit distinguishes Syrians in Mafraq Governorate: many Syrians see a business, even at the smallest level, as the only opportunity for income [Al al-Bayt University, 11-04-2018]. The majority of employed Jordanians in Mafraq Governorate perform governmental jobs (public administration, defense and compulsory social security) for which they obtain skills on-the-job. A second local sector with jobs for Jordanians is education: primary and secondary schools offer teaching jobs and AABU offers academic jobs. However, the youth of Mafraq is underrepresented in these job sectors, which means that the youth has to gain skills in the little available private sector jobs in Mafraq. The small private sector mostly contains wholesale and retail trade, repair of motor vehicles and motorcycles, transportation and agriculture²⁷, not offering much valuable internship opportunities for youth to gain professional and technical/practical skills. This results in a skillset of Jordanian youth that does not match labor productivity standards that are required by the private sector that could offer them valuable job opportunities with a decent income.

6.2.5 Skills and Gaps per Sector

In general, both graduates from the universities as well as Vocational Training Institute in Mafraq Governorate lack the professional skills and technical/practical skills from a lack of hands-on experience to be of interest for most private sector employers. The nature and size of the gap depends on the sector.

1. ICT

The Jordanian ICT market can yearly only absorb 30-35% of the around 5000 yearly ICT university graduates, of which around 60% is female [Int@j, 23-04-2018]. Recent research by Int@j among its

²⁶ https://www.ilo.org/beirut/publications/WCMS_364162/lang--en/index.htm

²⁷ <http://www.dajaniconsulting.com/EchoBusV3.0/SystemAssets/PDF/GIZ%20EPP-Trends%20in%20local%20job%20markets%20in%20Jordan-2017.pdf>



private sector members shows that university graduates need to be trained on basic English language skills, technical IT skills and several professional skills. These professional skills include adaptability, communication, customer service, creative thinking, negotiating, influencing, planning, problem solving, decision-making and team working [Int@j, 2018]. Graduates possess mostly theoretical knowledge from university education, but often miss the technical skill or skills as required by current and future jobs [Bayanat, 01-04-2019]. This is also caused by the fact that Jordanian universities could not keep up with the pace of the development of the ICT sector [MoICT, 05-08-2018]. In Mafraq, only 4% of the IT graduates in 2017-2018 found a relevant job in the ICT sector so far [Al al-Bayt University & Int@j, 04-07-2018]. The situation for IT students and graduates from Mafraq is more difficult, because the almost complete absence of private sector does not offer them internship or high-quality training opportunities to obtain the needed skills for the market [Al al-Bayt University & Int@j, 04-07-2018]. Since the ICT sector demands international skills standards, the gap in this sector is highest of all sectors of the Youth Business Campus. In general, there is a gap in professional-, language- and technical skills.

2. Hospitality

The Jordanian hospitality sector has a large demand for skilled hospitality workers. TVET providers can therefore offer 100% job guarantees to hospitality students upon graduation [AAUC, 08-10-2018; Luminus Education, 12-08-2018]. Although the hospitality market of Mafraq is small, there are job opportunities in abundance in Amman and other main touristic areas. TVET providers in hospitality are not yet present in Mafraq. Young people in restaurants and other hospitality services in Mafraq have mostly not received any training, except for on-the-job training. Although an increasing amount of Jordanian women access training opportunities in the hospitality sector [AAUC, 08-10-2018], the sector in Mafraq is dominated by young men working as managers, cooks and waiters. Most of the students in the Jordanian hospitality schools come from families that have hospitality business owners close to them [AAUC, 08-10-2018]. Since not many people in Mafraq own a hospitality business, the skills among youth are limited. GFC's own research shows that there is space for improvement in the professional skills of hospitality workers. Food can be of adequate quality, so the gap among staff in the hospitality sector therefore mainly lies in the professional skills. However, the gap is high for youth from Mafraq that aims to work in Jordan's international tourism industry. In that case, they also need to be educated on technical/ practical and English language skills.

3. Construction

The construction sector is a conservative sector with men and foreign labor dominating the labor force. The engineering jobs are an exception since engineering is a closed sector for foreign labor [MoL, 26-09-2018]. Due to cultural reasons, construction-related *labor* jobs are not popular among Jordanian youth. Engineering is, on the other hand, one of the most popular university degrees for Jordanian youth that yields a high status in the community [University of Jordan, 24-05-2018; SiteCast, 09-10-2018]. This results in a job market saturated with engineering graduates who face difficulty to find relevant job opportunities [University of Jordan, 24-05-2018]. Due to a lack of design- and engineering firms in Mafraq Governorate, engineering students have a gap in their professional and technical/ practical skills upon graduation. Young engineers do, for example, not know how to work on a tender, how to collaborate with engineers from other engineering disciplines or how to deal with a contractor [Jordan Engineering Association, 08-04-2018]. In addition, AABU graduates informed GFC about the difference between their innovative work at the university and the conservative projects they work on as part of an engineering firm. In reality, both technicians and engineers in Mafraq Governorate work with traditional (not energy efficient)



construction methods. The labor force misses the technical/ practical skills to work on manufacturing and installation of more sustainable construction methods [JGBC, 21-11-2018].

4. Energy

There are engineering and installation skills available among Mafraq's male and female youth in the renewable energy sector. Several Jordanian universities, including at AABU, offer degrees that totally focus on renewable energy engineering. While almost only Jordanians possess engineering skills, recent renewable energy projects in Za'atari refugee camp and the KHBTDa offered both Syrian and Jordanian youth the opportunity to obtain skills in installation, operations and maintenance of renewable energy installations (solar-water heating and solar PV). The German Jordanian Center of Excellence in Solar Energy (CoE) in the KHBTDa offers market-driven vocational training in solar PV installations. Young people still lack technical/ practical skills in the deployment of innovative energy applications such as smart meters, wind power, smart grids and energy storage. Local energy utility IDECO uses foreign consultants of Cowater and Siemens for the rollout of smart meters [Cowater, 04-04-2019], and GFC research indicates that wind power, smart grids and energy storage are not (much) applied yet in Mafraq Governorate. Energy engineers have theoretical knowledge about renewable energy systems, but are not familiar with the professional skills and technical/ practical side of the work in the field. There is also space for improvement in business skills, because the liberalization of the energy sector started only around a decade ago, demonstrated for example by the existence of private sector sustainability advocacy EDAMA since 2009. The current owner and CEO of Kawar Energy established EDAMA to foster liberalization of the energy sector [Kawar Energy, 16-09-2018].

5. Water

Due to an almost complete coverage by the public sector, the conservatism and the difficulty to make profit, young people have little skills in innovation and business in the water sector [Cewas, 28-10-2018]. EDAMA also covers the liberalization of the water sector, but states that there is "still a long way to go" to change the mentality in the water sector [EDAMA, 24-02-2019]. There is only one Jordanian university (Hashemite University) that educates students on 'water management' for management jobs in water treatment plants and other water facilities. Other universities focus mostly on research and engineering (Hashemite University, 2019). The Vocational Training Institute trains youth on practical jobs in the water sector such as plumbing and sanitary installations. As part of the Training on Water and Energy Efficiency (TWEED), NET/GIZ provides skilled and semi-skilled technicians and engineers on water network maintenance. Technicians and engineers in Mafraq Governorate are not yet trained on innovative water saving applications in water treatment and water harvesting. Some practical water saving skills (rooftop water harvesting for example) are inherited from the older generations, but new buildings do often not include such systems anymore. Like in the energy sector, water engineers are far more educated on theoretical than practical and business-oriented skills. The gap between graduate skills and regional market demands mainly lies in the technical/practical skills, but professional- and business development skills should also be improved in order to create regionally competitive capacity in the water sector.

6. Agri-Food

The labor force in the Agri-Food sector is dominated by foreign labor, except for the engineering, trade agent, exporter, and farm- or facility management jobs. Many large commercial farms in Mafraq Governorate hire seasonal workers for the harvesting period and have regular foreign employees working throughout the season. Some farmers hire Syrian workers who live with their families on the farms. Those unskilled or semi-skilled workers receive on-the-job instructions



[DelMonte, 02-07-2018]. TVET in the sector is unpopular among youth due to a negative perception about the sector's status, wages and career opportunities [JEPA, 16-10-2018]. The University of Jordan and JUST educate students to become agricultural engineers, but most graduates do not find jobs within the sector after graduation [University of Jordan, 05-06-2018]. AABU does not offer an academic degree in agriculture. The Vocational Training Institute in Mafraq Governorate offers trainings in agriculture, but the content does not seem to fit the needs of the sector. Students of the Vocational Training Institute stated that the trainings are not fully agri-business driven, but about food processing at household level and fundamentals of agricultural activities. The link between the Vocational Training Institute and the private sector is weak. Most university students graduate without an internship at a commercial farm. This is why they possess theoretical knowledge, but almost no practical private sector skills to set up an agri-business or support the sector as a consultant. In general, young people miss the technical/practical skills and professional skills to set up a business or become successful in trade within the Agri-Food sector.

6.2.6 Youth Business Campus: Breaking a Vicious Circle

GFC is convinced that high-quality education is the way to decent employment. Although there are motivated and ambitious young people in Mafraq Governorate with the wish for decent employment, the current educational offer, cultural barriers and the lack of private sector activity (only 2.9%) create a cocktail of factors that hamper youth in this Governorate to develop the market-driven private sector skills. This gap will always remain an issue due to a lack of *on-the-job* training opportunities (internships with the private sector) and absence of high-quality education institutes that need private sector to place their graduates into jobs. Simultaneously, the private sector stays away due to a lack of skills in Mafraq Governorate, which keeps sustainable jobs away as well. This creates a vicious circle that gives ambitious youth only one option: moving to Amman or abroad. However, youth from Mafraq can rarely access opportunities in Amman due to economic and cultural barriers. For cultural reasons, women in Mafraq are highly dependent on opportunities close to their communities. There are exceptions though, such as the story of one of GFC's staff members presented in Text Box 2; her story confirms the analysis given above.

Text Box 2 *Exceptional story of Haneen Al-Shdifat told by her during the Mid-Term Workshop in her presentation "Career Challenges & Opportunities in Mafraq" [Van Beek et. al 2019].*

Haneen Al-Shdifat is born and raised in Mafraq and held a speech about her challenges and successes as a talented graduate from Mafraq. After her graduation in computer engineering at the Jordan University of Science and Technology (JUST), not far from Mafraq, she found out that there were no job opportunities for her in Mafraq and that she had to find her first job in Amman. After getting too exhausted from her daily commute between Mafraq and Amman (more than 5 hours per day), she had to give up this job. After this, her parents allowed her to move to Amman where she developed her career at HP and became the regional business development manager for the MENA region. Her story is unique in the sense that she has the enabling economic- and cultural background that allowed her to move to Amman. Many young talented women from Mafraq face a near complete absence of valuable job opportunities in Mafraq, combined with economic and cultural barriers that withhold them from successfully developing a career in Amman. Consulted young women from Mafraq stated that the top-three reasons for being unemployed are:

1. No available job opportunities in Mafraq;
2. A lack of job-related experience and lack of practical training upon graduation;
3. Living in Mafraq, while working in Amman lowers their working capacity.

To create a real perspective for motivated and ambitious young women and men in Mafraq Governorate, the Youth Business Campus aims to break through the vicious circle causing the gap between available skills among youth and market-driven skills. To close the gap, GFC aims to bring



high-quality education services and private sector activity together in a professionally stimulating environment with good conditions (infrastructure and services): the Youth Business Campus.

6.2.7 GFC Partners as Education Providers

When looking at the educational backgrounds, available skills of the target group and the needs and opportunities of the Jordanian labor market, the Youth Business Campus will focus on skilling, upskilling and reskilling of young people through the intensification of post-academic, vocational and technical education in Mafraq Governorate. This is supported by the *Strategic and Executive Plan for Mafraq Governorate 2019-2021* [GDP 2019-2021], stating the need for specialized training programs and on-the-job trainings to prepare youth for practical professions. The plan also includes the wish for a new vocational training center with specialized trainings relevant for the context of Mafraq Governorate. On a national level, Jordan 2025, the long-term national vision, urges the importance of capacity development in the water, energy, tourism (hospitality), ICT and agriculture sectors [MOPIC, 2014]. The development of a pool of human resources with private sector skills will develop a foundation for private sector development in Mafraq. This starts with the attraction of already existing specialized education for employment providers with high success rates and interest to operate in Mafraq Governorate. Education for employment means that the educational programs are designed according to the needs of an employer or a group of employers to guarantee employment of students upon graduation. This sometimes includes upfront agreements with private sector hiring partners. The education for employment services should build upon existing skills, opportunities and gaps. Depending on private sector- and market developments and new investments in the KHBTD, GFC Education Partners can adapt and create more training opportunities. Youth will be selected, educated and guided into jobs according to existing models of GFC Education Partners. The educational opportunities for education providers differ per sector:

1. ICT

GFC Education Partners in the ICT sector have to build upon mostly theoretical knowledge of university graduates. The education for employment services need to close the gap in professional, language and technical/ practical skills based on the needs of hiring partners and online freelancing jobs and projects. Int@j research identified the needed technical/ practical skills as demanded by its private sector members [Int@j, 2018]. Education Partners can also offer business development trainings to develop tools and applications for the other sectors at the Youth Business Campus. The ICT sector would give youth a high status, thereby being able to attract youth to work in less popular sectors via the ICT education services. The sector offers excellent opportunities for women, because education and employment in the ICT sector is culturally accepted. In addition, the increasing internet penetration rates in Jordan and online freelancing opportunities would allow women to combine learning and working from home with education at the Youth Business Campus [Bayanat, 01-04-2019]. GFC partners with *Luminus Education* and *Luminus Shamal Start*, respectively providing education for ICT employment- and business incubation services (see Annex 17). Another partner institute is RBK.org (see Annex 20) providing post-graduate training to help graduates closing the gap and guiding them into employment with hiring partners by “doing in less than half a year what universities cannot do in four years” [RBK.org, 14-11-2018]. The last Education Partner in ICT is *Bayanat*, a Jordanian IT company that aims to equip youth with specific highly demanded skills by using IT projects offered at online freelancing platforms. This will gradually create a pool of highly skilled IT professionals that can work from the Youth Business Campus or even from home on well-paid freelance IT projects. This offers the



opportunity especially for women in rural areas of Mafraq Governorate to work on such projects from home as well (see Annex 21).

2. Hospitality

GFC Education Partners in the hospitality sector primarily educate youth for the demanded hospitality services of the hotel and the *women oasis*, and secondary for hospitality services in Jordan's international touristic areas. However, in order to offer youth in Mafraq a career path in the hospitality sector, the level of education should be focused on the international level. In this way, the hospitality services at the Youth Business Campus could become an example for the Governorate's hospitality sector. With international digital nomads and NGO staff as semi-permanent residents of the Youth Business Campus, the level of education should in any case be tailored to international market standards. GFC Education Partners therefore have to educate selected youth on professional-, language- and technical/ practical skills. Examples of professional skills are customer service and working under pressure, whereas examples of technical/practical skills are customer handling, marketing, sales, food preparation, food safety and food service. The primary customers of the hospitality services will be the users of the Youth Business Campus itself, followed by business travelers, tourists and event participants (weddings, conferences). GFC witnessed significant interest from young women in Mafraq Governorate to get trained in the hospitality sector. Although men dominate the sector, the education opportunities for young women lie in roles like hotel manager, hostess, receptionist, cook and waitress in the hotel, and cook in IMDAD's catering (see Annex 25). In addition, the *women oasis* at the Youth Business Campus could help young women accessing education for employment in the hospitality sector or set up a hospitality business, since this is a women-only area. The partnerships with AAUC and Luminus Education (see Annex 17-18) include their intention to link the training facility on the Youth Business Campus to their training facility in Amman. This aims to help youth in Mafraq Governorate to access high-quality hospitality education. Additionally, the facility in Mafraq aims to create a 6-month *minor* in hospitality for AABU students. This will offer them the opportunity to follow a quick track towards a TVET diploma in the hospitality sector upon graduation at AABU. Looking at the current demand for skilled hospitality workers in Jordan, this will help them to access employment relatively quick [AAUC, 08-10-2018]. GFC also wants to pilot whether part-time volunteering by all campus citizens in the hospitality services will help to improve professional skills.

3. Construction

GFC Education Partners in the construction sector can already use the development and construction of the assets of the Youth Business Campus itself to close the gap between traditional technical/practical skills and the technical/practical skills as needed to work with the energy efficient construction methods for the Youth Business Campus. This includes trainings on design, engineering, tendering, manufacturing, installing, contracting, site operations (including on site enforcement), maintenance, financial management, facility management, marketing and business development. Replication of the showcased construction methods will create more education opportunities for GFC Education Partners. NET/GIZ is the Education Partner in relation to the deployment of an energy efficient wall panel manufacturing facility and the construction of the Youth Business Campus. Other Education Partners like Luminus Education could take care of education on facility management. Except for the onsite installation of the wall panels, the other trainings could be of interest for women as well.

There is not a large demand for traditionally skilled engineers in the Jordanian labor market, but there is a demand for young people with accredited skills in welding for example [Petra



Engineering Company, 02-07-2018]. This makes the upskilling of technicians and reskilling of traditional engineers (university graduates) towards practitioners with the needed technical/practical skills of today and tomorrow a real opportunity for GFC TVET Partners. Engineers should be trained on technical/ practical as well as professional skills. The bottom line is that it should be attractive for young engineers to enter TVET in the construction sector. This can be achieved with an attractive education environment, and with trainings on innovative and sustainable construction methods. This is in line with the partnership with CD20 and Luminus Education (see Annex 22) to develop a construction hub that responds to the regional need for real estate and sustainable building applications, especially in the GCC countries [CD20, 23-01-2019]. GFC explores together with CD20 and Luminus Education how it can take advantage of the strategic location of the Youth Business Campus to serve the region with its commitment to increase energy efficiency in the built environment in order to reduce electricity consumption and curb power demand. As an example, industry studies project the LED lighting market for the GCC countries will increase five-fold over the next five years. Many countries, including Saudi Arabia, the UAE, Bahrain, Lebanon, and Egypt, are phasing out incandescent light bulbs and are looking to retrofit existing lighting systems with LED technology [ROMAN ARCH Clean Energy Finance LLC, 19-12-2018].

CD20 also expressed to see an opportunity to train youth in the application of Building Information Modelling (BIM) software (see Annex 22). The same was expressed by RBK.org, but not included in their letter of intent. BIM education can be beneficial for the developments around the reconstruction of Syria and Iraq [RBK.org, 14-11-2018]. *SafePorts Inc.*, a US-based firm, develops a logistics hub in the KHBTDA nearby the Youth Business Campus. While the sanctions on Syria are still active, *SafePorts Inc.* and Luminus Education are in the preliminary stage of the development of trainings on heavy equipment (cranes etc.) for reconstruction purposes in the wider region (including Iraq). Both the regional reconstruction and the need for sustainable infrastructure require skilled (re)construction specialists. This offers GFC Education Partners education opportunities in the construction, energy, water and ICT sectors. Engineering and BIM also offer education opportunities for women.

[4. Energy](#)

GFC Education Partner in the energy sector is GIZ. GIZ supports NET's training facility on solar energy (CoE) in the KHBTDA. Currently, the CoE faces several challenges [NET, 06-03-2019]:

1. Distance of students' households to CoE;
2. Not enough private sector activity to ensure job placements for their graduates;
3. Weak link of CoE to the local residents of Mafraq due to the distance between the CoE and the city of Mafraq;
4. Limited physical attractiveness of the educational facilities (factory hangars).

GFC aims to help the CoE to tackle these challenges through:

1. Provision of accommodation for CoE students at the Youth Business Campus;
2. Increase private sector activity in Mafraq through the development of the Youth Business Campus and the EDSCO;
3. Strengthen the link between local residents of Mafraq and CoE with the Youth Business Campus, built in between the KHBTDA with the City of Mafraq (see Section 5.4.3: challenges in urban planning);
4. Offer CoE students and graduates an attractive living, learning and working environment on the Youth Business Campus, not far from the CoE.



GIZ and GFC are fundraising a project to expand the training facility with trainings in assessment, design, engineering, installing, O&M, marketing and business development skills around innovative renewable energy applications such as wind, electricity grid enforcement, smart grid, smart meters, energy storage, industrial scale solar heating, cross-sectorial applications, and energy efficiency options in the built environment. This includes training opportunities on the installation of RE solutions at the Youth Business Campus. Youth will also be trained for employment at the Energy Development and Service Company (EDSCO) responsible to replicate the showcased solutions from the Youth Business Campus in Northern Jordan. The trainings on the rollout of smart meters can be supported by Alliander and taken over by IDECO (see Annex 46). The numerous activities in the energy sector offer energy engineers the chance to develop technical/practical as well as professional skills. NET/GIZ can upskill energy technicians and reskill energy engineers towards skilled practitioners in the installation and O&M of innovative renewable energy applications. Although the energy sector is still dominated by men, the sector offers women education and business development opportunities for the EDSCO. GFC will align with the rollout of the Women In Renewable Energy (WIRE) initiative by the Canadian Government, aiming to stimulate young women to work in all aspects of the renewable energy sector [Cowater, 04-04-2019].

5. Water

There is an opportunity for Mafrq Governorate to become a regionally competitive knowledge and skills hub for scarce water countries. Young people can take advantage of this by acquiring technical/ practical skills at the Youth Business Campus for regional deployment in the water sector. The development and installation of the water management system at the Youth Business Campus itself offers GFC Education Partners NET and Luminus Education the opportunity to educate technicians and engineers on the design, engineering, tendering, installing, contracting, site operations, maintenance, financial management, marketing and business development of water solutions. Since the water management system includes grey water treatment and (rooftop and on site) water harvesting, this will be an area for reskilling and technical/ practical skill development of technicians and water engineers. Water treatment will be one of the focus areas for Nuffic, a potential funding opportunity for GFC Education Partners. In order to become regionally competitive, local water engineers and water managers need to be trained on professional-, language- and technical/practical skills, in addition to business development skills. Cewas Middle-East, a Swiss NGO, runs a water incubation program together with Luminus Shamal Start²⁸. The Youth Business Campus aims to provide those start-ups a launching platform and testing site. There are successful examples of women integration in TVET in the water sector, especially in plumbing on household level (NET/GIZ)²⁹. On both TVET and academic level, Education Providers can build upon examples of women involvement in education on design and engineering of water management systems and in business development.

6. Agri-Food

GFC Education Partners in the Agri-Food sector can educate youth for the installation and operation of the R&D Centre and post-harvesting hub on the Youth Business Campus. The Education Partners are Wageningen University & Research (WUR), Luminus Education and Luminus Shamal Start (see letters of intent: Annex 16-17). The focus will be on TVET, Agri-Food business development and strengthening the link to the private sector for internships, a *minor* and demand-driven business development. By developing a *minor* in Agri-Food for university- and TVET

²⁸ <https://cewasmiddleeast.org/wp-content/uploads/2018/02/cewasbrochure1.pdf>

²⁹ <http://www.jordantimes.com/news/local/german-agency-trains-women-plumbing-profession>



students, Luminus Education grows career opportunities for young people in the sector. This can also help the Vocational Training Institute to become involved. Next to water, agri-Food will be one of the focus areas for Nuffic, a potential funding opportunity for GFC Education Partners. The proposed education approach is supported by the *Strategic and Executive Plan for Mafraq Governorate 2019-2021* [GDP 2019-2021], emphasizing the need for specialized TVET training programs and on-the-job trainings to prepare youth for practicing agricultural professions. Agriculture engineers from universities should get the chance to get reskilled towards practical agricultural professions, research and management jobs in the R&D Centre and TVET graduates from the Vocational Training Institute should be upskilled to work in the post-harvesting hub. In this way, both scientific and TVET education is covered within the Agri-Food sector.

Due to the usage of mostly low-skilled (foreign) labor by employers, there is a scarcity of salaried jobs interesting for university- and TVET graduates. The R&D Center run by WUR (and with a private sector partner), in collaboration with Luminus Shamal Start, can educate youth on business development with the aim to develop knowledge and tools that can be used by farmers to strengthen their livelihoods. The operations of the post-harvesting activities require youth with TVET education on graphic design for branding and packaging, product design, facility management, M&E for agriculture, food processing skills, manufacturing operations, machinery O&M, marketing, sales, logistics, value chain management and supply chain management. Education in the Agri-Food sector can easily be combined with education in the ICT sector. This education can focus on agro-tech application development including monitoring, website development, finance control, traceability platform development, agricultural calendar platform development and online marketing. The combination with other sectors (ICT, Energy) can compensate for the unpopular perception of the Agri-Food sector and attract young women to the sector at the same time. Although farming itself is generally dominated by male workers, GFC has seen that women in Mafraq are involved in post-harvesting, engineering and business development activities in the Agri-Food sector.

6.2.8 Collaboration Universities and TVET Institutions

GFC aims to collaborate with universities in Mafraq Governorate (AABU) and nearby universities in Ramtha Governorate (JUST), Irbid Governorate (Yarmouk University) and Zarqa Governorate (Hashemite University). This collaboration includes:

1. Access to students, student associations and data;
2. Creation of internship-, minor-, further education-, and sustainable employment opportunities for students and graduates;
3. Exchange of trainers and university staff;
4. Include education curricula from Youth Business Campus in university curriculum as minor or regular semester education. The hospitality sector is an example of how GFC Education Partners AAUC and Luminus Education (TVET partners) could create minors for students of local universities. SPARK supports Jordan's SME ecosystem with education and entrepreneurship programs, and can play a role in the development of curricula and internships for students of AABU with the goal to develop entrepreneurial skills (see Annex 24). Hence, the education activities at the Youth Business Campus aim to gradually strengthen the outputs of local universities, e.g. reduce the gap between graduate skills and market-demanded skills. The collaboration with AABU is a priority for GFC due to its geographic location close to the Youth Business Campus (5 minutes by car/bus) and the good working relationship to date (see Annex 15).



The type of collaboration between GFC and TVET Education Partners is elaborated on in the stakeholder analysis (section 3). There is a distinction to be made between Education Partners as private sector entity or NGO. It is clear that both types need infrastructure and seed funding for the rollout of their educational programs in Mafrqa Governorate. Since GFC perceives these Education Partners also as fundraising partners (see section 3.1.4), it depends on the donor which type of financing will be applied for the educational programs. EFE (see Annex 19) is non-governmental organization that offers youth from Governorates education for employment services. Although GFC and EFE are partners, it is not determined yet in which subjects EFE will educate youth at the Youth Business Campus. GFC also collaborates and coordinates with locally available TVET institutions. The GIZ-GFC collaboration on the energy- and construction ‘building blocks’ of the Youth Business Campus includes the inclusion and expansion of NET’s training facility in the KHBTDA. There is no direct collaboration with the Vocational Training Institute and ICT Knowledge Station, but revisions will be made to the curricula of those institutes. GFC believes that the curricula of the Vocational Training Institute complements the intended educational programs at the Youth Business Campus. In all cases, GFC aims to help strengthen these institutes and will look for collaboration in the near future.

6.2.9 Conclusion and Overall Overview

GFC has identified and committed sufficient Education Partners to the YBC concept. These partners cover all the YBC sectors, educational backgrounds of youth and sectorial skill gaps. GFC decided to work with multiple education providers to ensure a right fit between the skills gaps, employment opportunities and the strengths of the education providers. These Education Partners have the quality to close the gap between available skills and private sector skills required in the six sectors. To attract such specialized TVET players (and thereby virtually their hiring partners) to Mafrqa Governorate, the Youth Business Campus will deliver quality infrastructure and services for the Education Partners. Those partners will skill high school graduates, upskill TVET graduates and reskill and/or upskill university graduates on the Youth Business Campus. The education programs are based on the skill gaps and demands of Jordan’s labor market and private sector developments in Mafrqa Governorate. A sectorial overview of the skill gaps and education partners can be found in Table 7.

Table 7 Sectorial overview of the skill gaps and education partners.

| Sector | Skill gap (small/ medium/ big) | Type(s) of skill gap | Educational backgrounds of beneficiaries | Education Partner(s) | Role Education Partner(s) |
|----------------|---|--|--|----------------------|---|
| General | The size of the gap depends on the sector, but generally there is a gap between available skills and private sector demanded skills | -Professional -Language -Technical | University | SPARK | Train for development of entrepreneurial skills |
| | | | - High school - TVET - University | EFE | TVET for salaried employment and support for micro-enterprise development in multiple sectors |
| ICT | Big; international | -Professional -Language -Technical | - High school - TVET - University | Luminus Education | TVET for salaried employment and self-employment in ICT sector |



| Sector | Skill gap (small/ medium/ big) | Type(s) of skill gap | Educational backgrounds of beneficiaries | Education Partner(s) | Role Education Partner(s) |
|---------------------|---------------------------------------|--|--|--------------------------|---|
| | standards required | | - High school - TVET - University | Luminus Shamal Start | Enterprise/ business development for self-employment and support of other sectors at Campus |
| | | | University | RBK.org | Post-graduate upskilling and reskilling for salaried employment |
| | | | University | Bayanat | Post-graduate upskilling and reskilling for freelance employment |
| | | | University | AABU | Internships, further training and job placements for students and graduates of IT department |
| Hospitality | Big; international standards required | -Professional -Language -Technical | - High school - TVET - University | Luminus Education | TVET for salaried employment and self-employment in hospitality sector |
| | | | High school | AAUC | TVET for salaried employment in hospitality sector |
| | | | University | AABU | Minor for students |
| Construction | Medium; regional standards required | -Professional -Technical | - High school - TVET - University | GIZ/NET | TVET in energy efficient construction from CoE in KHTBDA for salaried employment and self-employment in construction sector |
| | | | - High school - TVET - University | CD20 (Luminus Education) | TVET on sustainable construction methods for local- and regional deployment |
| | | | University | AABU | Internships, further training and job placements for students and graduates of engineering department |
| Energy | Medium, regional standards required | -Professional -Technical | - High school - TVET - University | GIZ/NET | TVET in renewable energy from CoE in KHTBDA for salaried employment and self-employment in energy sector |
| | | | University | AABU | Internships, further training and job placements for students and graduates of engineering department, |



| Sector | Skill gap (small/ medium/ big) | Type(s) of skill gap | Educational backgrounds of beneficiaries | Education Partner(s) | Role Education Partner(s) |
|------------------|---------------------------------------|--|--|--|---|
| | | | | | Faculty of Renewable and Sustainable Energy Engineering |
| Water | Big, international standards required | -Professional -Language -Technical | - High school - TVET - University | Luminus Education | TVET for salaried employment in water sector |
| | | | - High school - TVET - University | Luminus Shamal Start | Enterprise/ business development for self-employment and support of water activities |
| | | | - High school - TVET - University | Cewas Middle-East | Enterprise/ business development for self-employment and support of water activities |
| | | | University | Hashemite University and AABU (WEARC) | Internships, further training and job placements for students and graduates in water sector |
| Agri-Food | Big, international standards required | -Professional -Technical | University | Wageningen University & Research (WUR) | Academic R&D for salaried employment in R&D |
| | | | - High school - TVET - University | Luminus Education | TVET for salaried employment in Agri-Food sector |
| | | | - High school - TVET - University | Luminus Shamal Start | Enterprise/ business development for self-employment and support of Agri-Food activities |
| | | | High school | VTC Mafraq | Improve curricula with help of other GFC Education Partners such as WUR |
| | | | University | JUST and AABU | Internships, minor, further training and job placements for students and graduates |

GFC has to attract young women and men to the TVET sector, parallel to the attraction of the Education Partners. Young people are needed to create a pool of skilled human resources in Mafraq Governorate, a prerequisite for private sector development. That is why the training providers and facilities at the Youth Business Campus need to be of excellent quality. The high



quality assets and training provisions of Luminus Shamal Start incubator in Mafraq are a good example of creating an attractive environment for young talent. Applications from youth to be included in the program are way higher than the facility can bear [Luminus, 18-04-2018]. In addition, students need to be able to see a perspective of growth in the learning opportunities in the different sectors of the Youth Business Campus. That is why collaboration with TVET providers as well as universities is important. The *women oasis* is needed to overcome mainly cultural barriers to attract female members of the target group (see also Section 8.1: Implementation Strategy). In order to avoid 'empty seats', GFC applies a full back strategy: the Youth Business Campus does start with the most motivated people who could also come from other Governorates than Mafraq Governorate. The first citizens of the Youth Business Campus should become shining examples for the Youth Business Campus. Other young people in Mafraq Governorate will be attracted to the successes of these successful pioneers. This should trigger the motivation and aspirations to develop themselves professionally at the Youth Business Campus. Consultations of young women in Mafraq Governorate show that there is a firm demand from young women from Mafraq, both Jordanian and Syrian, for further education. The *women oasis* and female ambassadors (respected elderly women from the community) could help to convince their male family members about the importance of education for women in the Youth Business Campus. Summarizing, this mix of strategies to overcome cultural barriers, close skills gaps and improve the level of education in Mafraq should be able to kick-start the so much needed private sector development of Mafraq Governorate.

6.3 Concept, Design and Business Model Youth Business Campus

The Youth Business Campus in Mafraq is a scalable model with the goal to give a sustainable economic boost to Mafraq governorate through sustainable job creation and climate change adaptation and mitigation. It responds to the need in Mafraq for high-quality infrastructure and services to train youth to job market standards and attract green private sector investment to decouple economic growth and Greenhouse gas emissions (GHGs), as well as reduce pressure on other natural resources like water. The Youth Business Campus is financially, socially and environmentally sustainable and therefore enables GFC and partners to work for at least 30 years on the biggest challenges and opportunities of Mafraq: youth unemployment, water scarcity, sustainable farmers' livelihoods and the energy transition.

As is shown in Chapter 5, physically, the Youth Business Campus is a new neighborhood in the Mafraq Special Economic Zone. It includes attractive green living, learning and working buildings, utility infrastructure (renewable energy, ICT, water and waste) and public space, managed long-term by GFC. Specialized partners take care of the training, awareness raising, capacity building and business services.

The infrastructure and services on the campus are designed to create uniquely attractive living, learning and working conditions in Mafraq that aim to attract talented youth and green private sector investment to accelerate the creation of employment opportunities for this youth. This approach indeed simultaneously contributes to decreasing GHG emissions (decoupling), tackling water scarcity, stimulating the energy transition and helping small- and medium size farms to sustain their livelihoods. It is a physical environment that should make the youth of Mafraq proud, energetic and hopeful for the future. In addition, the campus creates the necessary trust in Mafraq, skilled human resources and other business services to become an attractive investment opportunity for businesses and impact investors.



The impact of the Youth Business Campus goes beyond the campus itself. The built environment of the campus functions as a showcase, training, awareness raising and promotion platform for efficient use and re-use of water and energy resources and services in the built environment. Based on the developed business cases and user experiences on the campus, demand for such solutions will increase in Jordan, driving private sector job growth and contributing to climate change mitigation and adaptation.

6.3.1 Business Model

Starting small, the role of GFC is to continuously develop, build and manage the infrastructure and business services. These include promoting/marketing, maintaining, cleaning, improving, re-investing, attracting investment and initiating new projects based on local needs and opportunities. Gradually, public management tasks can be transferred to the local government to help the decentralization efforts in Jordan.

The Youth Business Campus will develop in manageable and locally driven steps while making the transition from 90-95% public/grant funding to 70-90% impact investment in 3-5 years. By doing so, the Youth Business Campus aims to create 3000 jobs within 5-7 years in the ICT, Hospitality, Water, Agri-Food, Energy & Construction sectors. The fully-fledged campus consists of all these sectors. The feasibility study demonstrated strong cross-sectorial synergies and strengthening, but also the need for GFC to subdivide the campus design in sectorial *building blocks* to be able to meet the (often singular) sectorial focus of investors and donors. Apart from the infrastructure for water, energy and ICT, these building blocks could function independently, but fit as jigsaw pieces within the whole picture of the GFC vision for a fully-fledged campus.

The financial business model behind the campus ensures sustainability of the infrastructure and the activities around job creation and climate change mitigation & adaptation. When the project has proven its success in Mafraq, the concept aims to be replicated in other governorates in Jordan, or elsewhere.

6.4 Sectors and Sector Impact

The GFC project is a combination of green infrastructure, socio-economic, education and business development activities with the goal to create new, sustainable, locally relevant and valuable jobs for youth. As mentioned before, GFC identified six different focus sectors for development on the campus. These will be discussed in more detail in Section 6.4.1 to 6.4.6.

The six focus sectors are: Hospitality, Water, Agri-Food, Energy, Construction and ICT. These sectors emerged out of market research and combine financially sound opportunities, local needs and available resources. GFC has ranked sector opportunities for the Youth Business Campus along different scoring categories. GFC developed a model to score the opportunities according to results from interviews, meetings, desk research and calculations on a 4-point scale for 5 different indicators for all sector opportunities:

- a. *Urgency*: to what extent is NOT developing the opportunity a problem for the people in Mafraq;
- b. *Return-on-Investment*: to what extent is the opportunity *financially* attractive for private impact investors;
- c. *Job Creation Potential*: to what extent can the intervention help to create jobs on campus and broader in Northern Jordan and Syria;
- d. *Cross-sector impact*: to what extent are the sector activities a prerequisite for, or able to support other sectors;



- e. *Time to impact*: to what extent has the sector longer or shorter lead times to have impact in terms of job creation and other positive impacts.

The idea and rationale behind the multiple sector approach of the Youth Business Campus is that, just like in a real city or municipality, financially stronger cases can support financially weaker cases, and faster-to-realize projects can act as stepping stones for projects that need more time to materialize. Overall, the sectors influence each other as well by providing the socio-economic fabric and practical interactions that make cities “high added value” places. In the separate sector sections below this is explored and discussed. In Section 6.5 the cross-sector impact and importance is analyzed in detail.



6.4.1 Hospitality

Jordan's tourism and hospitality sector contributes to around 20 per cent of the country's GDP, but according to sector employers, Jordan's formal education system is currently unable to provide the skills needed to further improve service quality and make the sector grow³⁰. Additionally, hotels and restaurants are heavy energy and water consumers. Although hospitality is in the DNA of the Jordanians, sector stakeholders state that there is no *professional* hospitality culture in Jordan as the sector has a relatively low status among youth and is known to pay low wages (AAUC, 2018). That is why foreign labour (mainly Egyptian, Syrian and Philippine) has found its way to the sector. Despite this, there is a lot of demand for skilled human resources in the sector and an abundance in open vacancies (LTUC, 2018). There are several institutes in Amman such as Amman Applied University College of Hospitality and Tourism Education (AAUC) and Luminus Technical University College (LTUC) that provide skill trainings in hospitality to fill those vacancies. As it is all about perception in Jordan, these institutes include "University" in their name to compensate for the lack of status of vocational training in hospitality and to give graduates the option to enrol in a university program upon graduation at the college. Most of the hospitality students come from Amman and have family members active in the sector. Students from Mafraq are underrepresented as the institutes can hardly reach them.

The hospitality sector in Mafraq is relatively small with only a few available quality services. Questionnaires stated that restaurant workers never received any hospitality training. Inhabitants from Mafraq and graduates of Al al-Bayt University informed GFC that there is a 'hunger' for such services in Mafraq, confirmed by the Ministry of Tourism and Antiquities. Currently, many inhabitants from Mafraq drive to Irbid or Amman for proper hospitality and recreation services which is a loss for the local economy. Women can often not even go to Irbid or Amman for such services. Although there seems to be a lack of customer trust in the current hospitality services of Mafraq, GFC staff frequently discover and try out proper restaurants and coffee houses of a level that can be built upon. Additionally, tourists tend to skip Mafraq due to its proximity to Syria and the absence of a real hotel and tourism facilities in Mafraq. While the *urgency* of establishing a hotel and additional hospitality services is not high (1/4) in the sense that it would not solve existential problems in Mafraq, the hotel and hospitality services are important for the campus revenues (to ensure sustainability of the campus). Hospitality services are also important to create an attractive level of liveliness on the campus for youth, to create specific conditions for young women and to build a solid base for tourism development in this governorate. Mafraq is not part of the programs of the main tour operators, but the governorate has two large vineyards (one of them is from Jordan River Wine, Jordan's best wine producer) and many historical and archaeological sites, of which some are since recently being improved with new facilities, sign-posts and brochures for tourism purposes.

Market research by GFC has shown that tourism demand can be developed over time, but that the primary demand during the first years will come from regional travellers, internationals related to Za'atari refugee camp (10 minutes away from the campus site) and business travellers associated with the neighbouring KHBTDA and reconstruction of Syria and Iraq. Whilst it is currently common for researchers, aid workers and business travellers to stay in Amman and commute to Mafraq, questionnaires have provided positive responses for the establishment of accommodation in Mafraq. To avoid that the campus will be a 'dead space' after working hours, the hospitality sector

³⁰

<https://www.ebrd.com/cs/Satellite?c=Content&cid=1395273822033&d=Mobile&pagename=EBRD%2FContent%2FContentLayout>



and housing are important to bring a level of liveliness that is attractive for everyone and in particular for youth. However, the hospitality sector has an even more important role for the gender agenda of GFC (SDG5). A women-only space for living, combined with gender sensitive learning and working space was conceptualized during consultations of young women from Mafraq and expert advocacy agencies such as UN-WOMEN and the Jordan River Foundation. This is needed in order to be able to increase female labour participation in Mafraq. Male family members stated during interviews that specific conditions should be met to allow young female family members to become a campus citizen. The business case for the sector is developed based on these consultations combined with consultations of professional stakeholders from the sector such as hotel owners and hospitality education providers.

Hospitality

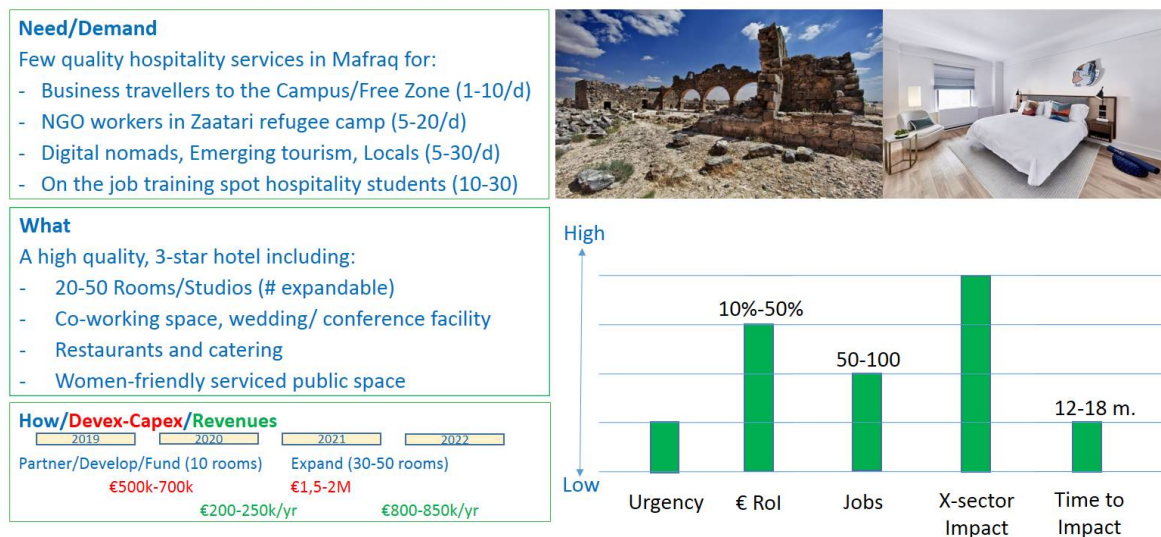


Figure 71 Summary concept and impact Hospitality sector.

6.4.1.1 Accommodation: Mixed Hotel Rooms, Studios and Dorm Rooms

There is immediate and future demand for temporary and permanent accommodation types in Mafraq. The feasibility study indicates that, next to permanent housing for campus citizens, a three-star hotel with 10-20 rooms and 35 furnished studios would be feasible for the first phase of the Youth Business Campus. Hospitality education providers have stated to be willing to set up a hospitality training program in Mafraq. The hotel and studios offer a training-on-the-job opportunity for students from Mafraq. By making a strong link to Amman, these students can learn the basics in Mafraq and eventually continue their hospitality career in Amman. The aim is to train 150 young people per year as part of the hospitality sector by using the Youth Business Campus as a vocational training basis in Mafraq. Additionally, for students in Mafraq with certain fields of study (for example History and Foreign Languages) it would be extremely difficult to find a job, even in Amman. That is why GFC aims to offer these students already during their studies a minor in hospitality so that they can enter a fast-track in hospitality after their university graduation.

The hotel rooms and studios have sizes of 16m² or 32m² and are either shared or non-shared, depending on the demand group. Next to campus citizens, demand groups are:

- International students AABU, male and female (1800). Most study Arabic or Islamic Studies for one or two semesters.



- National students of AABU, male (40%) and female (60%). Dorms at AABU do not satisfy 90% of users due to low quality and lack of nearby services. This is why most students do not consider this as an option. Dorms on the Youth Business Campus are only for female students, either national or international.
- International students doing internships or preparing for graduation from partnering, overseas universities such as Wageningen University.
- Digital nomads: experts, mostly in ICT, who work from changing locations on the planet. They can do their ICT work from any place with stable Internet, electricity, safety and appealing living conditions. Digital nomads normally do high added-value work and can contribute to the development of professionalism on the campus. GFC will actively market a number of the studios in the digital nomad communities.
- International aid community around Za'atari camp and Mafraq: researchers, consultants, NGO workers and persons related to NGO and/or donor missions. Missions only last for 1-3 days, whereas researchers, consultants and NGO workers would need accommodation for a few days to a few months or even permanently.
- Temporary visitors of Mafraq for family visits, sightseeing and medical recovery who would need accommodation for a few days up to two weeks. Medical tourism is an important sector in Jordan and Mafraq offers a quiet and clean environment for recovery.
- Business travelers, trainers and management related to the KHBTDA including SafePorts Inc. who need accommodation for a few days up to a few weeks. Some investors in the KHBTDA would prefer to permanently rent accommodation for company representatives.
- (Truck) drivers, only males, who need temporary accommodation to sleep overnight during long trips.
- KHBTDA workers (900). Research among KHBTDA investors has shown that shared accommodation for 11% of the workers would be feasible.

6.4.1.2 Integrated Hospitality Services

The hospitality services are divided over two parts: the "hotel" and the "women oasis". The "hotel" includes a restaurant, and catering for KHBTDA employees. The KHBTDA attracts around 900 employees (70% Jordanian, 30% foreign labor including Syrian) on a daily basis. In a survey, 40% of the business owners in the KHBTDA expressed to be interested in healthy and nutritious lunch catering services for their employees instead of the current 'junk food' that is offered to the employees. The "hotel" furthermore includes a wedding hall (separated rooms for men and women) and a meeting/conference room. Co-working space with snacks and drinks creates a bridge between the "hotel" and "women oasis" and makes interactions between young women and men possible in a "legitimate" way, as in a working and learning environment. Functions of the "women oasis" include dorm rooms for young women (shared furnished 16m² rooms), retail for females (make-up/nail/hair studio and clothes), a study space/café and 50 to 100 childcare places.



Women Oasis

- Public Space
- Dorm
- Retail
- Study Space
- Café

Hotel

- Accommodation
- Restaurant/
Catering
- Wedding/
Conference hall
- Co-working space

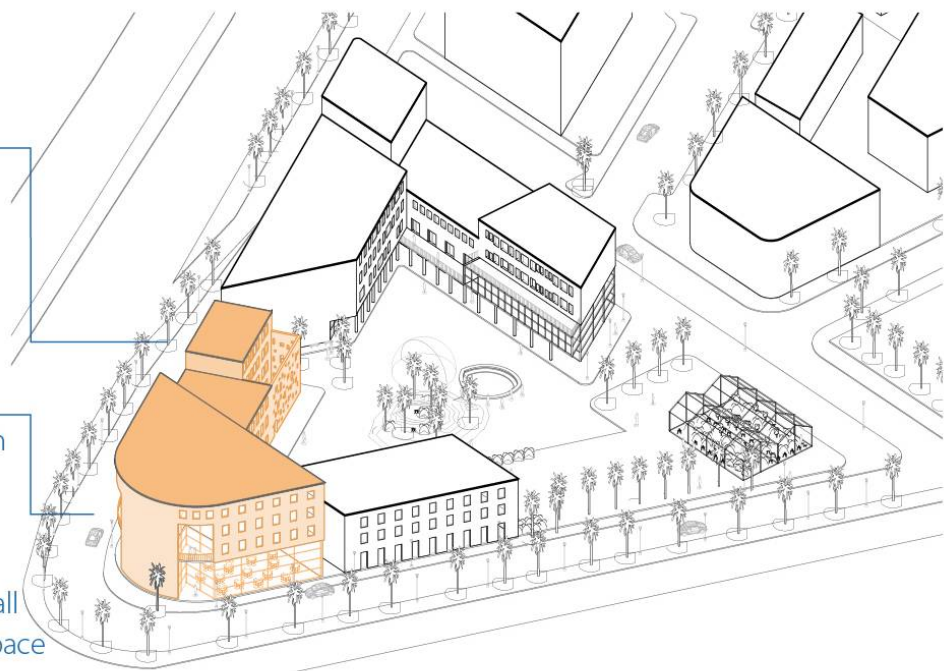


Figure 72 Hotel functions in the Sketch Design for the Youth Business Campus.

6.4.1.3 Results Hospitality Business Case

The *Return on Investment (RoI)* of the hospitality business case is positive (10-50%), but requires initial concessional seed funding to get its enabling infrastructure, hospitality services, training, job brokering and marketing services established and running (SDG4 and SDG8). The *urgency* of the hospitality sector is low (1/4), but calculations indicated that a three-star hotel will be feasible to run and generate revenues for GFC. Together with Luminus Education and Agence Française de Développement (AFD), GFC aims to explore attracting a hotel operator. The hospitality sector is expected to create 50-100 jobs and 25 internship positions per year. Hospitality is not a closed profession for Syrians. The quota by the Ministry of Labor is 60% Jordanian / 40% Syrian. However, the Ministry of Labor told GFC that they could stretch this ratio to 50% Jordanians/ 50% Syrians, with more Jordanians working in the hotel and more Syrians working in the restaurant and wedding hall. Further exemptions were not ruled out either (Ministry of Labor, 2018). The unpopularity among youth to work in the sector can be overcome because of the linkage at the campus to other sectors. Involved youth becomes thus part of something larger that can trigger their pride and energy. The types of jobs that are created vary. Customer facing jobs include waiters, receptionist, event planners, security staff and hosts. There will also be back-office jobs, such as accounting, cooking, maintenance, procurement, cleaning and general management jobs. *Cross-sectorial value creation* is high (5/5), because hospitality services are needed (1) to create a level of liveliness and gender sensitive conditions (SDG5) needed to attract female youth to the campus, and (2) to keep the campus financially sustainable. In addition, the sector creates jobs and on-the-job professional skills training. Simultaneously, trainees in other sectors can gain professional skills (communication skills etc.) by working or volunteering part-time in the hospitality services on the campus (SDG4). Finally, the *time to impact* (12-48 months) is relatively short, because a hotel and hospitality services can quickly create employment opportunities and generate revenues for GFC.



6.4.2 Water Management

In contrast to the hotel sector, the *urgency* in the water sector in Mafrag is very high (4/4). Mafrag faces an existential water problem. The main aquifer (the main reason for establishing the city in this location many hundreds of years ago) is depleted, forcing the local Yarmouk water company to drill into and damage a 600-700 meter deep fossil aquifer. This water is salty, expensive and non-renewable. The energy costs for pumping alone surpass JOD 2 per m³. Without step-change interventions in the governorate, Mafrag will be the first area in Jordan where water scarcity would force people to migrate (Source: Swiss Agency for Development and Cooperation, 2018).

Unfortunately, financial, regulatory and social barriers prohibit such change to happen by itself, which results in a growing debt of more than 50 million JOD with the local utility company (IDECO) for Yarmouk Water Company. The management of IDECO does not expect this money to ever be paid back (IDECO, 2018). The financial position of Yarmouk Water Company hampers them to make the necessary investments for reducing losses and recycling more water.

On the Youth Business Campus, it is impossible to create a financially viable water business case for impact investors. Obviously, proper water management on the campus is of existential importance for all the other sectors on the campus. Therefore, GFC needs other financially strong sectors on the campus to ‘subsidize’ the water sector on the campus. The water management activities on the campus offer an opportunity to showcase an efficient water management system to help transition Jordan into a regional leader in this field. GFC stimulates that transition by mimicking the expected 2030 water situation in Mafrag with a highly efficient, high quality water system on one side (60-80% less primary water use), and high (€2.5-€4/m³) water prices on the other side. Such a transition is currently impossible to deliver by the Jordanian government and local water companies. It ultimately requires a high labor productivity society to sustain this system and customers that are willing to accept such a drastic change. The modern character and the reliable management of the water infrastructure (including monitoring) on the campus should help to overcome social and regulatory barriers that prevent specific innovations in the sector.

Water Management

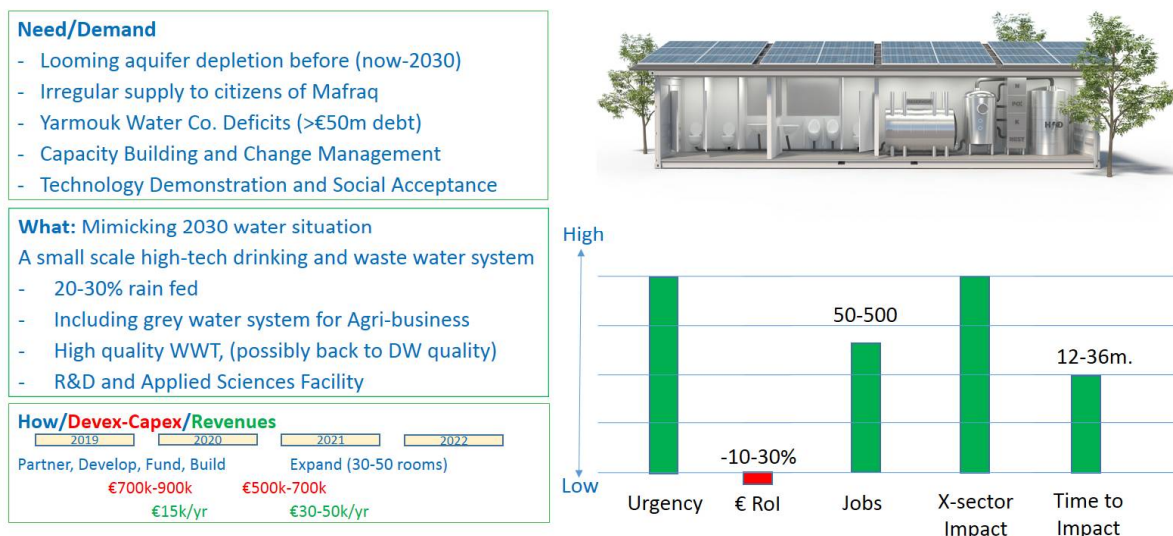


Figure 73 Summary Concept and impact of the Water sector.



6.4.2.1 Water Knowledge & Demonstration Hub

The water infrastructure and water services for campus users will serve as a revenue center and demonstration hub for water actors in the wider region. With partners such as Semilla and Nijhuis Industries, GFC designs and aims to implement sustainable water solutions, even for the Pop-Up stage of the campus. By adding sufficient rainwater catchment surface and storage, at least 20-30% of primary water consumption can be covered by rainwater. From interviews with local people, GFC found out this percentage can be even higher.

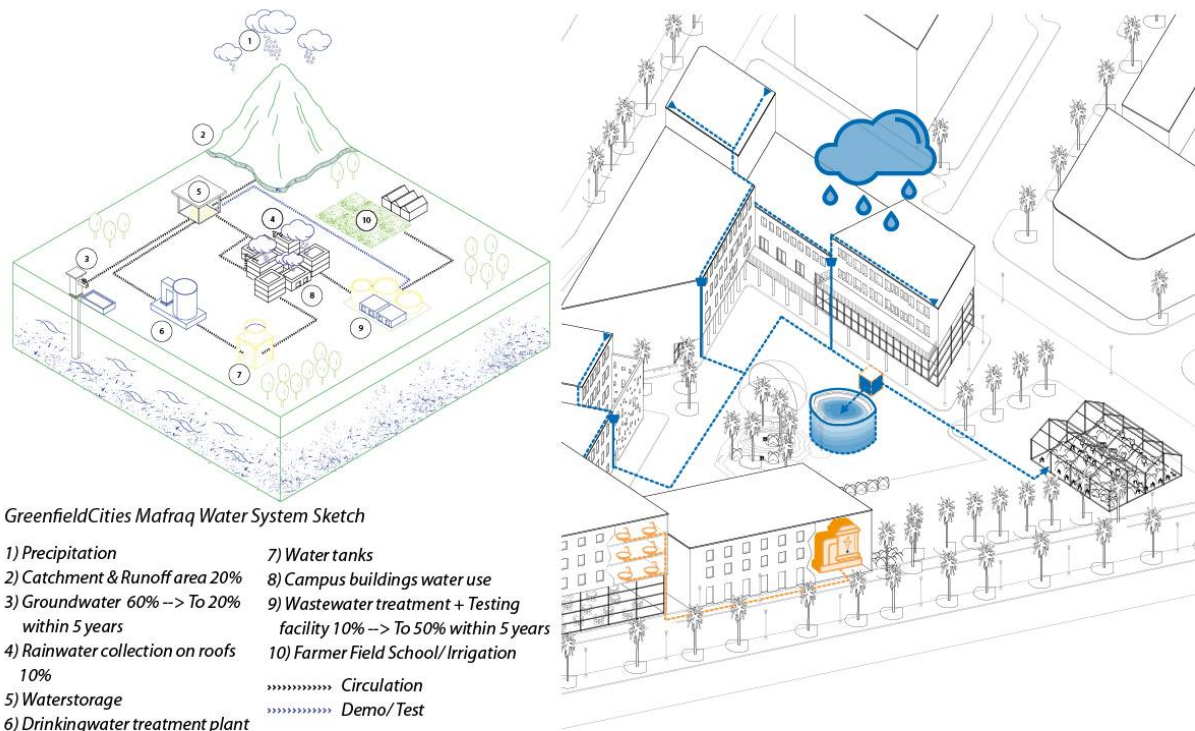


Figure 74 Conceptual Design Water System and implementation in the sketch design of the campus.

Water demand reduction interventions include water saving faucets, showerheads and toilets. The campus can function as a launching customer for such products as developed by water start-ups of cewas-Middle East³¹. The water system will also include various recycling and upcycling options. Greywater (and potentially black water) will be recycled to EC1-EC2 (electrical conductivity) levels, suitable for “dry” hydroponic agriculture. These water-recycling activities have *cross sector impact* on the agricultural activities on the campus, including a research opportunity for Wageningen University & Research (WUR): what is the interaction between water quality levels and different types of crops. Overall, the Water Knowledge and Demonstration Hub secures a sustainable water future for the campus itself and showcases a scalable concept to help Jordan make the necessary water-related climate change adaptations (SDG6 and SDG13). This hub includes: a small Water Development and Service Company (WADSCO) will be established. This company will operate the system on Campus, market it and look for replication opportunities. The WADSCO can also train

³¹ Cewas Middle East is the regional branch of the Swiss cewas Start-Up program. They offer professional training, coaching, mentorship and consulting in business development for sustainable water, sanitation and resource management.



youth on the practical Design & Engineering, installation and O&M of implemented solutions. Some can also earn employment with the WADSCO or start-ups as connected to the water management system.

6.4.2.2 Results Water Business Case

The water business case is not financially profitable based on the current water prices in Jordan (around JOD1.4/m³). At a price for drinking water of JOD 2/m³ and irrigation water of JOD 1/m³, the *Return on Investment* is negative (0-10%) and the simple pay-back time around 50 years. An average price of JOD2.5-3.0 for drinking water and JOD1.5-2.0 for irrigation water is needed for a financially sustainable water system. However, the weak financial water business case can be compensated by cross-subsidizing from more profitable sectors on the campus. Besides that, water costs will be equal to the current situation due to demand saving measures. The *cross sector impact* of the water case and *urgency* (4/4) for Mafrq justify the efforts and investment. The *time to impact* is average (12-36m), because it requires showcasing the impact of sustainable water solutions find their way into the Jordanian water management systems. The *job creation potential* is high with the expected creation of between 50-500 jobs. The types of jobs vary and include planning, engineering, inspection & monitoring, planning, laboratory, consulting, maintenance, accounting & billing, IT support, marketing communications, training and general management jobs.



6.4.3 Agri-Food

Small- and medium sized farmers in Mafrq are 'standing still' and face major challenges around water scarcity, limited market availability and unprofitable production. For this group of farmers it is an overall challenge to sustain their livelihood in agriculture. The closure of the borders with Syria and Iraq resulted for many small and medium sized farmers in a loss of export markets. Prices for produce are below cost prices; this resulted in low or negative margins at local wholesale markets. There is a lack of capital to invest in technologies and other inputs needed to save water, access new markets and meet increasing production standards.

The agriculture sector contributes less than 2% to the Jordanian GDP and employs less than 2% of the Jordanian labor force. However, interventions in the sector are *urgent* (3/4) as it consumes over 50%³² of the scarce water resources in Mafrq. In case of no action, more than 1000 farmers in the second largest fruits and vegetables producing region of Jordan will lose their livelihoods as a result of negative economic outputs, debt and the battle against the diminishing water resources. Mafrq is a governorate full of rural communities depending for income, social cohesion and perspective on their agricultural roots. The lack of financial means also hampers business development and innovation in the sector by entrepreneurs. Young people are not interested to work in the sector due to issues around social status, low wages and negative economic outputs.

6.4.3.1 Agri-Food Hub and ADSCO

Based on the needs of small and medium sized farmers, GFC developed the concept for a scalable Agri-Food Hub. This Agri-Food Hub aims to help increasing income for necessary investments of small and medium sized farmers from Mafrq. The Hub will provide knowledge, training, tools and practical support that help farmers to make the transition to innovative technology and market-driven, future-proof and sustainable (water and energy efficient) production and sales of higher-value products. The Hub will also act as an accelerator for the creation of

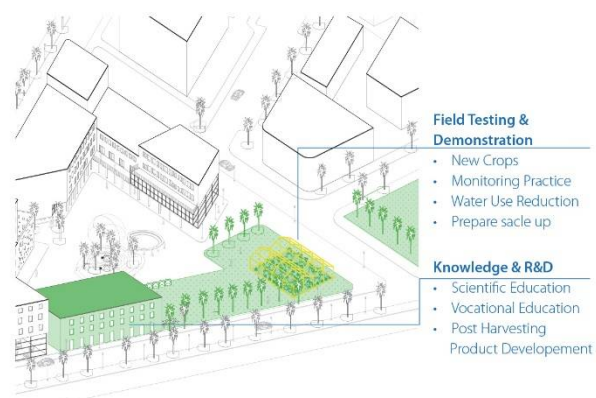


Figure 75 Agri-Food Hub and Farmer Field School in sketch design.

attractive employment opportunities for Jordanian and Syrian youth. In line with the Dutch policy on Foreign Trade and Development Cooperation (BHOS), GFC aims to foster economic growth and employment generation for Jordanians and Syrians in the horticulture sector in Mafrq. The business case has been developed with input from Dutch and Jordanian stakeholders, students and personnel of university departments in the sector as well as farmer cooperatives and farmers in Mafrq. It also builds upon the report: "Jordan's horticulture: a sector in danger?" (De Groot et al. 2018). The Agri-Food Hub will be organized in the form of a cooperative Agricultural Development and Service Company (ADSCO) with farmers and agri-businesses as collective owners.

³² Wanna Institute 2017, Decoupling national water needs for national water supplies



■ Agri-Food

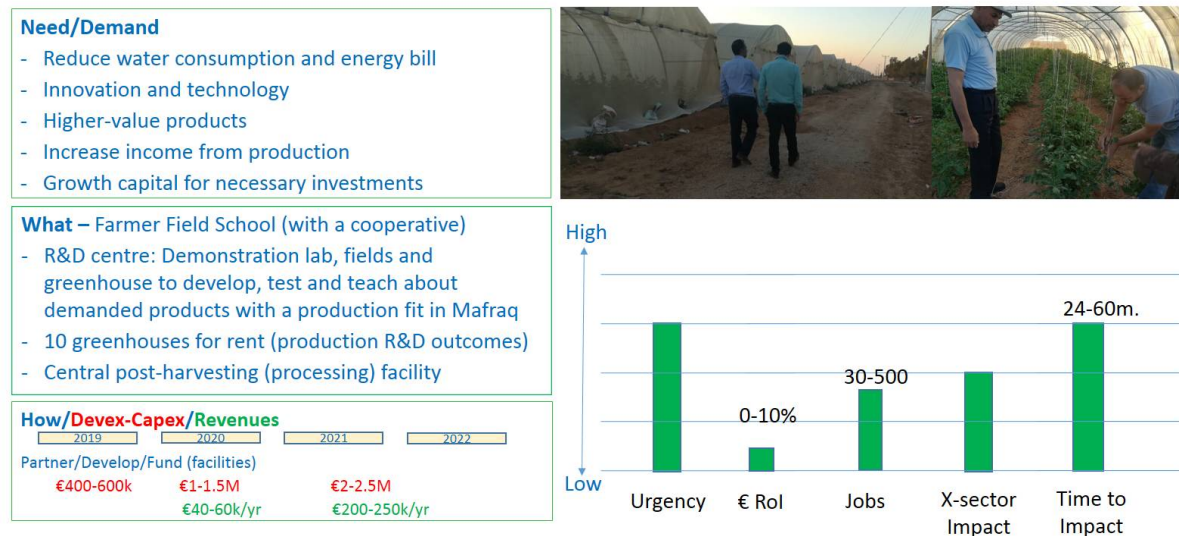


Figure 76 Summary concept and impact Agri-Food sector

6.4.3.2 ADSCO: R&D Center & Training Including, Farmer Field School and Marketing

The ADSCO consists of multiple parts. The Research & Development Center, operated by Wageningen Environmental Research (research institute of WUR), is the basis of the ADSCO R&D Center. The outputs of the research at the R&D center are inputs for a showcase *production line* and *central post-harvesting facility*, monitored by youth as vocationally trained by Luminus Education. Luminus Education trains students in agricultural extension, farm management, agricultural technology installation, operation and maintenance, logistics, facility management and applied software development. Building upon the CBI and HAED³³ project efforts on new markets and products, Jordan Exporters and Producers Association for Fruit and Vegetables (JEPA) and WUR would be responsible for the trade facilitation, applied research of product-market combinations; more than 90% of consulted farmers stated to have a lack of marketing capacity. Solutions can be tested, improved and demonstrated in the ADSCO demonstration greenhouse, operated by trained youth (supervised by WUR) and used to train members in a real Farmer Field School environment. ADSCO members are small and medium sized farmers and other value chain stakeholders such as wholesale traders, distributors and local input suppliers. Farmers learn how to use the technologies in a effective and efficient manner, how to manage the farm and to produce as efficiently and sustainably as possible, whereas other value chain stakeholder learn how to manage the value chain according to international standards. Building upon efforts of SPARK and Al al-Bayt University to develop a scientific curriculum for an agriculture summer school (summer 2019) at the Al al-Bayt University, WUR aims to expand this scientific curriculum and continues educating university students at the Agri-Food Hub including providing internships. To foster innovation, WUR invites local entrepreneurs to pilot their products at the hub under WUR and SPARK supervision. All these partners together are able to make this business case both nationally

³³ https://www.wur.nl/upload_mm/3/0/8/aee57c78-fa3b-4d2d-bb41-f43c2041a69f_HAED-Jo-EN-Fact%20Sheet.pdf

CBI: Centre for the Promotion of Imports from developing countries

HEAD: Jordan Hydroponic Agriculture and Employment Development Project



as well as locally embedded, institutionalized and sustainable (SDG17). The ADSCO Research and Development Center, for example, can after 5-7 years gradually be transferred to Jordan National Agricultural Research Center (NARC) – Mafraq Branch and the Mafraq Decentralized Council (SDG16).

6.4.3.3 ADSCO Production Line

Farmers in the *ADSCO* can benefit from the scalable production line to produce (cost, input and water efficiently) regular and higher-value crops. It consists of one demonstration greenhouse (part of the R&D center) and 10 production greenhouses with simple greenhouse technologies (including crop management system with sensors and simple weather stations) for 10 farmer families from Mafraq. These families sign a rental contract to use the greenhouses for 5-7 years after which it becomes their property, if they use the equipment in a proper manner (according to required standards). This model is based on a similar successful model as applied by Priva in Mexico. The production in these greenhouses can be made much more water-, pesticide- and fertilizer efficient by using:

1. Outputs from market research and demonstrations of new product-market combinations (JEPA and WUR) with higher value in the demonstration green house of the R&D center (30%).
2. Quick wins in regular crop production (70%) in the demonstration greenhouse of the R&D center.

The climate installations in the greenhouses (Priva) and quality control (of international standards) are centrally monitored by trained youth. Priva has offered GFC to donate climate equipment for this production line in-kind. The other farmers can be trained in the demonstration greenhouse and join the cooperative, based on the success of the first 10 greenhouses.

6.4.3.4 ADSCO Central Post-Harvesting Facility

Post-harvesting is a way to increase the production price/m², but small- and medium size farmers do not have investment capital to invest in post-harvesting infrastructure and equipment. In addition, much value is lost in the value chain from farmer to exporter due to a lack of careful handling and cooled storage capacity. The quality along the value chain should be standardized by including a monitored post-harvesting facility with a cold storage facility to the ADSCO. Farmers from the cooperative and external farmers, intermediaries and wholesale traders can bring their produce to this facility. Trained youth runs the facility (processing, packing and storing) and monitors the process (quality control) to guarantee that outputs meet required standards. GFC takes care of the branding of the products under the “GreenfieldCities” brand.

6.4.3.5 Results Agri-Food Business Case

The business case for the Agri-Food Hub concept and the ADSCO vehicle is modestly positive with *Return on Investment* (0-10%) from rent of the greenhouses and cooled storage facility, service fees from the cooperative members and a percentage from the outputs of the *central post-harvesting facility*. The *job creation potential* is high; it is expected that between 30-500 jobs are created for youth (SDG8) after intensive training (SDG4) and scaling of the production line and post-harvesting facility. Especially post-harvesting and R&D are opportunities for young women from Mafraq to set up and lead such activities to increase female labor participation in Mafraq (SDG5). Agriculture is not a closed profession for Syrians, except for engineering positions. However, the Ministry of Labor provides flexible working permits so that Syrian engineers can work as a sort of freelancer under the umbrella of the Greater Jordan Trade Union Federation. The types of jobs vary and include process management, logistics, planting & harvesting, sales, procurement, engineering, inspection & monitoring, planning, laboratory, seed, soil & water consulting, accounting & billing, IT



development & support, branding, marketing communications, training and general management jobs. The *cross-sector impact* is medium (2/4) and consists of fresh food delivery for the hospitality services on the Youth Business Campus. JEPAs representatives and farmers from Mafraq stated that the low status of the sector is the main reason why youth does not want to work in it. It was even said that men who work in the sector believe not to be able to find a wife to marry due to this low status. However, the combination with ICT (monitoring and decision support software on quality, productivity and water usage for example) and (energy) technologies would help to overcome this cultural barrier and attract Jordanian youth to the sector. Finally, the depleting water resources in Jordan fuel the discussion on whether continued investment in Jordanian agriculture makes sense. However, even though the agricultural sector in Jordan is small, the *urgency* for development of the sector is high (3/4) to support livelihoods and social-coherence in the large rural parts of Jordan necessary for stability. The Youth Business Campus is a place where agricultural transitions can be tested and demonstrated (SDG13). Additionally, water and affordable energy are secured on the Youth Business Campus (SDG6 and SDG7). Farmers can also be taught how to use renewable energy sources as an additional source of income³⁴. Ultimately, farmers can learn a profession in another sector in case the agricultural system slowly collapses. The *time to impact* is relatively long (24-60m) as it takes time to start-up the activities and generate revenues to scale the Agri-Food Hub. The Agricultural Credit Corporation has been positive towards supporting the growth of the hub with loans under favorable conditions.

³⁴ In Flevoland, an agricultural province in the Netherlands, farmers use wind, solar PV and biomass as a second source for income. For some farmers this generates more than 50% of their income.



6.4.4 Energy

The energy demand in Jordan rapidly increases, while Jordan covers over 95% of its energy needs by imports of fossil fuels. This makes the country vulnerable to supply shocks as was demonstrated in recent years when cheap Egyptian natural gas had to be replaced with expensive fuel oil. High energy cost-prices created large budget deficits and slowed down private sector growth. As from last year, the new LNG terminal in Aqaba came on-line, restoring access to relatively cheap natural gas. The energy related CO₂ emissions have to decrease substantially. Water is becoming increasingly scarce due to climate change and depletion of aquifers; hence more energy is needed to acquire water and make it suitable for consumption. Therefore, the energy situation in Jordan is dire. Saving energy, improving energy efficiency and adding more renewable energy power are necessary for stability and “green” growth in the country. As energy is part of the crucial infrastructure for any development in the built environment, the urgency to include this sector is high.

GFC aims to cooperate with the German Jordanian Center of Excellence in Renewable Energy in the KHBTDA to facilitate the energy transition in Northern Jordan as an accelerator to create jobs in the sector. A scalable Energy Development and Services Company (EDSCO) will be set up on campus to develop, build and operate the campus energy system including the living, learning and working infrastructure in this specific sector. The EDSCO will also initiate and facilitate energy saving, energy efficiency and renewable energy projects in the Mafraq Economic Free Zone, Mafraq itself and ultimately in Northern Jordan. Together with the German Jordanian Center of Excellence in Renewable Energy a training facility including solar energy projects, a demonstration wind turbine, and a smart grid including a LiveLab³⁵ will be set up to enable young people:

- To do energy scans and energy assessments;
- To develop and implement energy saving and renewable energy solutions and programs.

The KHBTDA has around 200 MW of solar projects installed. Therefore, the local grid has limited capacity for more renewable energy projects. The smart grid on the campus will help to develop solutions to overcome such barriers and will enable the sector to keep growing. In addition, requests from IDECO and Yarmouk Water Company for renewable energy projects will also be explored for development potential. Capacity will be built up fast, so that students can make a living as a designer, engineer, or consultant in the energy sector immediately after graduation. Cooperation with energy departments of the Al-al-Bayt University and the University of Jordan for the design of the campus energy system has already taken place within the framework of the sketch design of the campus. In future stages, this cooperation will be strengthened.

³⁵ A LiveLab is dedicated to knowledge creation, making it a vital source of information for the management and maintenance of Alliander's networks going forward.
See <https://www.alliander.com/en/innovation/our-innovations>



Energy

Need/Demand

- 95% of energy is imported
- Rise in electricity demand
- Growing renewables share requires smart grid
- Paris Agreement GHG reduction goals
- Capacity building integrated energy systems

What: Demo-park, Education & Dev. Company

- Campus itself is monitored energy live lab
- Smart Grid on Campus, including storage
- Vocational & academic education & research
- Renewable Energy & Energy Efficiency Development & Service Company

How/Devex-Capex/Revenues

| 2019 | 2020 | 2021 | 2022 |
|-------------------------------|------|----------------------------------|------|
| Partner, Develop, Fund, Build | | Expand (regional project devel.) | |
| €800-900k | | €20M-50M | |
| €40-70k/yr | | €3M-€7M/yr | |

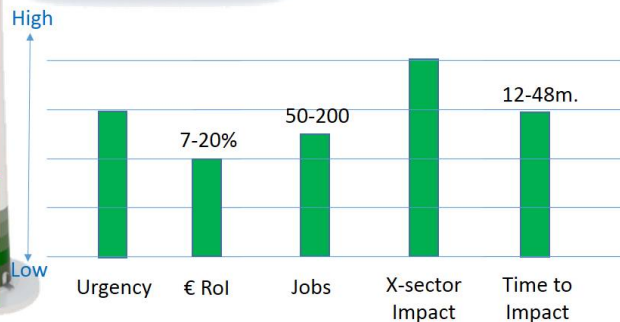
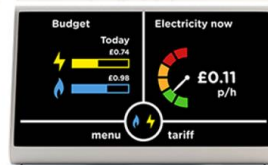


Figure 77 Summary concept and impact Energy sector.

6.4.4.1 The Energy System on Campus

The energy system on the campus efficiently balances renewable energy supply and energy demand. The Youth Business Campus consumes energy from solar PV and wind, linked to a smart grid and a small, managed, battery storage. The limited capacity of the local grid requires smart solutions to manage demand and supply anyway.

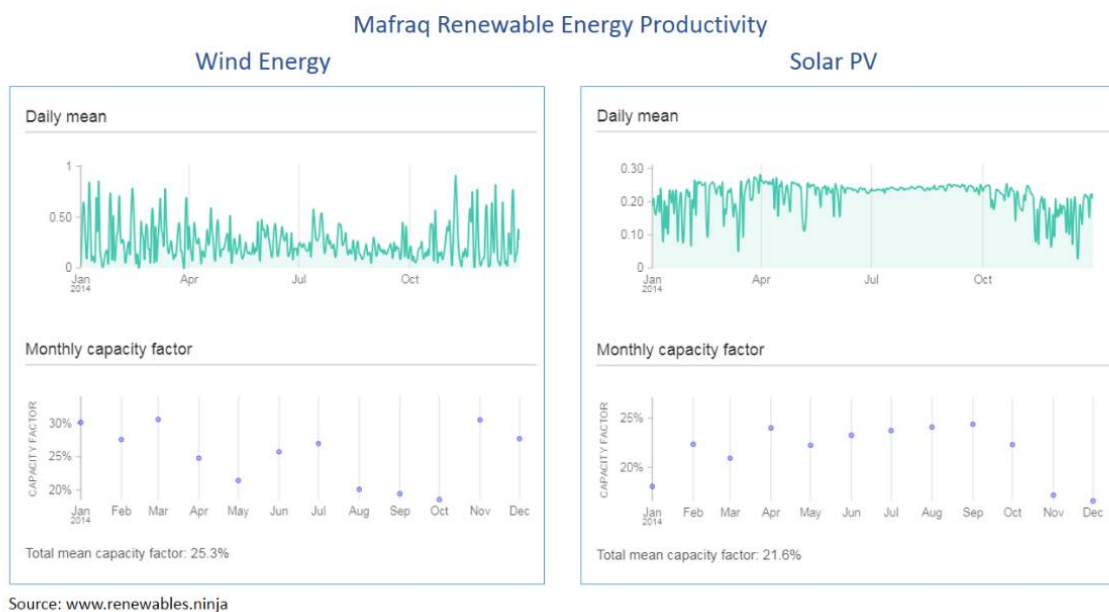


Figure 78 Mafraq Solar PV and Wind energy: strong complementarity and strong performance make 100% coverage feasible.



The Pop-Up stage of the campus will require 200 kW-300 kW of peak energy generation capacity. The supply side of this system could consist of 200 kW of PV, 160 kW of wind and a 200kW/50kWh battery storage. The strong performance of PV solar, the complementarity of Wind and Solar in particular in the “winter” season, and the smart management of the demand side backed up by a battery system could make 100% coverage by renewables feasible, see Figure 78. Other power options could be explored in a later stage if necessary.

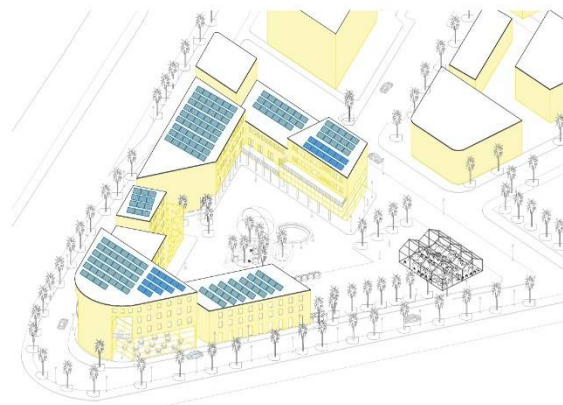


Figure 79 Energy System in Sketch Design Youth Business Campus.

The system is grid connected and can function off-grid, as a grid enhancer, and as a black start facility. The heat and cooling demand will be reduced substantially by using walls with high quality insulation and shading (thermal resistance, R , 5-7.5 m².K/W). On the heat supply side, solar thermal energy is feasible as well and will be part of the campus energy system. Exact dimensions of the solar heat component of the energy system are dependent on the local climate, the detailed design, energy characteristics of the building materials and the building functions. Design and definition of the solar thermal part of the energy system will be included in the engineering phase of the campus.

Extensive monitoring and reporting is part of the system activities. This smart grid will be connected to the local distribution grid. GFC already cooperates with the local utility IDECO to create a “LiveLab” environment in cooperation with Alliander (grid company in the Netherlands experienced in creating “LiveLab” environments).

6.4.4.2 The Energy Development and Services Company

The Energy Development and Services Company (EDSCO) piggybacks on the performance and learning curve of the energy system on the campus. As said before, the limited capacity of the regional grid increasingly requires smart solutions to manage demand and supply. On the supply side, Jordan requires more, and more diverse renewable energy projects. Next to solar PV, solar thermal, wind and to a lesser extent, landfill gas and biogas projects, are strong options. On the demand side, reduction in energy consumption (climate change mitigation) and climate change adaptation measures are necessary. An EDSCO is a proven concept to create the necessary impact while generating revenues and creating jobs. GFC and the German Jordanian Center of Excellence in Renewable Energy intend to start up the first EDSCO to serve the campus, the KHBTDA and Mafrq and ultimately Northern Jordan. Once the services and training component is getting traction, energy project development activities will be started. There is local demand for such services. Consulted investors in the KHBTDA want to reduce their energy bill and MDC would like to reduce the energy costs for water delivery (JOD10.000/month for pumping about 8000 m³ of water per month from a deep well).

GIZ and GFC discuss options to facilitate setting up more EDSCO's by Jordanian energy entrepreneurs to facilitate the energy transition in other areas of Jordan. In this way, GFC and GIZ explore whether and how to integrate their energy activities in the Mafrq Economic Free Zone. GIZ executes the Training for Water and Energy Efficiency Development (TWEEDII) program in Mafrq. GFC and GIZ are developing a joint proposal for collaborative activities under TWEED II and ideas for a possible future TWEED III program. Other identified project opportunities include:



- A large solar thermal project for the King Abdullah University Hospital in Ramtha (near Mafraq) that serves Syrian and Jordanian patients; impact: 2.6 kton CO₂ emission reduction/yr, USD 1M/yr fuel cost savings, 25 trained Syrian and Jordanian solar thermal experts. For this project, GFC aims to collaborate with Millennium Energy Industries, a successful Jordanian Renewable Energy Development Company with strong ties to Jordan, and Catalyst Group, a renewable energy financing company.
- A smart metering roll out program for IDECO with a CAPEX of around €50 million that GFC explores with Alliander.
- Development of a utility scale wind and solar energy project in the Badia area along the Risha-Amman transmission corridor. This is an area with good wind and solar resources. The conjunction with the Risha natural gas power plant can create a sizable hybrid project with a very large renewable energy share. This project would reduce costs per kWh for ratepayers and contribute significantly to Jordan's GHG reduction emissions. The project would also demonstrate the complementarity between wind and solar and therefore effectively enhance the limited grid capacity.

6.4.4.3 Results Energy Business Case

The *urgency* of the energy activities for the campus and for Mafraq is high (3/4). The proposed activities will contribute to the stabilization of energy prices and the local economy by creating temporary construction jobs and sustainable jobs through the EDSCO and by fostering entrepreneurship in renewable energy initiatives. The *job creation potential in the energy sector* is very high; it is estimated that around 50-200 jobs are created, but that even more sustainable jobs can be created depending on the success of the EDSCO. The types of jobs vary and include project management, asset management, project development, customer sales, trading, procurement, engineering, inspection & monitoring, planning, energy demand consulting, accounting & billing, IT development & support, branding, marketing communications, training and general management jobs. Specific focus will be on renewable energy integration into the existing grid and energy consumption reduction in buildings in Northern Jordan, based on the showcase of the Youth Business Campus. Apart from €4-€5M investments in the campus energy system (when developed completely), a 10-100x multiple of that amount can be attracted through the EDSCO to serve renewable energy development in Northern Jordan. The campus will consume 70-80% less energy than currently usual in buildings in Jordan, demonstrating strong decoupling of economic growth on the one hand and energy and emissions on the other hand. The campus will reduce GHG emissions with at least 40 kton on the campus, and through the EDSCO and copy effects, the total regional GHG emissions reductions can grow up to 1.500 kton less CO₂eq emissions in 15-20 years. This serves the national energy agenda and reduces macroeconomic vulnerabilities from energy shocks. In addition, the Jordanian government would need to spend less on fuel subsidies. Since the Youth Business Campus helps Jordan achieve its energy and climate mitigation goals, GFC yields support from the Jordan Renewable Energy and Energy Efficiency Fund (JREEEF), the Jordan Environment Fund (JEF) and the Ministry of Environment (MoE). The MoE encouraged GFC to secure Green Climate Fund funding.

The *cross-sector impact* is very high (4/4). First, all sectors on the campus require energy. Second, in the Agri-Food sector, farmers or farmers cooperatives could become well positioned to increase the renewable energy share of Northern Jordan while adding an additional revenue stream. Third, the cross-sector impact with ICT is also strong, because a smart grid is operated through ICT infrastructure and its applications (offering application development and testing opportunities). Fourth, the construction sector will benefit from demonstration and implementation of solutions for energy efficient building envelopes. In general, all sectors of the Jordanian economy will benefit



from a strongly developed clean energy sector. *Return on Investment* is for most options favourable (7-20%). One of the challenges of making this sector work is timing: (be there when key investment, maintenance decisions and spatial plans are made. The *time to impact* (12-48m) is relatively long, because expertise have to be developed and awareness to be raised throughout the sector.



6.4.5 Construction

The construction sector is strongly related to the energy sector and climate change mitigation, because energy efficiently (EE) constructed buildings have a lower energy demand and therefore reduce GHG emissions, increase user comfort and reduce energy bills compared to energy inefficient buildings. The application of thermal insulation in the physical building envelope can reduce the heating/cooling demand with 50%³⁶. Currently, Jordan's real estate portfolio is not energy efficient at all, but many stakeholders do not see this as an *urgency* (1/4) to change (see Figure 80). However, Jordan cannot meet its GHG reduction targets without making its real estate more energy efficient. This is currently not happening for a couple of reasons:

- First, there is a lack of knowledge, trained people and awareness about energy efficient construction methods such as the inclusion of thermal insulation and passive building. Mr. Rasmi Hamzeh, CEO of JREEEF, stated during a meeting that energy efficiency is not something visual like solar panels on a roof, which makes it harder to make people aware of the benefits of energy efficiency measures in the built environment. Jordanians in rural areas tend to build their houses themselves according to knowledge of simple construction methods as inherited by family members.
- Second, the building codes around energy efficiency are not enforced on the construction site. Although the Ministry of Public Works and Housing (MoPW&H) and the Royal Scientific Society (RSS) have developed energy efficiency building codes and guidelines on how to implement them since the early eighties, less than 5% of Jordan's buildings are thermally insulated according to these codes (Jordan Green Building Council, 2018). Although compliance with all building codes is compulsory by the national building law, enforcement mechanisms are either absent or ineffective. The Jordan Engineering Association (JEA) checks (obliged by law) whether construction plans on paper include thermal insulation in order to grant a building permit, but there is no agreement between the JEA and the MoPW&H to enforce the codes on site. In fact, there is no real enforcing entity to enforce compliance on the construction site (Royal Scientific Society, 2018).
- Third, there is little willingness for enforcement of the codes at the level of MoPW&H, the Jordan Contractors Association (JCA), contractors and building owners, because of the direct higher construction costs for the constructing party (Royal Scientific Society, 2018). Although building owners are more likely to thermally insulate their buildings than construction companies, building owners in Jordan often also have the role of the contractor and therefore prefer to leave the thermal insulation out in order to save on construction costs.³⁷ According to the JEA, site engineers should be responsible for the enforcement of the implementation of thermal insulation, but they are often hired by the building owner and are therefore not empowered to enforce. It shows the lack of enforcement mechanisms as well as the lack of incentives for constructing parties (construction companies, contractors or building owners) to comply with the codes.

Based on these challenges, GFC aims to provide local youth with the right knowledge, training, agency and business perspective to achieve 5-10% increase in compliance to the energy efficiency building codes in Northern Jordan. This is part of GFC's objectives to contribute to climate change mitigation (NDCs) and the national energy efficiency goals (National Energy Efficiency Action Plan 2018-2020) by lowering the energy demand of the real estate in Northern Jordan. With the campus

³⁶ <http://jjmie.hu.edu.jo/vol-11-3/JJMIE-112-16-01.pdf>

³⁷ Some sectors have subsidized, hence low, energy prices reinforcing the lack of incentives to apply energy saving measures.



as an excellent environment for training, awareness raising and promotion of energy efficient construction, GFC creates temporary jobs and internships with the construction activities of the campus itself. More permanent jobs will be created with continuous business activities in the construction sector that are developed and tested from the campus and the Mafrq Economic Free Zone. The business case for these activities has been developed with input from Dutch and Jordanian stakeholders from the construction sector. The activities in the sector include the energy efficient buildings on the campus and an energy efficient wall panel factory, linked to the Energy Development and Services Company (EDSCO).

Construction

| <p>Need/Demand</p> <ul style="list-style-type: none"> - Speed & Quality for regional reconstruction efforts - Jordan building energy performance needs push - Embedded capacity building in innovative construction - Regional specific (applied) science demonstrations | | | | | | | | | | | | | | | | |
|---|---------------|------|-------------------------------|------|---|--|--|-------------------------------|------------|---------|--|--|--|---------------|--|---------------|
| <p>What</p> <p>Simple, yet high quality, “smart” buildings on campus</p> <ul style="list-style-type: none"> - Vocational and scientific training - Innovative panel wall factory (Free Zone, 15-25 jobs) | | | | | | | | | | | | | | | | |
| <p>How/Devex-Capex/Revenues</p> <table border="1"> <tr> <th>2019</th> <th>2020</th> <th>2021</th> <th>2022</th> </tr> <tr> <td>Partner, Develop, Fund, Build (7000m²)</td> <td></td> <td></td> <td>Expand (15000m²)</td> </tr> <tr> <td>€3.5M-4.5M</td> <td>€6M-€7M</td> <td></td> <td></td> </tr> <tr> <td></td> <td>€200k-300k/yr</td> <td></td> <td>€400k-900k/yr</td> </tr> </table> | 2019 | 2020 | 2021 | 2022 | Partner, Develop, Fund, Build (7000m ²) | | | Expand (15000m ²) | €3.5M-4.5M | €6M-€7M | | | | €200k-300k/yr | | €400k-900k/yr |
| 2019 | 2020 | 2021 | 2022 | | | | | | | | | | | | | |
| Partner, Develop, Fund, Build (7000m ²) | | | Expand (15000m ²) | | | | | | | | | | | | | |
| €3.5M-4.5M | €6M-€7M | | | | | | | | | | | | | | | |
| | €200k-300k/yr | | €400k-900k/yr | | | | | | | | | | | | | |

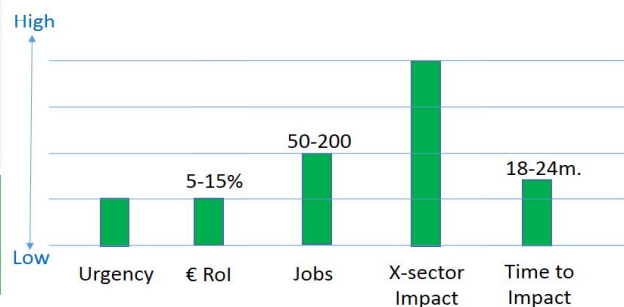


Figure 80 Summary concept and impact Construction sector.

6.4.5.1 Innovative Wall Panel Factory

GFC aims to facilitate the establishment of an innovative wall panel factory in the Free Zone for the production of a code compliant building envelope construction solution. The campus can serve as a launching customer for this solution. In combination with the reconstruction of Syria and Iraq and national energy efficiency targets, this is a solid training and business opportunity for a local or international company with solutions that are quickly to deploy, energy efficient and cost-effective. GFC has discussed the design for the campus and set-up of a factory in the Free Zone with TGS-Uniq, a Dutch-Moldovan company producing energy efficient EPS sandwich panels with a patented Dutch technology. The production and on-site assembly of the sandwich panels and attached Engineering & Design pillar create training (by Luminus Education) and employment opportunities for local youth, local real estate developers, contractors and workers. This can also fulfil a future demand in Building

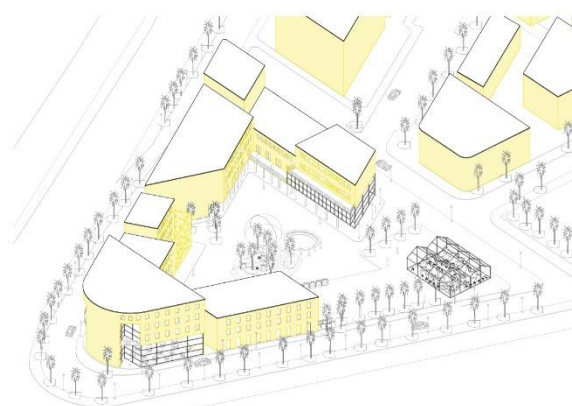


Figure 81 The campus as launching customer of the wall panel factory.



Information Modeling (BIM) capacity, a specialty of RBK³⁸ (SDG17). Promotion and awareness raising from the campus can increase the regional demand for these type of solutions, thereby increasing the number of jobs. The factory will also be a basis for the exploration of more opportunities for the establishment of local value chains to produce locally fitting and energy efficient solutions in the construction sector. One example is the abundance of wool (a strong thermal insulator) in Mafrq that can be processed into wall insulation panels. GFC aims to embed the TGS-Uniqa factory within the confines of the German Jordanian Center of Excellence in Renewable Energy (GIZ), located in the Free Zone. Demand for such solutions can be found in Jordan, but is also likely to emerge as part of the upcoming reconstruction efforts in Syria and Iraq. GFC seeks collaboration with the SafePorts Logistics Hub in the Mafrq Economic Free Zone to explore this opportunity.

6.4.5.2 Training on Youth Business Campus

The campus is a launching customer for the wall panel factory and should function as a physical role model of energy efficiency with its thermally insulated- and building code compliant buildings with a low heating and cooling need and a high level of thermal comfort. Together with the wall panel factory, the campus is an energy efficiency showcase-, training-, awareness- and promotion platform to attract, train and commit energy efficiency stakeholders (students, engineers, designers, real estate developers, contractors, policy makers and consumers) to the replicable construction solutions that GFC implements. A newly established Energy Development and Services Company (EDSCO, see Section 6.4.4.2), operated by Jordanian and Syrian youth, takes care (under the supervision of the Jordan Green Building Council) of awareness raising and promotion campaigns that can simplify the potential benefits of thermal insulation and code compliance to all sectors. The EDSCO includes human resources with capacity in assessment, Engineering & Design, sustainable real estate development, contracting and site supervision. CD20, a Dutch construction company, and BLOOM, a Jordanian construction company, are researching to respectively establish manufacturing facilities for the manufacturing of prefab concrete elements and green wall and roofing systems in the KHBTDA. Additionally, CD20 is interested to rollout BIM trainings for regional deployment of youth for regional (re)construction needs with prefab applications.

By demonstrating the business-case on paper and in reality (experience the comfort and cost reduction) and show how stakeholders can make or save money (and energy) through replication of the showcased construction solutions, GFC aims to create demand for replication. In turn, this will create more private sector driven training and employment opportunities (SDG4 and SDG8). The training of energy stakeholders distinguishes between design engineers, the technical engineers and the site engineers so that every engineer knows its role in the complex reality of the energy efficient construction process. This results in a growing local pool of trained designers, engineers, contractors and construction workers who know how to comply with, implement and enforce the energy efficiency building codes in new and existing real estate projects in Jordan. Ultimately, this local capacity could be bundled in an energy efficiency compliance department, linked to the Jordan National Building Council (part of MoPW&H) and institutionalized by the relevant national entities, including the MoPW&H, JEA and JCA. This department would develop incentives for constructing parties such as certifications for code compliance in actual buildings and low-interest financing schemes that target energy consumers to overcome the initial cost obstacle and implement thermal insulation in their facilities.

³⁸ <https://rbk.org/>; the letters RBK stand for ReBootKamp.



6.4.5.3 Results Construction Business Case

Although the *urgency* for the sector is low (1/4), the business case for the wall panel factory and other construction activities is positive with *Return on Investment* (5-15%) from rents of living, learning and working buildings, sales of energy efficient solutions and income from the EDSCO. The *job creation potential* is high: between 50 to 200 jobs are expected to be created for youth (SDG8) after intensive training (SDG4), in addition to numerous temporary construction jobs such as the construction of the living, learning and working buildings on the campus. By using innovative and high-quality panels for the construction of the campus, GFC aims to attract Jordanian youth to work in the construction sector, a sector that is currently dominated by an Egyptian and Syrian workforce. Engineering & Design and BIM modelling activities offer specific employment opportunities for local young women (SDG5). The construction sector is open for Syrians, except for engineering positions (Ministry of Labor, 2018). The types of other jobs vary and include manufacturing, finishing (plumbing, woodwork, carpeting, painting electrical installing) construction management, project development, logistics, architecture, spatial planning, MEW engineering, sales, procurement, inspection & monitoring, planning, accounting & billing, IT development & support, branding, marketing communications, training, and general management jobs. The *cross-sector impact* is very high (4/4), because all the buildings on the campus have to be constructed energy efficiently and code compliant. The energy efficient building envelopes result in lower energy bills for companies in comparison to Amman, which is valuable for any space to live, learn and work, but even more so for ICT companies that have a large cooling demand. The campus in Mafraq delivers office and training space that reduces the energy bill compared to such space in Amman, and additionally reduces GHG emissions (SDG13). The *time to impact* (18-24m) of the wall panel factory is short as it is quickly to deploy and directly create 15-25 jobs. Although the impact on energy compliance on the campus itself is almost immediately, the time to reach the energy efficiency compliance targets in the region is relatively long as it takes time to raise awareness, break through institutional boundaries that hamper code compliance and generate revenues in a energy efficient construction market that still is in its infancy.



6.4.6 ICT

Jordan has a long standing and successful national ICT strategy. In 1999, King Abdullah II launched the REACH initiative, “a blueprint for a vibrant export oriented internationally competitive ICT sector”. This initiative has been followed up consistently with government sponsored plans for the sector. As a result, the ICT sector contributes to around 12% to the Jordanian GDP (Int@j³⁹, 2017). The performance of the ICT sector fluctuated during the past years, but it becomes visible that the sector is recovering⁴⁰. There are around 500 ICT companies in Jordan accounting for around 80.000 jobs. This number could easily increase if Jordan would be selected as location for the back-office of international ICT companies. At the moment, the domestic revenue generation from the sector is relatively low added value in domains like sales and repair of hardware. Domestic revenues have halved between 2007 and 2013 to USD 317M while higher added value export services in IT grew with 50% in the same period to USD 300M. For comparison, telecom revenues in 2013 were around USD 1.7B.

ICT is a huge opportunity in terms of training and employment for Jordan’s talented young people, but there are several challenges that can clarify the mixed performance of the sector:

- Jordanian universities annually deliver around 5000 IT graduates (50% female) of whom only 30-35% is absorbed by the market. On a national scale, 60% of the IT graduates are unemployed (Int@j, 2018). Ironically, IT companies report that the IT technical, English language and professional skills of Jordanian graduates are not matching (international) market demands. It was stated that universities could not keep up with the pace of development of the ICT sector (Ministry of ICT, 2018). The lack of professional skills among Jordanian graduates apply to almost all sectors, but recent research by Int@j among its members (private sector) shows that graduates need to be trained on professional skills such as accountability, dependability, adaptability, flexibility, communication, customer service, creative thinking, job knowledge, negotiating, influencing, planning, organizing, problem solving, decision making and team working (Int@j, 2018). Additionally, GFC’s own experience shows that graduates have to be trained in other professional skills like proactivity, quality awareness, action planning and reporting. There are successful examples of upskilling programs by Luminus Education and RBK.org that apply a selection process before the start of the training.
- Several factors negatively impacted Jordan’s competitive position and hampered investment in the sector such as the Syrian and Iraqi wars, the high cost levels of Amman (most expensive Arab capital to live) and labor productivity. Additionally, government taxes on business income, electricity and telecommunication services, censorship laws and in general stricter government controls do not favor a creative and trusted business (development) environment. Some companies even moved to the Gulf Countries. The Jordanian government is aware of these issues and is consulting with the sector to (re)create a more favorable national regulatory and tax framework for the sector.

The fact that Mafrq lacks a professionally stimulating environment of good quality (infrastructure and services) and “learning on the job” opportunities for talented youth to increase skills and productivity, results in IT graduates with skills that often do not match market needs. This keeps private (sector) companies and thereby sustainable and valuable ICT job opportunities for youth away from Mafrq. Although around 150-200 IT students from Mafrq graduate every year, Mafrq

³⁹ Int@j is Jordan’s ICT association.

⁴⁰ http://moict.gov.jo/uploads/Public-Consultations/Position_Paper_ICT-Policy-Report-on_the_first_consultation_31-7-2018.pdf p. 52



has virtually no ICT companies to offer valuable internship and job opportunities. Market driven training and job opportunities in ICT can be found in Amman, but youth from Mafrq can rarely access these opportunities due to economic- and cultural barriers. For cultural reasons, women in Mafrq are highly dependent on opportunities close to their communities. These factors push many IT graduates in Mafrq into long-lasting unemployment.

Between 150-200 IT graduates/year, of which 90-140 females, come from Mafrq. Most of them (90%) come from the Al al-Bayt University (AABU) in Mafrq (Ministry of ICT, 2018). Currently, AABU has 20.300 students of which around 1700 IT students. In 2017/2018, 159 IT students (60% women) graduated from AABU. Only a few of those graduates have found a relevant job in the ICT sector (Al al-Bayt University, 2018). The *urgency* of the sector is relatively high (3/4) due to relatively high GDP-contribution, the opportunity for youth to make a decent income in the sector, the need for innovation and technology-push in many sectors and the wish of the Jordanian government to transition Jordan's economy into a 'knowledge-based' economy for which ICT is essential. The ministry of ICT has the goal to create 500 IT jobs for graduates in 2019. The minister of ICT, H.E. Mothanna Gharaibeh, explained to GFC that the creation of ICT jobs in the governorates (outside Amman) is important as part of a larger framework of decentralizing economic development and local political responsibilities. For the Ministry of ICT, GFC's Youth Business Campus is an opportunity to implement the decentralization policies and create ICT jobs.



Figure 82 A joint workshop with ICT companies, organized by Int@j and GFC in September 2018.

For the development of the business case in ICT, GFC has consulted 24 national and international IT companies during stakeholder consultations. In addition, GFC held a workshop together with Int@j on the private sector requirements for doing business from the Youth Business Campus.

Without private ICT sector presence and ICT jobs in Mafrq, it is not a self-starting process to attract ICT companies to the Youth Business Campus. However, GFC has found that around 70% of the 24 consulted ICT companies are interested to do business from the Youth Business Campus under specific conditions. GFC needs to test this opportunity based on the following four starting points (from the research):

1. First, the fact that IT companies look for skilled human resources. Most of the 150-200 IT graduates per year from Mafrq cannot find a relevant job. They lack the professional skills and



Mafraq currently has no place to acquire these. The initial focus should be to close the existing gap between IT graduate skills and market needs on the Youth Business Campus.

2. Second, the fact that IT companies seek more affordable alternatives for Amman. IT companies pay rental costs of 140-150 JOD/m²/year in the King Hussein Business Park and above 100 JOD/m²/year at other office locations in Amman. In addition, ICT companies complain about high energy bills of 8.5 JOD/m²/year. GFC can reduce renting and energy costs compared to Amman.
3. Third, the fact that the campus itself creates a need for IT solutions for the Hospitality, Water, Energy, Construction and Agri-Food sectors, and overall management of the campus. In addition, the local and international network of GFC helps to link IT companies on the campus to international demand.

Based on stakeholder consultations, the business case in ICT consists of ICT training and working space on the Youth Business Campus.

ICT Hub

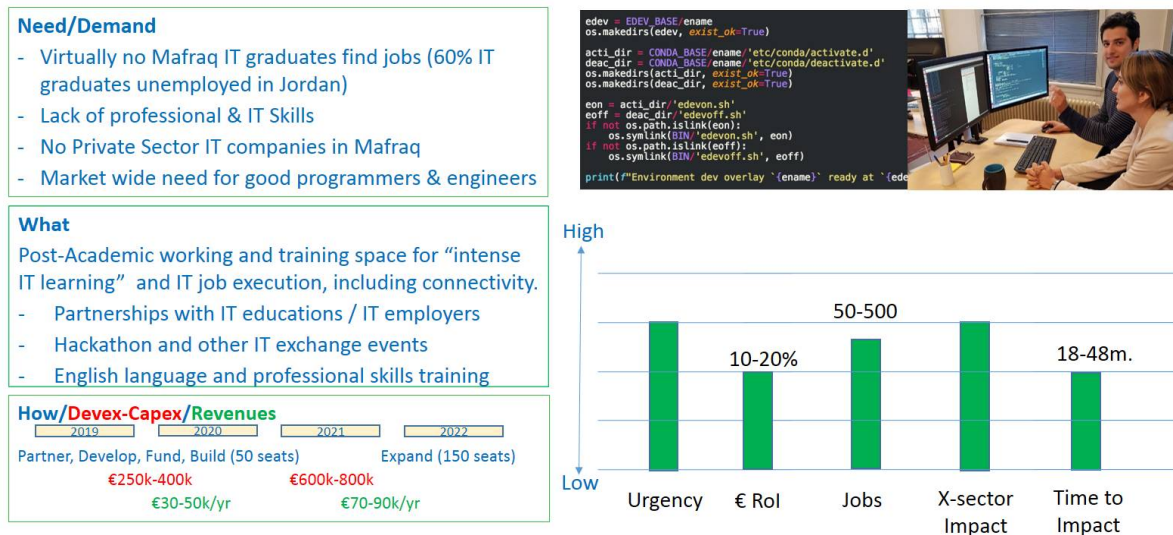


Figure 83 Summary Concept and impact ICT Hub.

6.4.6.1 Post-Graduate Education Institute

The emphasis should be on intense IT learning and IT technical, language and professional skills development, in line with REACH2025, priorities of the Ministry of ICT and the *Techsquad* upskilling framework as developed by Int@j. The education program consists of three stages:

1. Select suitable candidates;
 2. Train them on professional, language and technical skills;
 3. Coach and broker towards employment on the Youth Business Campus and the wider region.
- GFC identified several IT education partners with a basis in Amman, such as RBK.org and Luminus Education that already run such programs, including tuition financing, and have over 100 hiring partners (such as Expedia, Microsoft and Amazon) who take up their IT graduates. For RBK.org and Luminus Education, it is attractive to replicate their activities in the governorates, because of lower costs: RBK.org, Luminus Education and hiring partners would run training programs and work in high-quality space where labor costs are relatively low and where they can access youth from



Mafrq. Most young people from Mafrq cannot reach those education programs in Amman for practical, economic and cultural reasons.

6.4.6.2 Working space

After creating a pool of trained youth (SDG4) with the necessary professional, language and technical skills, ICT solution companies rent office space on the Youth Business Campus to employ the trained talents (SDG8). One example is MonstarLab, an IT company from Japan with around 1.500 employees in 15 countries. Hiroki Inagawa, the CEO, flew to Jordan from Tokyo to attend the GFC workshop. The Youth Business Campus can offer ICT companies good quality infrastructure for 60 JOD/m²/year and energy bills of 2-4 JOD/m²/year due to the energy efficient building designs (SDG13). Finally, ICT

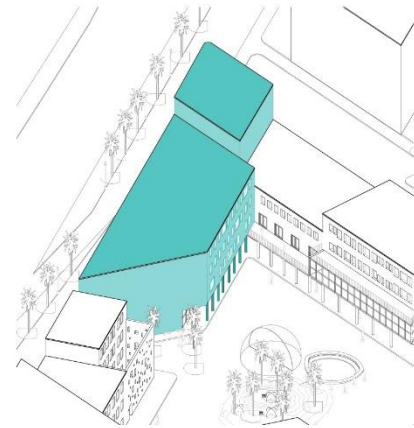


Figure 84 Post-Graduate Education Institute and office space for ICT companies on campus.

companies find proper data-, communication and office infrastructure offered by ORANGE with whom GFC explores a CSR contribution that could potentially result in ICT infrastructure for a reduced price. GFC expects that around 120 graduates per year will land in regular ICT jobs, around 20 will land in in start-ups (set up by entrepreneurial graduates) and around 10 in a small 'green' data center (power usage effectiveness co-efficient 1.2). GFC and partners will help to incubate promising ICT ventures and broker deals to secure their growth. In addition, GFC will use the innovative character of the campus to attract *digital nomads* and *digital volunteers* for shorter or longer periods of time. They can contribute to the ICT community by creating jobs, internships or giving training. All the jobs together will expectedly create 30 internship positions per year available for IT students from Mafrq who can thereby improve their skills.

6.4.6.3 Results ICT Case

The business case for the ICT activities is positive with *Return on Investment* (10-15%) mainly from brokering services and rents of educational and office buildings (as rented by ICT training providers and ICT companies). The *job creation potential* is high; it is expected that 50-500 jobs can be created, because the ICT sector is growing and regular ICT jobs are relatively easy to create after the pool of trained graduates is ready (SDG4). ICT offers specific employment opportunities for local young women (SDG5) and Syrian refugees. Although the Ministry of Labor (MoL) considers Syrians as migrant workers under the labor law and ICT is a closed profession for Syrians, they can start up a venture together with a Jordanian national or receive an exemption as granted by a special committee within the MoL. This committee oversees employment opportunities for foreigners and decides on the grant of permissions (Ministry of Labor, 2018). The types of jobs vary and include application developers, gaming experts, database administrators, full stack developers, ERP implementation consultants, business process developers and analysts, data analysts, AI engineers, project management, front end designers, testers, sales, data center operators, accounting & billing, branding, marketing communications, social media, training and general management jobs. The *cross-sector impact* and *urgency* are high (3/4), because all sectors on the campus need ICT infrastructure and solutions. ICT can give the other sectors the needed technology-push to be able to attract talented youth and help Jordan to shift to a knowledge-based economy. The *time to impact* of the ICT activities is relatively long (18-48m), because the first jobs can only be created



after the gap between IT graduate skills and market needs is closed through the post-graduation education program. However, after employers are satisfied with the graduates from this program, the ICT business activity on the campus can grow relatively fast.

6.5 Overview Key Results and Cross Sector Importance

In European countries, companies and governments increasingly realize that urban development, from new housing and offices to public space and transportation, requires collaboration between the private, public and third sectors. The perspective of climate change, energy security issues and water scarcity on one side and technological and social developments on the other, calls for the private sector, government and civil society to work together to mitigate those risks and grasp the cross sectoral opportunities in the communities in which they operate. While single sector solutions might seem attractive in terms of simplicity, they rarely lead to lasting value creation. In general, many donor funded humanitarian- and development projects are based on a separation of sectors, such as water (WASH), construction (shelter) and agriculture (livelihoods), whereas GFC aims to bring sectors together to create a thriving urban environment with interacting people, technologies, services and infrastructure in multiple sectors. This is exactly the reason why GFC promotes and facilitates a cross- and multi-sectoral approach.

As explained in Section 6.4, for each sector, an assessment was made on:

- a. *Urgency;*
- b. *Return on Investment;*
- c. *Job creation potential;*
- d. *Cross-sector impact;*
- e. *Time to impact.*

When comparing the different sector scores on the indicators, the value creation of the multi-sectoral approach is clearly visible. This approach has a positive impact on the financial, social, legal and economical feasibility of the Youth Business Campus. The financial feasibility is positively impacted due to the combination and compensation of financially stronger and financially weaker sectors. An example is the combination of hospitality and ICT (financially strong) with water (financially weak). The very urgent but weak financial business case of water can be financially compensated by the financially stronger hospitality and ICT cases. The latter earn good revenues on campus and can pay the true price of the water they use. This is a way to demonstrate that the existential water issue in Mafraq can potentially be tackled without continuous public funding. The feasibility research indicates that the water issue of Mafraq faces financial as well as social barriers that might be overcome as a result of the cross-sectoral approach on the campus. The high recycling rate for water is feasible, because the agricultural sector can use this recycled water. The hospitality-, agriculture-, and construction sectors face social barriers for the attraction of Jordanian youth (unpopular perception of working in these sectors), but the modern character of the campus and the combination of the sectors with technology and ICT will help to overcome these barriers. The legal barriers to create jobs for Syrians can also be reduced with the multiple-sectoral approach; it is for example easier to create job opportunities for Syrians in the hospitality sector than it is in the ICT sector. The combination of sectors helps to increase the potential for job creation for Syrian refugees and thereby the economic feasibility of the Youth Business Campus.



X-Sector Importance

Strong RoI cases support weak RoI cases / short term impact cases fuel long term impact cases, etc. etc.

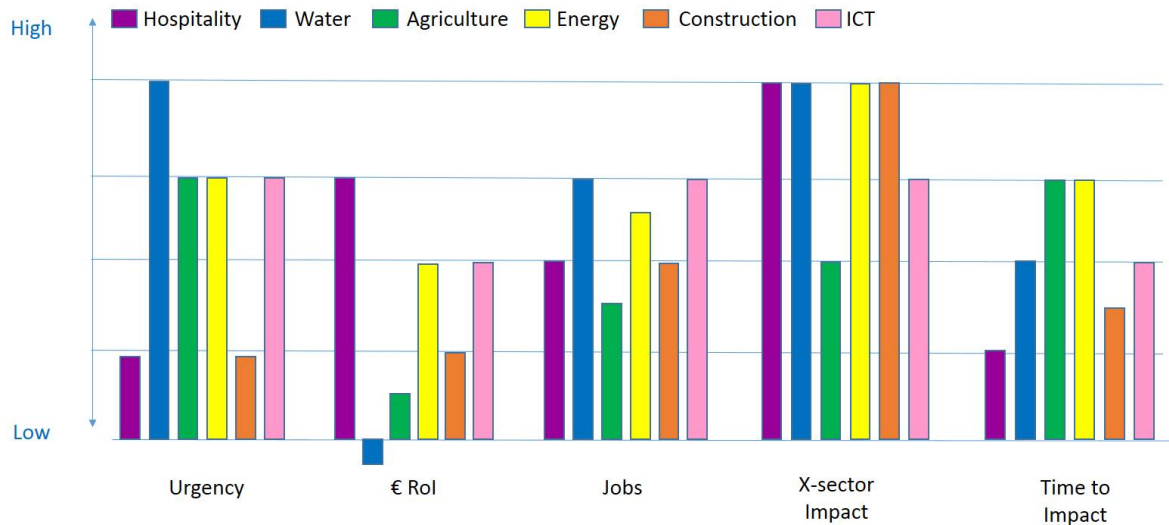


Figure 85 Overview indicating cross sector importance.

Another example of cross-sectoral complementarity can be found along the indicator of *time to impact*. It is relatively easy to open and run a small hotel including additional hospitality services. This will immediately generate revenues and create liveliness on the campus and help to attract and develop activities with a longer time to impact. Such quick wins are also beneficial to attract the first private investors to the campus. Additionally, in case there are legal barriers for the implementation of a certain sector, GFC and partners can first implement other sectors to show the value of the approach. The hospitality services will also attract people to the campus. These people will experience the benefits of the water and energy efficient infrastructure. This helps raising awareness, which in turn helps to increase local demand for such solutions.

When zooming out to the campus as a whole, some sectors like Water, Energy, ICT and Construction are 'table stake' sectors. Without those, there are no training facilities, offices and agriculture for example. One could decide just to connect a new building to the local utilities and use the business as usual approach, but these utilities are actually interested in testing grounds for change. In addition, Jordan needs convincing and sustained demonstrations to internalize and accelerate scalable green growth. ICT solutions are essential to achieve circular ambitions in sectors like Agri-Food, Water, Energy and Construction. Those sectors also offer testing grounds and clients for ICT solution developers. When ICT companies decide to do business from the campus, they can make use of the pool of clients on the campus (in multiple sectors) to kick-start their activities. If for example Wageningen University & Research decides on a long-term agriculture R&D facility in Northern Jordan, this will be more effective in a cross-sectoral campus setting where R&D activities can be put in practice and ICT solutions can be integrated.

The Energy and Agri-Food sectors influence each other in a positive way as well: many renewable options (wind, solar power, solar heat, biomass) can be relatively easy implemented at farms. Land, rooftop area, organic material, manure are key factors in unlocking renewable energy potential. At the same time, the implementation of (one of these) options increases the income of farmers. Farmers will learn in the cooperative how to exploit such options and share knowledge and



experience efficiently and effectively. At the Youth Business Campus (as it is an energy live lab as well), many relevant technologies are demonstrated.

Last but not least, all sectors at the campus include training, capacity building and job creation aspects, which implies that facilities and results can be shared. This will lower both investment costs as well as operational costs. As many connections between the campus sectors exist, it will be a natural, stimulating and inspiring environment to think integrally and act across sector boundaries. Many more examples of interconnectedness and *cross-sector impact* can be given, but the economic power and liveliness of the urban environment on the campus can be easily imagined from the examples as listed above.

6.6 Estimated Impact in SDG Format

The GFC project is a combination of green infrastructure, socio-economic, education and business development activities with the goal to support creation of new, sustainable, locally relevant and valuable jobs for youth and to find new, innovative yet tangible ways to avoid migrants have to come to the EU and the Netherlands. The intended impact after 5-7 years of these activities can be described in terms of the United Nations framework for Sustainable Development Goals (SDGs). The SDG framework is attractive for communication, monitoring and benchmarking purposes. GFC's point of view towards SDGs (and performance indicators in general) is that SDGs as performance indicators are only meaningful if they are made measurable and verifiable both in terms of quantities and time. GFC chooses to monitor success and failure along 8 of the 17 SDGs. The Youth Business Campus may have impact on other SDGs as well, but the selected SDGs currently best fit the planned activities. When extraordinary impact on other SDGs is observed, they can be added to the monitoring and reporting process as well. Figure 86 shows the overview of the estimated impact on the selected SDGs. The monitoring and reporting approach around these impact indicators is described in Section 6.6.3.

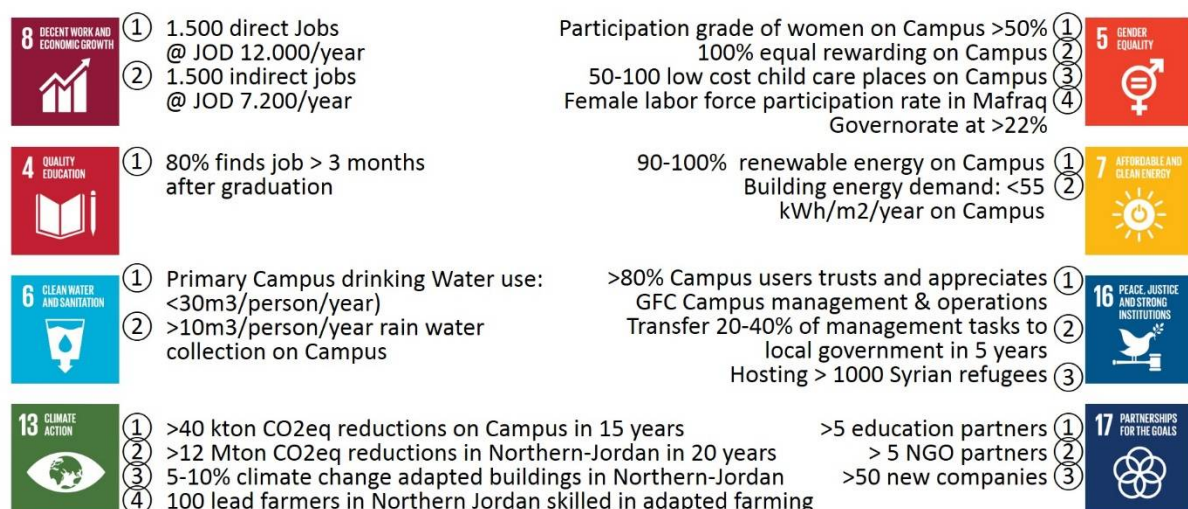


Figure 86 Overview of 8 SDGs including the estimated impact within 5-7 years.

The impact is described from the Jordanian as well as the Dutch and EU perspective in the sections below.



6.6.1 Jordanian Perspective

The Youth Business Campus aims to create pull-conditions in Mafraq Governorate for young people by sustainably stimulating the local economy and reducing climate-related and governance challenges. It aims to create a sustainable perspective for young people in Mafraq. Based on Figure 86, the following positive impact can be expected from the Youth Business Campus project for Jordan.

Socio-Economic

SDG4: GFC perceives quality education as education that prepares young people for their next step in life. This means that they should be able to find or create a suitable job after graduation. Such education is currently largely missing in Mafraq Governorate, resulting in high amounts of young people that cannot find suitable jobs even after obtaining a higher education degree. This is why GFC attracts high quality Education Partners that specialize in education for jobs and that are willing to commit to results (see Section 6.2). GFC aims for an SDG4 score of at least 80% graduates of education programs at the Youth Business Campus finding a suitable job within 3 months after graduation. This is in line with Jordan's priority of making young people ready for the job market through the development of essential market-driven skills.

SDG8: Young people without a job, without any prospect for a job or without a job that fits their intellectual capacity, get easily bored, depressed or hopeless for the future. Unfortunately, this is the reality for many young people in Mafraq Governorate. Besides inducing drug use and fostering criminal activity, it creates disbelief in the current Jordanian social and governance system. They may even radicalize. That is why GFC aims for an SDG8 outcome of creating the conditions that can lead to 3000 decent employment opportunities for young people. These jobs will have a positive impact on the local economy and social resilience. Such job creation success is also good for the legitimacy of local and national political leadership, adding to stability..

SDG5: GFC can create conditions for quality education and job creation in Mafraq, but young women would not benefit from these opportunities without creating specific enabling conditions that help them to participate in the Youth Business Campus. A combination of physical and non-physical interventions will ensure that many young women can become a citizen of the Youth Business Campus. GFC aims for an SDG5 performance of over 50% women presence on the campus with equal incomes compared to their male peers. The availability of a low cost childcare facility and the 'Women Oasis' are good examples of the physical interventions that will help to attract young women to the Youth Business Campus and thereby boost female labor participation rates in Mafraq Governorate. These well-educated and motivated young women will help themselves and Jordan forward by putting their excellent performance at school and higher education into good use in their own region of origin.

Climate Change

SDG6: It is clear that the water situation of Mafraq Governorate is dire. Rapid action is needed in Mafraq. The Youth Business Campus aims, according to the indicators of SDG6, to showcase how significant amounts of water can be saved in the built environment compared to business as usual. With help of partners, the showcased solutions can be replicated to save water beyond the Youth Business Campus. This can help Jordan to become a regional knowledge and skillset leader in water saving.

SDG7: Creating a transition to a sustainable energy supply is a double-edged sword for Mafraq and Jordan. Turning towards a domestic renewable energy supply will reduce costs, emissions and vulnerability to price shocks. Reducing energy demand with technical and behavioral interventions



will help reaching high renewable energy shares in the energy supply sooner. Enabling the energy transitions in Jordan will also help to create jobs. The Youth Business Campus aims to showcase, according to the indicators of SDG7, 90-100% renewable energy supply on the Youth Business Campus and disseminate this benchmark beyond the Youth Business Campus itself.

SDG13: Climate change negatively impacts Jordan, but is also an opportunity to attract international funding for projects that work on climate change mitigation and adaptation. The Youth Business Campus offers opportunities to apply integrated climate change mitigation- and adaptation interventions in the Energy-Construction-Food-Water Nexus. While reducing GHG emissions, this will also help stakeholders to reduce their energy and water consumption (and thereby their water and electricity bills), stabilize energy costs, ensure availability of clean water and create a pool of skilled and internationally deployable young people in green growth sectors. By demonstrating the synergies of a skilled workforce, awareness and business opportunities around the showcased renewable energy and energy efficiency solutions, the YBC can possibly attract significant amounts of carbon financing by reducing CO2 emissions inside and beyond the Youth Business Campus, according to indicators of SDG13.

Governance

SDG16: The Decentralization Law is part of a process to transition more power to local authorities and local stakeholders. This is a transition that requires time and effort to succeed. Changing the status quo could be supported by helping local leadership to take ownership of projects such as the Youth Business Campus. This cannot be done at once as many public bodies are underfunded, and not used to sharing or delegating operational powers to (local) mid-level administrators. That is why GFC aims to strengthen the decentralization efforts in Mafraq by transferring 20-40% of the YBC management tasks to members of the Decentralized Council of Mafraq over time. It would be most beneficial if these members get trained in such a way that they can fully participate in the management team. This would for example mean that they obtain a professional, language and technical skillset that would allow them to attract private sector and investments to their Governorate. In all cases, it will be important that, according to the indicators of SDG16, over 80% of the citizens of the Youth Business Campus trust its governance system. This will increase their trust to live, learn and work in Mafraq Governorate.

Collaboration

SDG17: At the moment, Mafraq Governorate is full of NGOs rolling out development assistance programs. While there are inter-agency meetings and attempts of UNHCR to combine forces of entities operating in Mafraq, most NGOs still function rather mono-sectorial and focus on their own work. The competition over funding and innovative ideas has created a culture in which NGOs do not tend to share. UNHCR stated that this results in duplication of efforts, whereas complementing to each other's strengths would result in more impact in Mafraq [UNHCR, 19-02-2019]. GFC translated the potential for collaboration between multiple public and private stakeholders into a physical and socio-economic environment where such collaboration is stimulated and enabled. To prove that such collaboration benefits Jordan more than business as usual, the performance is measured and monitored. Obviously, cross-pollination at the Youth Business Campus will benefit Mafraq with more impact. The campus stimulates partners to look for opportunities beyond their own traditional boundaries and work together. That is why GFC aims for a minimum of 10 complementary partners and 50 new businesses as SDG17 goals.



6.6.2 Dutch and EU Perspective

Helping to curb forced migration by creating sustainable reception in the region of origin has positive impact on the Netherlands and the European Union:

1. Prevention of societal tensions (related to SDGs 10 and 16)

Societal tensions were clearly visible in the Netherlands when locations for Asylum Seekers Centers (ASC) had to be selected in 2014-2017. Rioting occurred around local council meetings for having this subject on the decision-making agenda during the height of the Syrian crisis. Angry citizens of Oranjedorp, a village where a large ASC would be located, blocked Former State Secretary Klaas Dijkhoff. Both examples of these tensions were on the front pages of many newspapers. Within the European Union, migration and more specifically the migration crisis, has caused rifts between Member States in position towards newcomers, distribution of them and solutions for the challenge at hand.

Though the influx of migrants decreased from 2016 through 2018, GFC expects that the migration challenge is structural and needs long-term solutions. Predicting future migration flows is complex, but general patterns include that migrants always seek new migration routes and that the reception centers in Southern Europe still receive migrants. Fact is that the number of migrants traveling to the EU has grown dramatically over the past 5 decades. As long as push- and pull factors keep growing and get more visible due to globalization and digitalization, this trend is unlikely to reverse. Research indicates that depending on pathways the GHG concentration will take, and hence how the average temperature rise will develop, an *increase* of asylum seekers from almost 100.000 per year to 660.000 per year at the end of the century will apply for asylum in Europe [Missirian and Schlenker 2017]

Impact of demographics and climate-change are two factors that can be predicted with high levels of confidence. The mix of a growing young African and Middle-Eastern population in the next 25 years, the negative impact of climate change, the slow response to the climate change challenge, severe governance issues and decreased trust of Europeans in their own authorities, make many (such as the US director of national Intelligence⁴¹) expect global migration to stay close or grow beyond current record levels in an increasingly unstable political landscape. Former Netherlands Chief of Defense, Tom Middendorp stated in his key-note address at the 2017 Future Force Conference that the migration crisis and climate change are the biggest (security) threats for NATO and the EU, and that climate change is fueling the migration crisis⁴². If around 1 million Syrian refugees create a crisis atmosphere at local- to EU governments, then the inability to reverse current migration trends may create an existential crisis in the EU⁴³.

2. Avoiding reception and integration costs of migrants and investing in regions of origin (related to SDG8)

Receiving migrants is a costly affair, especially when they come in irregular waves and when they have a non-western background. The German Ministry of finance calculated in 2017 that around 0.5% of the German GDP (> €20B/yr) is structurally needed to manage refugees and forced migration. In The Netherlands, the costs for reception of asylum seekers alone was € 753

⁴¹ Worldwide Threat Assessment by the US Intelligence Community, February 2018

⁴² Future Force Conference 9-10 February 2017, The Hague,

⁴³ First Vice-President of the European Commission Frans Timmermans said something similar during the Future Force conference mentioned before. Induced or reinforced by the migration crisis, the populist vote is gaining fast in Europe. He made clear that the unthinkable could happen: the rule of law and the European Union could be destroyed.



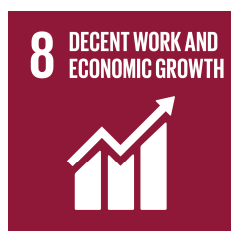
million in 2017. Regular reception costs per asylum seeker are around € 30.000 [Rijksoverheid, 2019]. GFC estimated in 2016 that reception and integration costs of non-western refugees over a 5 year period add up to an amounts between € 150.000 and € 170.000 per person. These estimates turn out to be real: after 3-5 years in the Netherlands, 85% of Syrian refugees still depend on state handouts. GFC plans stem from 2016-2017, when the influx of Syrian refugees was still ongoing. As the armed conflict in Syria is less intense and possibly winding down, the influx of Syrians has stopped. By hosting about 750 Syrians on the YBC, the avoided costs are hypothetical in this case. However, if the YBC can prove to be successful in the 1 to 2 years to come – and this feasibility study shows that this is likely – repeating this concept in areas where migration to Europe is underway or expected, every migrant sustainably prevented from going on the move to Europe will result in countries avoiding these extremely high public reception and integration costs. The *public* part of the costs for building a YBC are much lower. For the proposed pilot project, approximately € 10 million has to come from public sources (see Section 8.3). Per migrant, refugee or host community member on campus this costs between 3 and 5 k€.

A mechanism could be devised for EU donor-countries investing in YBCs. These could be allowed to diminish their quota for receiving asylum seekers at home. After all, these countries made sustainable reception in the region financially possible.

Avoiding forced migration and supporting regions of origin with sustainable reception solutions or (protected) returns are often preferable options from a societal, financial- and a humanitarian point of view, as this reports underlines.

6.6.3 Monitoring Methodology SDGs

One of GFC's fundamental pillars is the long-term commitment to the Youth Business Campus. This means that monitoring and reporting is a core task of GFC's operations. A beneficial starting point is that the Youth Business Campus is a so-called *greenfield* project: there is nothing in place at the moment, which makes it easier to objectively measure progress and impact than in existing environments. Subsequently, a monitoring approach per SDG is briefly described. GFC adds a general disclaimer: it is very likely that growing insight will lead to adapting the monitoring and reporting process over time.



The monitoring of progress on job creation and development of productivity (salaries and profitability of companies) is initially measured by GFC itself on a 6 months basis. This can be done using surveys or by using the digital campus user participation system⁴⁴ that will be developed. The longer-term goal is to transfer monitoring of labor market dynamics to the competent local authorities. The Governorate of Mafraq is already making economic development plans and these include statistics on job numbers. Three thousand new jobs in Mafraq is an ambitious target and GFC expects that such number will only be reached at the end of the monitoring period (after 7 years). For the number of direct jobs, specific estimates per sector have been made in Section 6.4 as is shown in Table 8.

⁴⁴ A digital platform will be developed for all 'citizens' of the YBC. This platform will include all sorts of digital and social services. It will be used to ensure security on campus. While maintaining privacy, user data can easily be used in aggregated form to collect data for the monitoring of key SDG indicators.



Table 8 Number of jobs per sector.

| Sector | No of Jobs minimum | No of Jobs maximum |
|--------------|--------------------|--------------------|
| Hospitality | 50 | 100 |
| Water | 50 | 500 |
| Agri-Food | 30 | 500 |
| Energy | 50 | 200 |
| Construction | 50 | 200 |
| ICT | 50 | 500 |
| TOTAL | 280 | 2000 |

There is a fairly wide range between the lowest number of new direct jobs that can be developed over a 5-7 year period and the highest estimates. The lower end numbers are based on a scenario where the YBC functions well as a local stepping stone, but people still leave for Amman or elsewhere after a while. Even with a lower than desired number of direct jobs created, the YBC can still be considered successful as success is determined by the total score of all indicators. The higher end numbers require the transition to private sector investments to materialize giving the YBC a regional hub function.



Monitoring of progress on women labor participation and other progress on gender equality such as women in leading positions, is initially measured by GreenfieldCities itself on a 6 months basis. This can be done using surveys or by using the campus user participation system. The longer term goal is to transfer monitoring of the improvement of the position of women to the labor market and gender dynamics monitoring processes of the competent local authorities. The governorate of Mafraq is already making economic

development plans and these include statistics on job numbers and gender. Activities on the YBC should see high women participation percentages right from the start of the project, making the 50% participation target achievable.



Monitoring of the *Quality Education* performance indicator will be done together with the education partners that work on the Youth Business Campus. The YBC will only work with education partners that truly educate for work and are willing to commit to that goal. For this purpose, an interface between education partners and the campus user participation system will be created. GFC expects that this performance indicator will be scoring on or above target, right from the start of the project.



Monitoring the *Affordable and Clean Energy* goal on campus is relatively straightforward and performance is by design and contract. Both energy supply and demand flows will be measured and used for billing purposes through the campus user participation system. GFC expects that this performance indicator will score on target right from the start of the project.



Monitoring Green House Gas (GHG) emissions reductions on campus is relatively straightforward and done by comparing the campus CO₂ footprint to a business as usual situation (using relevant emissions factors and business as usual emissions shares of different sectors in the Jordan economy/society). Monitoring GHG reductions outside the campus is more complex. For concrete projects that will be developed by the GFC EDSCO the previous methodology will be used. For more indirect and dissemination based impact GFC needs to work with assumptions that can be independently verified by subject matter experts. GFC intends to set up a working methodology for this together with the GGGI, GCF and the Jordan Ministry of the Environment. GFC expects that the GHG reductions targets on campus will show a clear and steady trajectory towards the target. The level of confidence with respect to the trajectory towards the other climate targets will grow over time. It seems that the targets can be overshoot when the climate for renewable energy and energy efficiency in Jordan continues to improve.



Monitoring the *Clean Water and Sanitation* goal on campus is relatively straightforward and performance is by design. Both water supply and demand flows will be measured for billing and cost management purposes. The campus user participation system will be used for this. GFC expects that this performance indicator will score on target right from the start of the project. The existing Jordan water regulation and pricing framework and the increasing need for more structural reforms in water management in the

country are a potential area of conflict and painful choices that can influence the water efficiency dissemination beyond the boundaries of the YBC.



The campus user participation system will play an important role in monitoring impact on governance improvement. Surveys and informal interaction with public stakeholders will be used as well. GFC intends to report annually on this indicator. It is not easy to predict the actual scoring of this indicator. It is likely that governance improvement and satisfaction of users depends on performance in the areas of economic development (jobs, liveliness and sustainability). Transferring responsibilities to local government

can only be successful when the performance levels at these public entities increases dramatically. This performance increase depends to a large extent on convincing younger, brighter and better people to stay in Mafraq and join the public workforce there.



Monitoring the *Partnerships for the goals* on campus is relatively straightforward and can be done by simply counting partners and companies in the campus user participation system. The information will be available online in real time. The target of 50 new companies in Mafraq is ambitious and is likely only to materialize near the end of the monitoring period. GFC will include front-end marketing activities for the KHBT development area in the on-line presence of the campus and keep track of growing interest in the

KHBT development area.

Monitoring day-to-day performance of YBC operations is closely linked with monitoring impact. Earlier in this section, the campus user participation system is mentioned. The idea is that many of the day-to-day, tactical and strategic decision making is truly data driven. Changing performance in



many sectors of society is not easy and will sometimes require debating choices. Therefore, it is important to have data. GreenfieldCities does not want to develop the campus user participation system from scratch or as a big bang project. Rather GFC sees a development process where initially monitoring requirements are described and diligently monitored in simple databases. By connecting to initiatives like for example DigidealGO⁴⁵, IT development standards can be adopted and transitions to more complex and web-based databases with user-friendly interfaces can be developed step by step. This is also a good way to use talented ICT students and attract IT partners to the project.

6.7 Spatial Planning, Legal Aspects Including Environmental Aspects

This section analyses the spatial, legal and environmental feasibility of the Youth Business Campus by zooming in on the spatial plans of the KHBTDA, Mafraq City and Mafraq Governorate (see Section 6.7.1), the legal procedures tied to the development, construction and operation of the Youth Business Campus (see Section 6.6.2) and the environmental aspects that can potentially influence the YBC. Based on a summary of the findings, GFC draws conclusions about the spatial, legal and environmental feasibility of the Youth Business Campus.

6.7.1 Spatial Aspects

6.7.1.1 The King Hussein Bin Talal Development Area (KHBTDA)

The Youth Business Campus will be located in the KHBTDA, a piece of land that was planned to give Mafraq Governorate economic opportunities through logistics, chemical and other industrial facilities [MDC, 17-07-2018]. The YBC site is surrounded in the West and North by land owned by the military. JIC perceives this as an advantage, because residents cannot complain or build infrastructure next to the Youth Business Campus that would negatively affect the image of the Youth Business Campus [JIC, 05-02-2019]. MDC will deal with the military (see Section 3.2.1). The military land on the Western side of the site is used to house and train military personnel, while the military land on the North is empty. The YBC site is furthermore bordered by Damascus Highway in the East (a main highway connecting Damascus and Amman) and by "Tank Circle" in the South. Tank Circle is a landmark for the city of Mafraq. Based on observations, GFC concludes that this place is an 'entry' and 'exit' point for the City of Mafraq (see also Chapter 5). Public buses and taxi's use the place to load and offload passengers, some farmers exhibit their products and the police uses it as a checkpoint. This place is literally the crossing point to Mafraq City Center, Baghdad Highway, Damascus Highway and the highway to Irbid. The road to Mafraq City Center is one of the main roads of Mafraq City, leading to "down town", the main bus station and the offices of the Governor of Mafraq and Decentralized Council of Mafraq.

More specifically, the site for the Youth Business Campus will be located in the designated *Residential and Commercial* area of the KHBTDA. The rest of the KHBTDA (*Manufacturing and Logistics* area) can be utilized for manufacturing, logistics and solar parks, except for the German-Jordan Center of Excellence for Solar Energy (training purpose). The *Manufacturing and Logistics* area and *Residential and Commercial* area are divided by Damascus Highway. So far, there are no plans to expand the KHBTDA or change its function [MDC, 27-05-2018]. When GFC will attract potential 'clients' for the Youth Business Campus, such as BLOOMS, CD20 or TGS-Uniqa (construction technology partners), they will locate their manufacturing facilities outside the Youth Business Campus site. Instead, these activities will take place within the *Manufacturing and Logistics* area. However, their office-based support, sales, marketing and training activities will be located

⁴⁵ DigidealGo is a Dutch initiative for a more circular, data driven, life cycle oriented built environment. <https://www.digidealgo.nl/>



within the Youth Business Campus (*Residential and Commercial*) and German-Jordan Center of Excellence (CoE). Therefore, GFC will work together with MDC to physically connect these areas of the KHBTDA with each other.

The *Residential and Commercial* area is supposed to serve the investors and workers in the KHBTDA, and the community of Mafraq. This area is spatially planned to be an area for housing, community services (including training) and commercial activities such as businesses [MDC, 27-05-2018]. The overview below shows that the sectorial activities of the Youth Business Campus fit the spatial (zoning) framework of the *Residential and Commercial* area:

- ICT: The activities of the ICT sector are all 'office-based'. This fits within the spatial framework of the *Residential and Commercial* area;
- Hospitality: the Hospitality sector fits within the spatial framework of the *Residential and Commercial* area, because the activities fall under (temporary) residential (hotel, accommodation) and commercial (restaurants and shops) activities;
- Construction and Energy: construction and renewable energy business partners can have their offices within the *Residential and Commercial* area, whereas the manufacturing activities have to take place within the *Manufacturing and Logistics* area. The design, engineering, installation and marketing of energy efficient construction solutions and renewable energy solutions happens on the Youth Business Campus site;
- Water: manufacturing of water products has to take place within the *Manufacturing and Logistics* area, but the design, engineering, installation, demonstration, use, monitoring and marketing of water efficient solutions can be located inside the *Residential and Commercial* area;
- Agri-Food: R&D, training and business activities can take place in the *Residential and Commercial* area, including small-scale agricultural activities. Although the Agri-Food activities of the Youth Business Campus resulted in some discussions about the purpose of the KHBTDA [JIC, 12-12-2018], JIC later confirmed that it does not see any objections with respect to the spatial plans for the pop-up stage including small-scale agriculture activities as long as they would not bother the residents of the Youth Business Campus [JIC, 05-02-2019]. MDC also did not object against the Agri-Food activities in the *Residential and Commercial* area.

6.7.1.2 Utilities in KHBTDA

Looking at the utilities of the KHBTDA itself, the *Residential and Commercial* area is one large plot that can be easily connected to the utilities, such as the electricity grid and water pipelines [MDC, 27-05-2018]. MDC invests in 'basic infrastructure' for projects in the KHBTDA. This means that MDC (through their own engineers and local contractors) connects plots of investors (such as GFC) to the KHBTDA road-, electricity-, sewage- and water supply networks. The *Residential and Commercial* area (YBC site) is empty and not connected to these networks yet. However, the potential of the utility connections is elaborated on below:

- Roads: the YBC site for the pop-up stage is surrounded by public roads. The sketch design for the YBC suggests the building of secondary roads, next to these public roads. This would be the responsibility of MDC;
- Electricity: GFC concludes that the availability of the energy distribution line on the YBC site will ease connection to the grid;
- Sewage- and Water supply: the current absence of a water system in the *Residential and Commercial* area will require MDC to implement a piping system. The KHBTDA has its own water well for water supply, but the well is located in the *Manufacturing and Logistics* and



therefore needs to cross Damascus Highway. MDC confirmed that it is possible that MDC installs another water well in the *Residential and Commercial* area [MDC, 17-07-2018];

- ORANGE conducted a technical feasibility study about the potential to connect the YBC site with its internet connectivity network and confirmed that it is possible to connect it to the YBC site [ORANGE, 26-02-2019].

6.7.1.3 City of Mafraq

Mafraq City is the commercial and administrative center for Mafraq Governorate. The City has 25 residential neighborhoods that cover around 80% of the land. Only around 5% of the land is covered by business functions, mainly in the city center. When looking at the spatial development of Mafraq City, GFC concludes that the main residential expansions take place in Southern and Western direction. The presence of military and governmental land has prevented expansion in Northern and Eastern direction to take place. The Al al-Bayt University is therefore somehow isolated from the city of Mafraq, despite the wish of the university to integrate the university more in the city. Requests of the university to expand in North-Western direction were rejected to date [Al al-Bayt University, 11-04-2018]. GFC will not have to deal with this issue, because the KHBTDA offers sufficient land for the growth stages of the Youth Business Campus. Since the Youth Business Campus is completely located within the KHBTDA, the project does not have to deal with spatial development plans of the municipality of Mafraq. However, the infrastructure of the Youth Business Campus complements several infrastructural improvements made by the Municipality of Mafraq such as the recent improvement of the road from “Tank Circle” to ‘downtown Mafraq’. In addition, the Youth Business Campus will reduce the pressure on the existing residential, education and business infrastructure in Mafraq City. After talks with the Mayor of Mafraq City [Mayor of Mafraq City, 14-06-2018], GFC concludes that there are no planned spatial interventions related to the City of Mafraq that would influence the building of the Youth Business Campus.

6.7.1.4 Mafraq Governorate

Mafraq Governorate borders Syria in the North, Iraq and Saudi Arabia in the East, Irbid- and Ramtha Governorates in the West and Zarqa Governorate in the South. This positions Mafraq Governorate in the center of road- and railway networks that will further develop based on regional (reconstruction) developments. The Governorate of Mafraq is already improving Baghdad Highway to foster expected trade over the road between Jordan, Iraq and Saudi-Arabia. In that sense, Mafraq Governorate has the potential to become the ‘kitchen’ for the reconstruction and sustainable development of Syria, Iraq and the GCC countries [Petra Engineering Co., 02-07-2018; JIC, 05-02-2019]. This can become a large economic driver for the Governorate; the Youth Business Campus could become the basis for companies that aim to work on regional reconstruction and development. Since the Youth Business Campus is completely located within the KHBTDA and the KHBTDA is perceived as an economic driver for the Governorate in the GDP 2019-2021, GFC expects no spatial barriers for implementation from the side of the Governorate. Meetings with the Governor of Mafraq also indicate that the YBC site fits within the spatial development plans of Mafraq Governorate.

6.7.1.5 Wrap-Up Spatial Plans

Summarizing, the spatial plans of the KHBTDA, City of Mafraq and Mafraq Governorate are expected to influence the Youth Business Campus project in the following ways:

- The spatial plans of the KHBTDA fit the sectorial spatial plans of the Youth Business campus, except for the Agri-Food activities. However, JIC and MDC have assured that this will not be an issue for the pop-up stage [JIC, 05-02-2019].



- Due to the emptiness of the *Residential and Commercial* area (YBC site), GFC expects that the installation of 'basic infrastructure' by MDC may take longer than expected.
- There will be no influence from the spatial plans of the City of Mafrq and Mafrq Governorate. Since spatial planning capacity is actually missing on both the levels of the City of Mafrq and Mafrq Governorate [UN-HABITAT, 24-01-2019], the spatial plans of the Youth Business Campus rely mostly on spatial guidelines of the KHBTDA; JIC (competent authority) and MDC are the points of contact for that.

6.7.2 Legal Aspects

In 2019, Heritage.org⁴⁶ writes:

"The Jordanian government is trying to balance its goals of economic modernization, growth and job creation with the need to consolidate public finances and maintain political stability. The Economic Policy Council has launched a range of economic reforms and infrastructure projects, funded by both the government and the private sector, to improve the business environment. There has been little progress on labor market reform, and economic freedom is further constricted by corruption and the judicial system's vulnerability to political influence."

During the feasibility study, GFC learned that the Jordanian regulatory framework is difficult to navigate, even for Jordanian lawyers. This is especially the case for non-standard issues, such as work permits for Syrian refugees, multi-sector companies, foreign ownership and innovative products. To mitigate this, GFC aims to fit within existing frameworks and thrive on legal experience of partners in Jordan that already have operating businesses. For the analysis of the legal feasibility of the Youth Business Campus, some background knowledge about Jordan's legal environment is required.

GFC's Jordanian lawyer explained that within the Jordanian legislative process, draft laws are prepared by various ministries. These draft laws are submitted to the Cabinet and subsequently presented to the Lower House of Parliament for consideration. Once passed by the Lower House of Parliament, draft laws must be approved by the Senate. All laws require royal assent and must be published in the Official Gazette⁴⁷ before they come into force. According to the constitution, the judiciary is independent from other branches of the government. In some cases, it is susceptible to political pressure and interference by the executive. The constitution classifies the judiciary into three categories: Religious courts, Special Courts (e.g. Military Court, Custom Court, Income Tax Court) and Regular Courts. Verdicts by the Jordanian judiciary are based on decisions made by a judge or a panel of judges. General legal provisions are incorporated within the Civil Code, unless the nature of the specific relationship is governed by a separate, more specialized law. Commercial activities are governed by the Commercial Code. Business contracts such as commercial agency- and commission agency contracts are subject to the code's provisions. Financial papers such as checks and promissory notes are also dealt with under the Commercial Code.

6.7.2.1 General

From a legal point of view, GFC is in the process of incorporating in Jordan by setting up a foreign owned (social) enterprise with the statutory place of business in the KHBTDA. The KHBTDA is a special jurisdiction under Jordanian law. The competent authority of the KHBTDA is JIC. JIC is comparable to a municipality in other parts of the country. MDC is the executive organization of

⁴⁶ <https://www.heritage.org/index/country/jordan>

⁴⁷ The Official Gazette is the official publication medium of the Kingdom and is managed by the Prime Ministry: <http://www.pm.gov.jo/newspaper#>



the KHBTDA, comparable to a master developer and/or a municipal public works department (see also Section 3.1.1). On top of their regulatory executive responsibilities, both JIC and MDC have economic development goals for the KHBTDA. Both entities aim to make Jordan more attractive for (foreign) investors [JIC, 12-12-2018]. In reality, processes to achieve this are under development and not fully effective yet.

Incorporation of GFC in Jordan

The regulatory responsibility for setting up a foreign owned (social) enterprise in Jordan rests with MoIT&S. However, in a bid to create a one-stop-shop for foreign investors, MoIT&S has delegated this responsibility partly to JIC. Unfortunately, JIC's civil servants at the one-stop-shop can only process single-sector investments in a limited number of sectors. Accepted sectors are:

1. Manufacturing (vehicles, electrical appliances, wood & paper, metal, leather products & textile, pharmaceuticals, food, rubber & plastics and chemical products);
2. Health sector;
3. Tourism sector;
4. Agriculture sector;
5. Media sector;
6. IT sector.

Since the Youth Business Campus includes multiple sectors, JIC's civil servants at the one-stop-shop were unable to execute the incorporation. Therefore, GFC hired a corporate lawyer to incorporate directly with MoIT&S. Despite fulfilling all legal criteria and having submitted legalized and apostilled translations of required documents, this process is moving ahead slowly. The main obstacle, according to the lawyer, seems to be the perceived complexity of the multi-sector approach. Involved civil servants often have no power to go beyond a strictly defined area of authority. Moreover, escalating to the next level is not part of the operational culture.

GFC and MDC decided to align with JIC's requirements for investments in the KHBTDA and ask the Prime Ministry's office for support. During this process, MDC sent a letter to the Prime Ministry's office explaining the YBC concept (see Annex 1). The Prime Ministry's office consulted 4 ministries with a request for feedback on the project: Ministry of Planning & International Cooperation, Ministry of Investment, Ministry of Interior and Ministry of Foreign Affairs. These ministries have sent no-objection letters to the Prime Ministry's office (see Annex 4, 5, 9 and 13). MDC has therefore received a support letter of the Prime Minister (see Annex 3). This approval will pave the way for a number of follow up steps:

- Remove barriers for incorporation of GFC in Jordan;
- JIC, MDC and GFC can sign a framework agreement whereby MDC is the formal public counterpart for GFC and JIC represents the various ministries that have a subject matter stake in the project;
- GFC and MDC can sign a development- and land lease agreement for the Youth Business Campus development.

Site

GFC – with input of JIC and MDC – draw up a master plan for the Youth Business Campus (see Chapter 5). JIC has to approve the masterplan and activities of GFC in the KHBTDA before GFC can start implementing and will coordinate with key ministries for input and feedback. MDC and JIC also support GFC with the environmental, construction and operational permitting process. After approval of the master plan by JIC (and the line ministries), GFC will sign a development agreement



including a land-lease for 30 years with MDC. Relevant permits for the various parts of the Youth Business Campus will be obtained by GFC and MDC, depending to the specific subject.

Funding

In alignment with this generic process, GFC has developed direct working relationships with various ministries. Good relationships are relevant to reduce permitting delays. The main entity for the approval of international donor funding for the Youth Business Campus is MOPIC (see Section 3.1.1). MOPIC consults and obtains no-objections from other relevant Jordanian ministries prior to asking for the approval from the Cabinet of Ministers. If the Cabinet approves, MOPIC can approve the GFC project. This process normally takes around 1 month [MOPIC, 04-06-2018]. GFC has talked with the Minister, the Secretary General and responsible staff and secured knowledge and support concerning the GFC project.

Labor (general)

MOL is responsible for the provision of work permits, when needed. This ministry has set quota for foreign labor (Syrians included) at the Jordanian labor market. GFC will work through established partners such as GIZ (bilateral agreement with MoL in the TVET sector) and Luminus Education (good relationship with MoL) to gain the needed training and job creation permits and accreditations of training curricula. GFC has discussed feasible shares of Syrian refugee participation in the Youth Business Campus and has observed that the Ministry's stance on this issue shifted over 2018 into 2019 towards less openness to the idea of allowing a substantial number of Syrians into jobs in general. The issue has been analyzed per sector and is reported in the subsequent sections.

Environmental Impact

MoE will be the public entity involved in the execution of an Environmental Impact Assessment for the Youth Business Campus. The involvement of other relevant ministries can be found in Section 3.1.1 and in the subsequent sections.

6.7.2.2 Legal Aspects Hospitality

The content of this Section focuses on the specific legal aspects of (preparing for) operating a hotel with additional hospitality services (restaurants and shops). In addition, this Section discusses the legal aspects of accommodation for Jordanians and Syrians. On top of the normal legal- and permitting procedures for Construction (see Section 6.7.2.6), there are specific legal requirements. The most important requirement is that a specific license for managing and operating touristic restaurants and hotels needs to be obtained from the Ministry of Tourism and Antiquities (MoT&A). A licensing request must be submitted by the corporate entity to MoT&A, alongside the land registration certificate and all duly certified building plans by the relevant authorities. Thereafter, the Minister of Tourism & Antiquities may issue a temporary two-year permit during which time the construction or renovation of the hotel must be completed. The two-year period may be extended upon approval of MoT&A. In addition to the license of MoT&A, the hotel operator, restaurant operators and shopkeepers need to obtain a permit from the Ministry of Health by fulfilling requirements related to public health.

If hotels, restaurants and shops are located in specific areas that are environmentally vulnerable, such as national parks, an environmental impact assessment (EIA) is necessary. As this is not the case, GFC does not expect that extensive EIA work is needed for hospitality services in the KHBTDA.



Tax-wise, the hotel operator and restaurant operator have to manage the following specific tax items that hotel guests are subject to:

- Sales Tax in the amount of 16% applicable on all reservations;
- Service charge in the amount of 10% to be charged on all invoices for services provided by hotels which are classified as 3 stars or above in accordance with the Regulations for Additional Taxes on the Sales and Services of hotels and restaurants no. 2 for the year 1988;
- The Service Charge is collected by the hotel and restaurant itself and thereafter, sales tax shall be remitted to the Income and Sales Tax Department.

The hotel operator and restaurant operator are subject to withholding tax imposed to services at the rate of 10%. It must be deducted by the resident and paid to the Income and Sales Department on behalf of the non-resident within a period not exceeding 30 days from the date of effecting the payment or it becoming due.

With respect the possibilities for Syrian refugees to work in the hospitality building block of the Youth Business Campus, the perspective looks positive. Tourism and Hospitality are open to non-Jordanians, but subject to labor quota of MoL. According to these, the Hospitality sector allows for up to 40% non-Jordanian labor, which could be stretched to 50% due to different quota for hotels (less non-Jordanians allowed) and restaurants and shops (more non-Jordanians allowed) [MOL, 26-09-2018]. Regarding accommodation for Syrian refugees, Syrian nationals are, unlike Jordanians, not allowed to own property. However, Syrians are allowed to rent. Since the business model of the Youth Business Campus includes rental of accommodation for its citizens, GFC does not expect any legal issues in this regard.

6.7.2.3 Legal Aspects Water

The regular water supply- and sewage connections and operational procedures are discussed in Section 6.7.2.6 MDC takes care of the Youth Business Campus connections to the existing water-supply- and sewage system of the KHBTDA. GFC's water plans for the pop-up stage comply to the policies and regulations of MoW&I. However, the aspirations of the Youth Business Campus and the local needs for a more circular water system go beyond the standard procedures and require communications and discussions with MoW&I. Therefore, it is necessary to submit the water plans to MoW&I and discuss how the aspirations can comply to the ministry's policies and regulations. Currently, GFC is discussing this with employees of MoW&I.

Guidance can be found in the following documents:

- Jordan's National Water Strategy (2016-2025): represents the vision and reference of the water sector in Jordan;
- Surface Water Utilization Policy (2016): the Campus aims to maximizing the use of surface water through rainwater harvesting on land and on rooftops;
- Jordan's Decentralized Wastewater Management Policy (2016-2025): the Youth Business Campus will follow the guidelines for wastewater reuse related to greywater and wastewater reuse.

GFC will apply for a regular water supply connection, including black water, grey water and rain water harvesting systems in the buildings and agree with MDC to invest in a small scale waste water treatment unit capable of meeting a range of output quality levels. Procedures on how to apply are described in Section 6.7.2.6. Based on the system specifics, (permits for) various water use and reuse projects can be obtained. It is expected that a light (Category II) Environment Impact Assessment is necessary for such a system, in collaboration with MoE.



Re-using waste-water for drinking water purposes is not allowed in Jordan, even if the recycled water would meet or exceed drinking water quality standards. Such levels of recycling would also meet mental resistance from local residents finding its basis in cultural and religious objections. Water projects are discussed with the Ministry of Health, Ministry of Agriculture, Ministry of Environment and the IFTAA. IFTAA is responsible for religious affairs in Jordan. Since water is perceived as a 'gift from God' by many Jordanians, the stake of the IFTAA in the water sector is quite strong. The objections against the utilization of treated water shaped regulations in such a way that it is not even allowed by law to wash food transporting trucks with treated water. It was even mentioned by employees of MoW&I that a Saudi investor rejected to use sludge water from a nearby WWTP in his cement factory, because concrete in houses is touched by humans and could therefore end up in the human body. In summary, water treatment for consumption purposes is seen as a fairly complicated and secondary priority by the ministry for now, considering the mental resistance against the idea of consuming treated water and the very strict regulations in this regard [MoW&I, 29-07-2018].

GFC has therefore decided to only use treated water for agricultural purposes (under strict regulations as well) and to green the Youth Business Campus during the pop-up stage. In this way, the relevant authorities can become aware of the benefits of the Youth Business Campus in terms of capacity development, job creation, awareness raising and reduced water consumption. This can prepare the ground to gradually work towards the utilization of treated water for drinking purposes during the growth stages of the Youth Business Campus and avoids immediate objections against the Youth Business Campus. A gradual approach also offers more time to work on awareness and the mind-set change that would be required to further innovate in the water sector. MoW&I advised GFC to take MDC on board during discussions with the relevant water authorities. MDC could represent the interest for a water treatment facility of the investors in the KHBTD, which would make the proposition of GFC stronger [MoW&I, 29-07-2018].

Despite the strict regulations in the water sector, MoW&I and the Water Authority of Jordan (WAJ) are aware of the looming water shortages in Northern Jordan. Therefore, step-by-step increasing water re-use is one of the priorities. There are several projects in Jordan where treated wastewater is being used in restricted and carefully monitored irrigation applications. The monitored environment of the Youth Business Campus could therefore be an opportunity for closely monitored experiments in the water sector after the pop-up stage, in close collaboration with MoW&I. The Water building block is not likely to create many jobs for Syrian refugees, because engineering is a closed profession for Syrian nationals and the water sector as a whole is mostly a public sector dominated sector that is not open for non-Jordanians. However, technical jobs of the WADSCO are not restricted for Syrians and could therefore be an opportunity to create employment opportunities for Syrian refugees. MoL can eventually provide flexible or customized work permits that would allow Syrians to work as freelancers [MOL, 26-09-2018].

6.7.2.4 Legal Aspects Agri-Food

Agriculture in Jordan is regulated by Law No. 13 of 2015⁴⁸ (Agriculture Law) aiming at reorganizing the agriculture sector Jordan. The Ministry of Agriculture regulates, organizes and develops the agriculture sector to:

- Increase the production of food and foodstuffs; use of natural and agricultural resources without damaging the environment;
- Create of suitable conditions for investing in agricultural sectors and rural development;

⁴⁸ http://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=102861



- Increase the production capacity;
- Increase farmer's incomes and improve their lifestyle;
- Protect animals;
- Improve the use of irrigation waters;
- Face animal and plant diseases and epidemics;
- Carry out scientific research and desertification control;
- Encourage agricultural cooperative work and agricultural cooperative associations.

Public health measures and sanitary plant measures are discussed in articles 5-8. The Ministry of Agriculture shall:

- Issue importation and exportation licenses for agricultural products;
- In cooperation with other authorities, contribute in defining the National Standardization and Metrology standards for agricultural products;
- Issue the directives required to organize plant production in a manner that secures efficiency of production and conservation of the agricultural resources and the environment.

The Law establishes that licenses are required for:

- Establishing olive presses;
- Producing, propagating, trading in seeds, fertilizers, plant growth regulators, the veterinary medicines, bio-veterinary preparations or animal growth regulators;
- Producing or preparing pesticides;
- Investing private forests through pruning or replacement of forest trees with fruit trees;
- Grazing in the governmental forests;
- Processing, investing or transport forest materials;
- Cutting forest trees or bushes or wild plants;
- Processing coal from governmental or private forests;
- Establishing farms or hatcheries;
- Producing or preparing materials of raw feed of animal origin, manufactured feed or feed additives;
- Operating in slaughterhouses of poultry and livestock;
- Fishing for commercial purposes; hunting wild birds or wild animals.

The Law also regulates and inspects fishing, wildlife protection, hunting season, protected species and the management of waste materials (i.e. plastic or containers of insecticide or seeds that have been used for agricultural purposes).

GFC expects that Law 13 will only have limited impact on the planned Agri-Food activities on the Youth Business Campus. As said in Section 6.7.2.1, JIC supports agricultural activities in Development Zones, especially when it comes to food processing. The only discussion point made by JIC was about the location of Agri-Food activities in the *Residential and Commercial* area of the KHBTDA, but JIC assured that it would not be a legal barrier during the pop-up stage (see Section 6.6.1). The Agri-Food activities will require mostly permits from other sectorial authorities rather than from Law 13. Examples are that the use of small fields for crop- and technology testing will be subject to zoning approval and a permit from MoW&I and the Water Authority Jordan (WAJ) for the use of treated water. The planned post harvesting activities (see Section 6.3.3) will be subject to normal business permitting and business incorporation regulations. The R&D laboratory for quality certification of crops and products is likely to be subject to national and international accreditation regulations and procedures. There are no legal barriers expected for these activities.



Regarding the involvement of Syrian nationals, the Agri-Food sector is formally open to non-Jordanians. However the vast majority of non-Jordanians working in the sector does so on an informal basis. Therefore, the Agri-Food activities on the YBC also constitute an opportunity to improve both the economic as well as the civil status of Syrian refugees.

6.7.2.5 Legal Aspects Energy

Implementing renewable energy systems on the Youth Business Campus is subject to the Renewable Energy and Energy Conservation Law No. 13 of 2012 and the Amended Law on Energy Law Renewable Energy and Energy Conservation No. 33 of 2014 (REEEL). REEEL also provides the regulatory framework for small-scale renewable energy projects (< 5 MW).

The regulations are favorable for on-site production and consumption of renewable energy. According to REEEL, power distribution companies must offer net metering to their customers for renewable energy systems below 5 MW. Systems under 1 MW are exempted from the need of an Independent Power Producer (IPP) permit by EMRC. Since the energy system for the Youth Business Campus is under 1 MW, GFC is exempted from the IPP permit by EMRC.

REEEL sets out the legal framework for a net metering scheme through Article 10a: "Any person, including small Renewable Energy Facilities and homes that have Renewable Energy Systems for the generation of electrical power, may sell the generated electrical power for the Bulk Supply Licensees". The bulk supply licensee in Jordan is the government's NEPCO and the three retail supply licensees are privately owned by JEPCO, EDCO and IDECO.

The net metering scheme rules include the following:

- The electricity production of the solar system making use of the scheme cannot exceed the consumer's average monthly consumption;
- According to the legal framework for net metering, the selling price of power cannot be lower than the purchase tariff of the consumer. The producer of renewable energy is therefore able to sell the excess electricity at the tariff price of its purchase;
- If the consumer draws more electricity than they export, the incurred net value is settled at the end of the month. If the consumer exports more electricity than they import from the grid, the Distributor adds the excess energy to the account of the subsequent month;
- Net metering with wheeling is also possible where the produce of renewable energy may be located off-site.

The electricity can be fed into the distribution- or the transmission grid and there is no cap on system size for wheeling projects. REEEL has been very successful in attracting investments in renewable energy projects. This resulted in a saturation of the national electricity transmission network in several parts of the country. MoE&MR felt forced to postpone implementation of the third tender round for large scale renewable energy projects in September 2018. MoE&MR is also considering to increase the levy on wheeling. GFC expects that over the next years, regulatory changes will lead to a stronger position for distributed renewable energy projects (close to- and aligned with the local demand).

For the pop-up stage of the Youth Business Campus, GFC needs to apply for a connection to the low voltage grid through MDC. This application is part of the construction planning process (see Section 6.7.2.6). GFC does not expect that the planned roof top solar systems will be subject to specific environmental impact assessment requirements. In order to develop business opportunities in renewable energy (despite the saturated grid around the YBC site), GFC aims to implement a smart-grid and energy storage capacity at the Youth Business Campus. Since both



technologies are not widely applied in Jordan, GFC needs to collaborate with MoE&MR and EDAMA for a smooth permitting process.

GFC expects that the development of wind energy on the site will require studies to overcome potential regulatory barriers. The Law of Environmental Protection, No. 52 of 2006, came into effect in Oct. 16, 2006 and includes the requirement to protect the environment *and all of its elements*. As per the law, MoE is responsible for setting Jordan’s environmental protection policy, monitoring activities, coordinating national efforts for environmental protection, and preparing environmental contingency plans. The most likely process for applying for an environmental permit for one or more wind turbines would be:

1. GFC completes a Project Information Form (PIF) for the intended project and submits it to MoE for screening;
2. An Inter-Ministerial Central Licensing Committee reviews the PIF. This Committee decides, based onsite surveys, if the project is classified as:
 - a. A Category I project; for which a full EIA/EMP report is required
 - b. A Category II project, for which an initial EIA/EMP is required
 - c. Category III for which no environment analysis is required
3. The decision by the Inter-Ministerial Central Licensing Committee is publicly displayed for 2 weeks.

With respect to wind energy, GFC expects that, though the tip height of the wind turbine is limited, the proximity of the King Hussein airbase is a potential obstacle. GFC’s general observation is that neither the Mafrq Governorate, nor the JIC or the Mafrq municipality have a wind energy ordinance in place that could facilitate and regulate the development of wind energy in the Governorate. GFC can help to develop such local regulatory frameworks that would help to attract wind energy investments to the Governorate.

Regarding the involvement of Syrians, the energy sector is a closed sector for non-Jordanians, but GFC may apply for exemptions or flexible work permits. Another way to include Syrian refugees is by labeling their positions in more general terms away from engineering.

6.7.2.6 Legal Aspects Construction

1. This section provides an overview of the steps for obtaining the necessary licenses and permits for building the Youth Business Campus in the KHBTDA. It includes data on submitting all required notifications, requesting and receiving all necessary inspections, and obtaining utility connections. This information is based on interviews with JIC and the World Bank “Doing Business” program⁴⁹.

JIC is the legally competent authority in the KHBTDA. The legal procedures towards constructing the buildings of the Youth Business Campus follow 21 legal steps as is shown in Table 9:

Table 9 Legal procedure and steps to take for constructing buildings.

| Number | Name of legal step | Description legal step |
|---|--------------------|---|
| Phase 1. Before the construction of the Youth Business Campus | | |
| 1 | Vocational license | Obtain a vocational license from JIC. |
| 2 | Topographic survey | GFC must obtain a topographic survey of the land plot before submitting the formal design process. The surveyor |

⁴⁹ <http://www.doingbusiness.org/content/dam/doingBusiness/country/j/jordan/JOR.pdf>



| <i>Number</i> | <i>Name of legal step</i> | <i>Description legal step</i> |
|---------------|------------------------------------|--|
| | | is a private company that must be licensed by the Department of Land and Surveys. |
| 3 | Soil examination | GFC must hire a licensed Engineering Office for a soil examination. before construction works can begin. |
| 4 | Approval of YBC designs by JEA | To obtain the approval for the project design drawings, GFC submits the blueprints to the Jordan Engineering Association (JEA). The contract with the architect should be attached. The application and attachments are referred to the appropriate departments within JEA for a review. After maximum 7 days, the blueprints are approved or declined by JEA. This is subject to the payment of a security deposit for the appointment of an engineer of JEA to supervise the execution of the project. |
| 5 | Apply for building permit | All design drawings must be submitted to JIC in order to obtain a building permit. Drawings should be compatible with the regulations of JIC. Architectural designs, civil engineering designs, and mechanical designs, including heating, conditioning, and water pipes, must also be submitted. The plans are verified and sent to the local building committee of JIC for a review. After the approval is issued, the plan is sent to the inspectors of JIC for examination. |
| 6 | Fire safety clearance | GFC must obtain a white book ⁵⁰ from the JIC and get it stamped by the Civil Defense Directorate. GFC must submit the project drawings and the land deed to the Civil Defense Directorate, which stamps the white book if there are no objections. |
| 7 | Water authorities clearance | GFC must obtain a white book from JIC and get it stamped by the Water Authority of Jordan (WAJ). GFC must submit the project drawings and the land deed to WAJ, which stamps the white book if there are no objections. |
| 8 | Electricity authorities clearance | GFC must obtain a white book from JIC and get it stamped by the Jordanian Electric Power Co., Ltd. (JEPCO). GFC must submit the project drawings and the land deed to JEPCO, which stamps the white book if there are no objections. After that GFC can apply for an electricity connection with the local utility (IDECO). |
| 9 | Department of Antiquates clearance | GFC must obtain a white book from JIC and get it stamped by the Department of Antiquates. GFC must submit the project drawings and the land deed to the Department of Antiquates, which stamps the white book if there are no objections. |
| 10 | Jordan Telecom Group clearance | GFC must obtain a white book from JIC and get it stamped by the Jordan Telecom Group. GFC must submit the project drawings and the land deed to the Jordan Telecom Group, which stamps the white book if there are no objections. |

⁵⁰ A "white book" is a review of specific design aspects by the local competent authorities (JIC) including a statement of no-objection with respect to that part of the design being implemented.



| <i>Number</i> | <i>Name of legal step</i> | <i>Description legal step</i> |
|---|--|--|
| 11 | Compliance to JIC regulations | GFC receives an inspection by JIC to check if compliance is full and complete. |
| 12 | Obtain building permit | GFC must apply for the building permit at JIC. |
| Phase 2: During the construction of the Youth Business Campus | | |
| 13 | Construction site inspection | GFC must hire an authorized engineering office for inspections of the construction site. GFC has to hire a Jordanian engineering office that is in charge of supervising the project. JIC does not send inspectors to examine the construction site, but inspectors are sent unannounced to the site to ensure that there are no violations of the building permit. |
| Phase 3: Right after the construction of the Youth Business Campus | | |
| 14 | Apply for occupancy permit | After completing the construction activities, GFC must submit an application to JIC to obtain an occupancy permit. A representative of JIC conducts an inspection to verify surrounding areas and the parking situation. Upon receiving the request for an occupancy permit, JIC forwards a notification to the Civil Defense Directorate to inspect and give their approval. |
| 15 | Inspection of completed works by Civil Defense Directorate | The owner, engineering office, or contractor (as agreed) notifies the Civil Defense Directorate that the work has been completed, and requests an examination and finalization of all the necessary approvals. The Civil Defense Directorate inspects the premises and grants an approval, which is required for obtaining an occupancy permit. |
| 16 | Approval Civil Defense Directorate | Receive final approval from Civil Defense Directorate. |
| 17 | Inspection by JIC | GFC receives an inspection of completed construction works by JIC. |
| 18 | Obtain occupancy permit | Obtain occupancy permit from JIC. |
| 19 | Apply for water, connection | An application form is submitted to Jordan Water Authority (WAJ). The following documents are attached to the application: <ul style="list-style-type: none"> a. Registration certificate of the company and a certificate naming the persons authorized to sign on behalf of the company; b. Planning location map (issued by JIC and MDC); c. Property deed; d. Occupancy permit. The exact address of the premises is given to WAJ, along with the number of water meter situated in the same street/area (or a copy of a water bill) in order to enable them to identify the closest connection point. WAJ conducts an inspection within 14 days, charges the fees and makes the water connection. |
| 20 | Water and Sewerage inspection | GFC receives a water and sewerage inspection by the Water Authority of Jordan (WAJ). |



| Number | Name of legal step | Description legal step |
|--------|--------------------------------------|--|
| 21 | Obtain water and sewerage connection | The cost of water and sewerage connections depends on the contractor and does not include the connections and pipes inside the buildings. The costs include a stamp duty of JOD 10.00, a JOD 275.00 connection fee (for all buildings larger than 100 square meters), and the price of the water meter. The connection is obtained at WAJ. |

Having MDC and the JIC as project partners will be beneficial for going through the legal steps. The 21 described steps focus on regulatory aspects of the construction works. Other important regulatory aspects include:

- Training construction workers, architects and engineers to get familiar with the energy efficient construction method(s) that GFC aims to apply for the construction of the Youth Business Campus (see Section 6.3.5);
- Teaming up with a contractor who is willing to invest in training his staff with respect to the above;
- Developing a partnership with JIC and MDC to navigate the unknown routes towards innovative built environment solutions that are not yet part of the standard regulatory frameworks;
- Securing that Syrian refugees are also part of the construction team. Construction is a sector that is open for Syrian nationals, except for engineering jobs. This may lead to some positions in the construction team as GFC also aims to employ Syrians in the construction manufacturing facilities of the construction technology partners, train them on-the-job during the construction stage of the Youth Business Campus and include them in the EDSCO (see Sections 6.4.4 and 6.4.5).

6.7.2.7 Legal Aspects ICT

Most legal aspects in the ICT building block are covered by the general legal requirements for constructing the necessary infrastructure (see Section 6.7.2.6) and setting up a business (see Section 6.7.2.1), because both Education and Business partners in this sector have to start doing business at the Youth Business Campus. There are a few specific regulatory issues relating to import and labor that have to be taken into account. First, sector specialists told GFC that IT companies with import needs such as tooling, software and devices frequently encounter customs delays to clear their shipments. Second, labor authorities make it almost impossible to obtain work permits for professionals from abroad, asking the companies to look for human resources in the large domestic pool of unemployed IT graduates. This also made the ICT sector a closed sector for Syrians, but not if they start a venture together with a Jordanian or when MoL decides to grant an exemption. RBK.org places Syrians in jobs by labeling their positions as 'freelancers' or as 'workers'.

6.7.3 Wrap-up Legal Aspects & Spatial Planning

Based on the analysis of spatial and legal aspects for the Youth Business Campus, it can be concluded that there are no spatial barriers for implementation and that potential legal barriers for implementation have to be further discussed with the relevant authorities. GFC does not expect significant legal barriers for the pop-up stage, because GFC will comply with policies and regulations of the Jordanian government. Legal barriers are completely absent for the Hospitality sector, but GFC would need to engage with relevant authorities to avoid any legal barriers for the other building blocks:

- *Water:* Although GFC abides by regulations of MoW&I and WAJ for the Water sector during the pop-up stage, a good collaboration with MoW&I, WAJ and other relevant water authorities is



needed, supported by EDAMA, to ensure a smooth legal process for the planned innovations in the growth stages of the Youth Business Campus. Showing the benefits of the pop-up stage to the relevant water authorities can help to smoothen the legal procedures during the growth stages;

- *Agri-Food*: Although JIC did not object to the activities of the Agri-Food sector during the pop-up stage, a good collaboration with JIC is needed to ensure that scaling of the Agri-Food sector is possible. GFC does not expect a legal barrier, but should keep a scenario in mind in which some Agri-Food activities have to move to the Manufacturing and Logistics area of the KHBTD. This does not apply to the R&D, small-scale field demonstration and small-scale food processing activities. In this case, it would be important to show the potential of the Agri-Food building sector to JIC to take away any legal barriers for growth aspirations;
- *Energy*: For the implementation of innovative technologies in the Energy sector during the pop-up stage of the Youth Business Campus, a good collaboration with MoE&MR and other relevant energy authorities is needed, supported by EDAMA, to ensure that the legal steps for the implementation of the Energy sector do not become a legal barrier. There are no regulatory frameworks for the planned innovative renewable energy solutions, and GFC expects that MoE&MR will support GFC in its aim to implement these (based on positive interactions with MoE&MR and support from JREEEF, see also Section 3.1.1);
- *ICT*: For the ICT sector, GFC only expects legal barriers for the involvement of Syrian refugees. This could be the same for the Energy and Water sector, but not for the Hospitality, Construction and Agri-Food sector. In this sense, it is important to maintain a good relationship with MoL and use the lobbying capacity of MoICT, Int@j and EDAMA. It is not expected that GFC cannot reach its goals for the inclusion of Syrian refugees, but the current political situation (see Section 6.9.1) can have a sudden impact on current policies and regulations regarding employment quota for Syrian nationals.
- *Construction*: the construction activities for the Youth Business Campus will not face legal barriers, but the only expected barrier, connected to the process of obtaining permits and approvals, can be time delays. Good personal relationships with MDC and JIC will reduce permitting times for the construction of the Youth Business Campus infrastructure⁵¹. Despite this, GFC should keep a scenario in mind in which the permitting for the Construction stage could take more time than expected.

GFC does not expect any barriers and delays from MOPIC's international donor funding approval or the land lease- and development agreement with MDC and JIC. These processes are clear and good relationships are in place. To ensure a smooth permitting process, GFC recommends, based on discussions with MOPIC, to establish a technical committee (see Sections 3.1.1 and 6.10) to facilitate the legal steps. This committee should consist of representatives of key authorities with an influence on the legal steps. These entities include at least MDC, JIC, MOPIC, and could be expanded with representatives of MoE&MR, MoW&I and MoL in case GFC faces legal barriers.

⁵¹ GFC will use "Mr. Fix It" (see Section 6.7.3 8.1 for more information) to follow-up on the legal steps.



6.8 Potential Dutch / EU Export

The Jordanian-Dutch trade is small in absolute terms. Jordan ranked 77th in 2017 with €483M in exports from the Netherlands, but this figure seems inflated with incidental exports (aid?). The exports from the Netherlands between 2011 and 2016 ranged from €240M to €300M per year (see Table 10). Imports from Jordan in 2017 were €52M.

From a Dutch export potential point of view, the opportunity becomes much more interesting when viewing things from a regional perspective. In 2017, Dutch exports to region with a 2000 km radius around Amman were just over €19B. That is comparable to the Dutch export to the USA, the 7 largest trade partner of the Netherlands. A significant part of that export finds its way within 1000 kilometers of Amman, see Figure 87.

Table 10 Value of export to and import from Jordan.

| Landen | Jordanië | | | | | | |
|---|---------------|---------|---------|---------|---------|---------|---------|
| Onderwerpen | Uitvoerwaarde | | | | | | |
| Perioden | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| SITC | 1 000 euro | | | | | | |
| Totaal goederen | 246 873 | 264 676 | 266 841 | 324 473 | 338 943 | 289 281 | 483 857 |
| 0 Voeding en levende dieren | 44 275 | 53 739 | 59 916 | 61 150 | 73 936 | 67 537 | 76 084 |
| 1 Dranken en tabak | 4 971 | 4 472 | 6 802 | 6 897 | 6 082 | 8 803 | 14 399 |
| 2 Grondstoffen, niet eetbaar, behalv... | 10 184 | 13 500 | 13 047 | 13 864 | 15 162 | 13 264 | 14 515 |
| 3 Minerale brandstoffen, smeermiddel... | 11 382 | 23 534 | 19 433 | 38 282 | 5 695 | 16 275 | 52 380 |
| 4 Dierlijke en plantaardige oliën en... | 86 | 18 | 96 | 170 | 117 | 15 | 45 |
| 5 Chemische producten | 70 165 | 59 091 | 69 335 | 56 502 | 61 813 | 47 248 | 73 857 |
| 6 Fabrikaten, hoofdzakelijk gerang... | 9 274 | 12 773 | 13 673 | 13 534 | 21 001 | 16 599 | 17 762 |
| 7 Machines en vervoermaterieel | 67 290 | 69 159 | 56 254 | 88 634 | 105 526 | 79 907 | 192 388 |
| 8 Diverse gefabriceerde goederen | 29 170 | 28 163 | 27 943 | 44 949 | 47 665 | 38 362 | 41 825 |
| 9 Niet afzonderlijk genoemde goederen | 75 | 228 | 342 | 491 | 1 945 | 1 270 | 602 |

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| Landen | Jordanië | | | | | | |
|---|--------------|--------|--------|--------|--------|--------|--------|
| Onderwerpen | Invoerwaarde | | | | | | |
| Perioden | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| SITC | 1 000 euro | | | | | | |
| Totaal goederen | 44 645 | 39 431 | 22 885 | 33 110 | 47 402 | 45 457 | 51 725 |
| 0 Voeding en levende dieren | 522 | 1 399 | 1 345 | 2 760 | 2 299 | 4 957 | 3 211 |
| 1 Dranken en tabak | 2 | 2 | 35 | 13 | 8 | 57 | 11 |
| 2 Grondstoffen, niet eetbaar, behalv... | 27 123 | 27 710 | 5 413 | 364 | 834 | 1 001 | 1 007 |
| 3 Minerale brandstoffen, smeermiddel... | 0 | 0 | 0 | 1 | 1 | 0 | 4 |
| 4 Dierlijke en plantaardige oliën en... | 152 | . | 298 | 202 | 656 | 1 101 | 1 377 |
| 5 Chemische producten | 697 | . | 2 586 | 7 973 | 14 724 | 4 089 | 4 433 |
| 6 Fabrikaten, hoofdzakelijk gerang... | 7 040 | 3 145 | 7 615 | 10 359 | 8 794 | 6 919 | 7 688 |
| 7 Machines en vervoermaterieel | 6 969 | 1 259 | 1 188 | 2 749 | 3 455 | 3 204 | 3 477 |
| 8 Diverse gefabriceerde goederen | 2 141 | 3 054 | 4 397 | 8 686 | 16 624 | 24 117 | 30 504 |
| 9 Niet afzonderlijk genoemde goederen | 0 | 11 | 8 | 3 | 7 | 11 | 14 |

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Figure 87 Large export markets within 1000 km of Amman.

Even while Jordan is not yet the most competitive economy in the world (see Section 6.1), Jordan is historically stable and focused on- and experienced in dealing with the US and Europe as well as with its neighboring countries, including Israel, Syria and Iran.

Over the next couple of years, the Netherlands has committed to investing significant amounts of development capital in Jordan and neighboring countries. GFC expects that this investment will be a mix of humanitarian, development and business efforts. This investment should also be able

to stimulate a balanced growth of the mutual trade relationships. However, this study is not an effort to quantify the impact of the YBC on the Dutch export potential. The YBC includes six focus sectors. These sectors are chosen with local needs and capabilities in mind first and foremost. Despite this, in each of these sectors, there is a potential for growing international business.



The strategy of GreenfieldCities is to realize and maintain a combination of assets and services that helps to build local confidence, improve professional skills and attract further investment. The presence of GreenfieldCities and the activities on the Youth Business Campus can help overcome part of the shortcomings of the current Jordan competitiveness and ease of doing business. As such, GFC can provide a soft and reliable landing spot for Dutch and other EU companies. Moreover, GFC can contribute to trade and business initiatives origination both in Jordan as well as in the Netherlands. It is important to note that this will only work when involved businesses have a well-developed vision and strategy with respect to growing regional business, including financial commitments. Such private sector commitments can – in the next couple of years – be complemented with development money that the Dutch government has pledged to the region.

GreenfieldCities is already developing practical examples and partnerships to test the private sector business development and export potential. Table 11 presents an overview of examples of these partnerships and Dutch (EU) organizations that could benefit from the YBC in terms of additional turnover and/or investments.

Table 11 Overview partnerships and Dutch (EU) organizations that could benefit financially from the YBC.

| <i>Partnerships / Organizations</i> | <i>Order of magnitude additional turnover / investment [€]</i> |
|---|--|
| Semilla (water technology): drafted a joint proposal | Hundreds of thousands |
| Uniqa (affordable energy efficient buildings): will consider setting up a factory for producing energy efficient panels for the second and third stage of YBC as launching customer. | Millions |
| DigidealGO members: a Dutch initiative to create digital standards for a data driven built environment. The initiative both has a domestic and export focus. DigidealGO and GreenfieldCities both build on a holistic, data driven and life cycle approach towards the built environment and the data platforms that are needed for the YBC can be based on DigidealGo platform standards. Using and rolling out these standards internationally –and truly sharing the data- will give Dutch infrastructure companies a significant advantage for future campus initiatives and other international regional rebuilding projects. | Millions |
| WUR: for the building blocks Agriculture and Water | Millions |
| HollandDoor | Hundreds of thousands |
| TGS Business Consulting: a firm specialized in hydroponics and aquaponics. MENA region is an interesting market for improving agri water efficiency | Hundreds of thousands |
| Deerns: can do engineering of parts of the YBC | Hundreds of thousands |
| Alliander: smart metering project with YBC as test bed and launching customer; regional roll out for IDECO | Millions |
| Lagerwey / Enercon: wind resources in the region are good enough to build wind farms. The EDSCO that will be set up will develop these farms | Tens of Millions |
| GreenfieldCities | Millions |
| VANAD Group | Millions |
| Orange Telecom | Millions |



| <i>Partnerships / Organizations</i> | <i>Order of magnitude additional turnover / investment [€]</i> |
|-------------------------------------|--|
| Priva | Hundreds of thousands |
| Groasis | Hundreds of thousands |
| MVO Nederland Members | Hundreds of thousands |

The table illustrates the potential to increase the size and quality of Dutch business interests in Jordan.

6.9 Political Assessment

As mentioned in Section 3.2.1: GFC cannot create safe, sustainable cities in home regions of migrants to help reduce migration into the EU, while at the same time economically strengthening the host countries, without financial and political public support. When the Netherlands, or any other EU member state, will invest in home regions (i.c. Jordan), this requires agreements between the donor countries and host countries to see if the donation is serving the right purpose, safety is guaranteed and other EU values can be upheld. In the following sections, the political support is assessed in Jordan and in the Netherlands.

6.9.1 Political Assessment Jordan

GFC researched the national and local political reality and the state of relevant public sector actors. This research was conducted through desk research, interviews, partnerships building and public sector representation in the GFC Advisory Board. In addition, GFC has consulted HE Majd Shweikeh, Minister of State for Public Sector Development, who is responsible for public sector reforms and has key insight in Jordan's political landscape. This section describes the political landscape, its potential effects on the project and how to manage potential negative effects.

6.9.1.1 Jordan's Political Landscape

In order to understand more about today's political landscape, one needs to start with Jordan's history. The Hashemite Kingdom of Jordan is a relatively young country in the sense that it functions as an independent state since 1946 [Patai, 1984]. Jordan and Palestine were united until the British mandate separated them in 1921. Jordan was called "Trans-Jordan" under the rule of *Emir Abdullah* while being supervised by the British [Massad, 2001]. After the 25th of May 1946, Jordan's independence date, the country faced several refugee influxes. The first and second Arab-Israeli wars resulted in more than two million registered Palestinian refugees⁵², leaving the unregistered Palestinians out of scope. Next to Palestinians, Jordan hosts Iraqi refugees who came to Jordan after the 1991 Gulf War and after the Anglo-American military intervention in 2003 [Chatelard, 2010]. The most recent large influx of refugees was caused by the Syrian civil war that started after the Syrian Arab Spring in Dara'a in March 2011. Over one million Syrian refugees found refuge in stable Jordan. Although Jordan receives large amounts of money from the international community for hosting refugees and has always received remittances from Palestinian-Jordanians who worked abroad, mainly in the Gulf States [Chatelard, 2010], the host community's infrastructure, resources, jobs and social services are overstretched. This leads to tensions between members of the host community and the refugee community. Hence, the Jordanian government earns revenues from hosting refugees, and at the same time has to keep the country stable with

⁵² <https://www.unrwa.org/where-we-work/jordan>



the popular sentiment going against refugee integration, its lack of resources and the unresolved Palestinian refugee issue.

To an extent, tensions exist between Syrians and Jordanians, but also between tribal Jordanians (East-Bankers) and Jordanians with a Palestinian background (West-Bankers). The exact percentage of Palestinians in Jordan is unknown. Many citizens state that the Palestinians form the majority of the population. However, the Jordanian government does not confirm that⁵³. Due to limited opportunities for Palestinians in the public sector, it can be stated that East-bankers (tribal Jordanians) have built up the public sector, whereas West-Bankers (Palestinians) have developed the private sector. Due to the tribal Jordanian domination in the public sector, many citizens believe that the Jordanian government is somewhat reluctant to stimulate private sector development in an attempt to keep the tribal Jordanians in power of the country. Driven by historic events, public sector jobs and public benefits are much less accessible for Palestinian Jordanians than for tribal Jordanians. For example, of the current ministers, less than 30% has a Palestinian background. Another example is that Palestinian students often study without a scholarship at Jordanian universities, even when their high school grades are higher than some tribal Jordanian students granted with a scholarship. This results in frustration among the Palestinian population and tensions between Jordanians and Palestinians. GFC believes that increasing income of young people is a good option to prepare for gradual political reforms in terms of granting more power sharing with Palestinians in order to mitigate negative effects of this issue in the long-term.

Hence, the public sector, and therefore the political power, is in hands of the tribal Jordanians. This automatically means that the political power is in hands of the Jordanian tribes. This power is exerted through the Jordanian intelligence and Jordanian Parliament to put for example high-level governmental employees (ministers or SGs) and even the Prime Ministry under pressure to take certain consensus building decisions to keep all the tribes on board. Such decisions can range from the appointment of a certain tribe member for a senior job position to the allocation of projects and capital to certain geographical areas of Jordan. The tribal sense is historically strong; many tribal members do not look beyond the tribe and would not elect a Parliament member of another tribe, even if this person would for example be a better fit to fulfil the position. Once members of Parliament are elected, they are expected to produce tangible benefits for their tribal voters. This is why many tribal Jordanians seek management and leadership positions in the Governorate that could put them positively in the spotlight in front of their tribal community. This is considered to be a stepping stone to a position in the Parliament. The tribal relations are so strong that high-level governmental employees are biased to work in favor of policies, regulations and projects that would benefit their tribal members even at the cost of the common interest. This created a system in which many decision makers in the public sector do not tend to collaborate. Instead, they try to build a road that would benefit their own tribe only. This is partly why governmental policies and regulations change all the time, a real frustration for the private sector.

In relation to the above, the influence of the Jordanian tribes on Jordan's political system is so large that it also dominates the appointments of the decision-makers in the public sector. Although there are many qualified Jordanians to serve as ministers, GFC was informed that the appointment of ministers by the King is partially driven by the need for an equitable division of ministers over the Jordanian tribes. This sometimes leads to odd matches of people and cabinet positions. The political power of the King is large, but several attempts of the King to implement political reforms

⁵³ <http://www.meforum.org/3121/jordan-is-palestinian?v=1362363401000%253F?v=1362363401000%3F>



in Jordan were hampered by objections of major Jordanian tribes in fear of losing their preferential positions in the system. The Jordanian intelligence community monitors such debates and interferes when proposed decisions can lead to instability in the country. The Royal Court is a parallel governance system of the King that 'monitors' what the ministers do, all with the ultimate goal to maintain the current power system. This is why GFC witnessed that many Jordanians in Mafraq believe that the Jordanian intelligence rules Jordan. This makes the Ministry of Interior, responsible for public security, a quite powerful ministry in Jordan's ministerial landscape. The above analysis shows that the political power is divided over a few entities that keep each other in a certain balance to maintain "stability". The political elite uses this word to justify decisions that work in favor of the current power balance in Jordan. Hence, this elite consists of the King (with Royal Court as parallel governmental system), the Jordanian tribal leaders, the Jordanian intelligence, the Jordanian parliament, the Prime Ministry and the ministers. Below that level, people have very limited political influence. Within ministries for example, most employees have absolutely no decision power: the power to influence and decide almost only lies in the hands of the SGs and the ministers.

The Jordanian Parliament, the Prime ministry and all the Jordanian ministries are located in Amman. Since most of the political elite, including Ministers and SGs, live in Amman, this Governorate has always been a priority for development. Some citizens even say: "Jordan is Amman". This has resulted in a neglect and particular framing of the more rural Governorates such as Mafraq Governorate. Of the current cabinet ministers, only one is from Mafraq. On Jordanian television, Mafraq Governorate is still depicted as an area where people live in tents and use camels to move around. This creates all kinds of prejudices about Mafraq that "justify" why the money and attention should go to Amman. A combination of this enduring neglect, the decline of the economic situation, severe budget constraints and the huge pressure of the omnipresent Syrian population in the poorest areas of the country partially led to the Decentralization Law to come into effect in 2015. This Law intends to give more decision-making power to the Governorates. It resulted in newly established Decentralized Councils in the Governorates, consisting of elected Council members. Mafraq Governorate has 43 Council members. Despite these efforts, the Mafraq Decentralized Council stated that the actual decision-making power is very limited and that decision-makers in Amman do not want to lose their power to people in the Governorates [Mafraq Decentralized Council, 2018]. It therefore remains difficult for governmental employees in the Governorates to exert political power.

Summarizing:

- Jordan's history of several refugee influxes impacted the country in the sense that the political elite does everything to maintain the political power in the hands of a certain part of Jordan's population, the tribal Jordanians;
- The public sector is dominated by tribal Jordanians, whereas the private sector is dominated by Jordanians with a Palestinian background. There are to a certain extent tensions between the two groups. The public sector does everything to remain in charge over the private sector in order to keep the political power on the side of the tribal Jordanians;
- The Jordanian tribes and Jordanian intelligence heavily impact how the public sector operates in practice, e.g. appointing people for key positions, assigning budget and projects to certain geographical areas, and placing individual interest above the public interest in for example an attempt to become a member of the Jordanian Parliament to increase one's political influence and to maintain stability;



- The political power is divided over entities that balance each other out with the ultimate aim to maintain the existing political power relationships. It is unclear for most of the citizens how the power relationships are exactly shaped;
- The quest for 'Stability' is ruling the country: the Jordanian government's number one priority is stability. They would stop any kind of development in the country that could, in their eyes, possibly threaten this;
- Amman Governorate has always been prioritized over other Governorates due to the presence of Jordan's political elite in Amman, resulting in a neglect of Mafraq Governorate. Recent decentralization efforts should give more decision-making power to the Governorates, but there is still a long way to go before this would have impact in practice.

6.9.1.2 Identification and Mitigation of Political Effects & Risks

Although the Youth Business Campus aligns well with the goals of the political elite, the current political situation of Jordan can have several effects on the project. These effects should be managed by GFC.

Private Sector Versus Public Sector

First, the position of the public sector is very strong in Mafraq Governorate. More than 60% of the jobs are (low paying) public sector jobs. This results in a general understanding among its residents that the government should take care of them and that governmental jobs are better than private sector jobs [Al al-Bayt University & Int@j, 04-07-2018]. This could imply that (too much) private sector development in Mafraq could be perceived as a 'threat'. This threat would derive from a fear by the public sector to lose credibility when a mainly private sector initiative like the Youth Business Campus creates better conditions for residents than the public sector could create. However, if successfully implemented, the project can help legitimize the existing power structure, while stimulating the decentralization agenda (by involving Decentralized Council of Mafraq). This will be monitored based on the indicators of SDG16. GFC clearly positions the project as a Public-Private Partnership-driven project and gives members of the political elite a chance to play a role in the project. An example is Mafraq Parliament Member Dr. Reem Abu Dalbough who can use the project for her own constituents while providing political support to the project.

As identified in the stakeholder analysis, the project is supported by powerful political entities such as MOPIC, Mol, the Prime Ministry and several Parliament members from Mafraq. The project aligns with MOPIC's objectives to facilitate the national decentralization agenda, achievement of the SDGs and commitment to the NDC [MOPIC, 11-11-2018]. GFC received the endorsement of Mol in Amman (see Annex 9) and the Governor of Mafraq (see Annex 10) in their perceived absence of security risks for the project [Governor of Mafraq, 12-08-2018]. In addition, the Prime Ministry endorsed the project based on consultations of MDC and several line ministries (see Annex 3). Simultaneously, the project can support the vision of the King and Parliament by facilitating the decentralization agenda and attracting investments in several sectors to Jordan. A growing economy in Mafraq can strengthen the existing political structures and foster stability. The majority of public income comes from taxes⁵⁴; more people with a decent income thereby means more public income to overcome budget constraints. This can help the public sector to improve its public service delivery. However, it should be kept in mind that currently the public sector capacities and budgets limit the sector to contribute to smooth and quick processes for the private

⁵⁴ <https://www.thenational.ae/world/mena/jordan-cabinet-approves-13-billion-budget-for-2019-1.797013>



sector. Ministries are not used to do joint projects and key public persons change position often. When for example asking business owners about the business climate in Jordan, many would say that Jordan is not a good country to do business. Regulations constantly change, while permitting procedures are unclear [Bayanat, 01-04-2019]. However, this can also be turned into an opportunity: while pushing the project activities forward and keeping a consistent vision, this private sector driven project can tag along the 'willing' public sector entities and individuals.

Participation of Syrian Refugees

Second, GFC research indicates that there is mixed sentiment about the return of the Syrian refugee population that is currently present in Mafraq Governorate. It should not be ignored that most refugees in Mafraq Governorate come from Dara'a, the place where protests against the Syrian regime started in 2011. Some Syrians therefore expressed that they want to return, but that they do not see a chance to return while *Bashar Al-Assad* is still in charge of Syria. Syrian employees within the GFC team expressed the same issue. GFC witnessed in Mafraq that women and children sometimes return to Damascus, but just for a temporary visit; men stay in Jordan. Other Syrians expressed that they do not want to return for political reasons, or even that their lives in Jordan are better than they were ever before in Syria. Research conducted by NAMA in 2018 indicates that 66% of the Syrian refugees in Jordan believe that Syrians would be better off after a return to Syria. Of the Syrians in Jordan, 33% never wishes to return, 24% expects that they will probably not go back, only 14% of the Syrians is determined to go back and 29% said that they probably would go back [NAMA, 2018]. This research concludes that the international community should prepare for a scenario in which the majority of Syrians would not return to Syria. Based on this research and GFC research among the Syrian communities in Mafraq Governorate, GFC expects that around 50% of the Syrian refugee population will stay in Jordan for the upcoming 10 years. This means that the creation of the Youth Business Campus remains relevant for the Syrian refugee context of Mafraq Governorate.

However, the involvement of Syrian refugees in the project will most likely be perceived as a serious political issue. Especially since the opening of the Syrian-Jordanian border and the wish of 87% of the Jordanians that the Syrians should return to Syria as soon as possible [NAMA, 2018], the political backing for sustainable solutions for Syrians in Jordan is decreasing. Dr. Ali Subah, SG of MoW&I, told GFC that MoW&I has an issue with UNICEF's aspirations to improve the water network in Za'atari refugee camp [MoW&I, 07-03-2019]. GFC received similar signals from some other Jordanian public stakeholders. These signals mean that this point has to be taken very seriously and is a risk for the participation potential for Syrians in the project. The creation of sustainable living, working and learning conditions for Syrians in Mafraq Governorate could lead to protests from Jordanian residents, especially when these conditions are better than the living, learning and working conditions of most Jordanians in the Governorate. Such protests occurred when the residents of the villages around Za'atari refugee camp saw that the Syrian refugees received a lot of services while they were left out and had to deal with the 'poor services' in their villages [UNHCR, 16-01-2019].

GFC has managed and keeps managing this political risk by clearly communicating to Jordanian stakeholders that the project is for minimum 50% for Jordanians and that in the future, when more will Syrians return, all the living, learning and working places at the Youth Business Campus will be for Jordanian youth. As the YBC is located in Jordan, most economic benefits land in Jordan. The Governor of Mafraq, responsible for public security, supports the project (see Annex 10). In addition to this, GFC could need support from Dutch and EU public entities to negotiate about the percentage of Syrians in the project if this would become a major barrier for implementation. In a



scenario where GFC would be invited to develop Youth Business Campuses inside Syria (under UN-supervision) to facilitate a dignified return of Syrians, the Youth Business Campus example in Mafraq could motivate Syrians to return to a similar safe, sustainable environment in Syria. This could potentially encourage the Jordanian political elite to support the development of the Youth Business Campus in Mafraq.

[Equal Distribution of Opportunities](#)

Third, the project aims to break through the *wasta* system that is strongly related to the tribal system in Mafraq Governorate. GFC will steer on an equal representation of youth from the districts of Mafraq Governorate, but the motivation, skills and willingness to learn of youth overrule the equal distribution target. This will be something different than the *wasta* system and means that people need to get used to that. The political risk lies in the fact that it may occur that most of the participating youth will come from only a few districts and/or tribes, creating feelings of jealousy. It will require clear communication and active community engagement (see Section 8.1) to avoid misunderstandings that could lead to decreasing political support for the project. Another issue related to the tribal system is that when the project becomes successful, politicians from other Governorates will ask for the project to come to their Governorate as well. This already happened during the discussion with the Women Committee in the Jordanian Parliament [Women Committee of Jordanian Parliament, 11-12-2018]. Potential Jealousy and distrust between tribes can be avoided by clearly communicating about the selection process of youth and replication potential of the Youth Business Campus concept.

[Distrust in Mafraq Governorate](#)

Fourth, the objective of private sector development in Mafraq Governorate sounds strange to some decision makers in Amman. Dominant prejudices about Mafraq include that the tribes fight over job positions, that the public sector mind-set does not allow for private sector development and that private sector development should belong to Amman. GFC found that such prejudices about Mafraq have created a distrust in its people and economic opportunities. At the same time, the Governorate Development Plan 2019-2021 describes a clear need for private sector investment in Mafraq and the national authorities are under pressure to give commitment to the decentralization agenda. If the political line would be to create jobs all around the country, it would reduce the pressure on Amman in many ways, thereby also creating a more sustainable future for the city itself. This is communicated with decision makers during meetings.

Based on the above analysis, it can be concluded that the project aspirations of private sector development and the involvement of Syrian refugees could raise some political question marks. GFC manages that debate through clear communication via its Advisory Board and champions in the (local) government and in the community of Mafraq. If needed, in coordination with key donors, GFC could adapt its strategy to the then prevailing political situation in Jordan to prevent that political barriers can hamper the implementation of the project.

These adaptations might relate to the percentage of participating Syrians and the level of involvement of the public sector, as long as these adaptations do not prevent GFC, donors and partners from reaching their objectives.

[6.9.2 Political Assessment the Netherlands and EU Including EU Values](#)

Political support for GFC's mission in general has been explored and assessed from the start of setting up the *GreenfieldCities foundation* in 2016. Early talks with members of parliament showed that there was genuine interest in GFC's mission. This resulted in useful feedback and focus as well ("keep it small", "start in Jordan"). The support for reception solutions including reception in the



regions of migrants' origin has grown over the years, in particular during and after the Syrian crisis. While many parties insist that "real refugees" in the sense of the 1951 Geneva Convention⁵⁵ should always be welcome, there is support for creating seeds of sustainable economic development in the region of origin across the (political) board. Table 12 presents the overview of the position and opinions of all Dutch political parties about reception of migrants in regions of origin and an assessment whether or not this fits the GFC mission.

Table 12 Overview of all Dutch parties' position on migration related to reception in the region and fit with GFC mission.

| Party (# seats) | Quote Party | Fits Mission GFC? |
|---------------------|---|-------------------------|
| VVD (33) | "For us it is clear refugees have a right on safety. But that need not necessarily be in Europe. We want to build safe havens in the region itself. In this way <i>all</i> refugees can be received and not only people wealthy enough to have themselves smuggled into Europe. We want to spend money on safe reception in the region. Asylum requests in Europe are then superfluous. In that way we put an end to life-threatening routes of human trafficking and we prevent problems in our own society." ⁵⁶ | yes |
| PVV (20) | "... Another big problem with access criteria is that the Netherlands allow many asylum seekers in while these can be safely received in their own region. ... Obviously, the PVV thinks that real refugees should always be helped. And if it is clear this cannot happen in their own region, then we still want to offer them access to the Netherlands." ⁵⁷ | indirectly |
| CDA (19) | "For the Cabinet it is clear that who is seeking refuge of war or violence has a right to protection. By organizing this protection in their own region, there is no need for the refugee to migrate further. Reception in the region requires structural investments in political and economic cooperation with countries of origin and intensive cooperation with international organizations such as IOM and UNHCR." ⁵⁸ | yes |
| D66 (19) | "Reception in the region is often mentioned as alternative for reception in the Netherlands. In our view, both are required. Not everyone can come to Europe. But we have to realize that right now 95% of the Syrian refugees are being received already in Lebanon, Jordan, Turkey and Iraq. We can do a lot to improve the reception there by increasing our emergency aid or by creating structural partnerships with their governments. By sustaining the educational system or improving the infrastructure." ⁵⁹ | yes |

⁵⁵ <https://www.unrefugees.org/refugee-facts/what-is-a-refugee/>: "A refugee is someone who has been forced to flee his or her country because of persecution, war or violence. A refugee has a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership in a particular social group. Most likely, they cannot return home or are afraid to do so. War and ethnic, tribal and religious violence are leading causes of refugees fleeing their countries."

⁵⁶ Malik Azmani: <https://www.vvd.nl/standpunten/asielbeleid/>

⁵⁷ Sietse Fritsma in budget treatment Ministry of Justice and Safety: <https://pvv.nl/index.php/component/content/article.html?id=7227:begrotingsbehandeling-veiligheid-en-justitie-asiel>

⁵⁸ <https://www.cda.nl/standpunten/asiel-en-migratie/>. Note: CDA's point of view corresponds with the Cabinet's one.

⁵⁹ <https://d66.nl/content/uploads/sites/2/2015/10/Actieplan-vluchtelingen-D66-online.pdf>



| Party (# seats) | Quote Party | Fits Mission GFC? |
|-----------------------------|--|-------------------------|
| SP (14) | "More money for reception of refugees in their own region and tackle root causes for fleeing: International treaties state that refugees have a right to get protection against persecutions, terror or war. It is important this right subsists. ... Most refugees are being received in the region. For that cause, we have to make more money available. ... The root causes why people flee should be tackled. ... Prosperity should be divided fairly across the world. The SP thinks the worldwide, economic inequalities should be diminished, trade should be more fair and tax evasion should be tackled." ⁶⁰ | yes |
| GroenLinks (14) | "Reception in the Region: GroenLinks wants a bigger budget for reception of refugees in the region. With this people that stay for a long time in the camps will get sustainable protection, safety, education and care. The Netherlands should, together with the private sector invest in the economy of host countries and create jobs for refugees <i>and</i> local citizens alike. ... We should fight the causes of war, suppression, persecution and hunger. International forces should be faster deployed to bring peace and maintain it; we should be tough on violations of human rights. More development aid can contribute to less poverty, more employment opportunities and better education. ... Improvement of refugee camps in the region as well as tackling the causes for migration through development cooperation is key." ⁶¹ | yes |
| PvdA (9) | "Amsterdam Migration Summit: - A focused, intensive approach of the root causes of migration means a Marshall plan for Africa aiming for a fair development over there. - A European investment program to improve conditions for living and the perspective of the region (in cities as well as in refugee camps) where people are received. - Protection in the region and safe, third countries under supervision of the UN and co-financed by the EU." ⁶² | yes |
| ChristenUnie (5) | "-Improve reception in the region. - Invest in improvement refugee camps of UNHCR and Dutch development organizations in countries like Lebanon, Syria and Turkey." ⁶³ | yes |

⁶⁰ <https://www.sp.nl/standpunt/asielzoekers-en-vluchtelingen>

⁶¹ <https://groenlinks.nl/standpunten/vluchtelingen>

⁶² Lodewijk Asscher: <https://www.pvda.nl/nieuws/meer-grip-en-meer-verantwoordelijkheid-bij-migratieaanpak/>

⁶³ Joël VoordeWind: <https://www.christenunie.nl/standpunt/vluchtelingen>



| Party (# seats) | Quote Party | Fits Mission GFC? |
|----------------------|--|-------------------------|
| PvdD (5) | "Commits itself ... to make the breeding ground for war and violence explicit and to remove this same breeding ground. ... Conflicts not only caused by religious differences, but also arise because of water and food shortage, droughts and climate change; ... Victims of war, violence, suppression and prosecution, hunger, climate change and natural disasters should be helped. The Netherlands should therefore actively commit itself to (humanitarian) aid necessary to give people in vulnerable areas perspective on a dignified existence. By raising the contribution to development cooperation and by making empowerment, sustainability, education and healthcare as priorities, the need for moving elsewhere can disappear. ... The PvdD has a preference for reception of refugees in the region. ... [and] thinks it key to invest in effective solutions. This should be leading in the international agenda for development cooperation." ⁶⁴ | yes |
| 50PLUS (4) | "50PLUS wants to prevent refugees go to sea in small boats in the first place. If possible, safe havens should be created in areas near the Libyan coast, where refugees can be accommodated in safe zones. Intensive cooperation between countries on both sides of the Mediterranean should lead to better information and setting up adequate reception in the region. the European Union should support African aid agencies with manpower and financial means." ⁶⁵ | yes |
| SGP (3) | "Through development cooperation the Netherlands should take care that people in the country of origin can build a [decent] subsistence, so that they can contribute to a vital society, so much needed there. Our plea: we should present a perspective in countries of origin together with Europe." ⁶⁶ | yes |
| DENK (3) | "Not less but more reception here and more financial means: the big influx is being caused by the persistent hopelessness amongst refugees who invariably are poorly received in the region. Relief of the region by receiving more refugees in Europe and sending more financial means to the region is an important second step according to DENK." ⁶⁷ | partly |
| FvD (2) | "The money we spend on reception of incredibly high numbers of immigrants without much of a chance, could be much better spent on reception in the region. If asylum for whatever reason is required, then it should not lead to a permanent permit to stay- but to a temporary one lasting as long as needed. The aim is resettlement to the country of origin when the situation allows for it." ⁶⁸ | yes |

From the overview presented it is overwhelmingly clear the GFC mission to receive refugees in the region of origin fits the view of all parties. Only the view of DENK has a partial fit: this party wants to receive more refugees in the Netherlands; however, they want to support the regions of origin financially, hence offering relief in their burden. The view of the PVV has not a direct, explicit fit, but

⁶⁴ <https://www.partijvoordedieren.nl/standpunten/vluchtelingen>

⁶⁵ <https://www.50pluspartij.nl/nieuws-archief-50plus/1356-50plus-heeft-duidelijk-standpunt-over-asielzoekers>

⁶⁶ <https://www.sgp.nl/actueel/stop-met-oppikken-migranten-uit-middellandse-zee/9245>

⁶⁷ Election program Denk 2017-2021: https://www.bewegingdenk.nl/wp-content/uploads/2016/11/Verkiezingsprogramma_DENK_2017-2021.pdf

⁶⁸ <https://forumvoordemocratie.nl/standpunten/immigratie-remigratie>



it is easy to conclude from their point of view that the region of origin is the place where they could, hence should be safely received.

The VVD's take on migration and reception on refugees comes close to GFC ideas to build "safe havens" in the regions of origin [see also: Boersema, 2018]. The sustainable aspect including the long term commitment is however not mentioned (though the latter is implied). The sustainability aspect of reception is often missing in the views expressed. However, elements of sustainability are mentioned. CDA states this approach requires "structural investments in political and economic cooperation"; D66 wants to create "structural partnerships with [host countries'] governments by sustaining the educational system". The SP wants "economic inequalities" to be diminished. GroenLinks includes the long term commitment and wants "sustainable protection" and invest in the economy to create jobs for "refugees and local citizens alike". The PvdA wants to "improve conditions for living and the perspective of the region", also in cities. PvdD wants the Netherlands to commit itself to "aid necessary to give people perspective ... in a dignified existence" and to make "empowerment, sustainability, education and healthcare" priorities. The SGP wants people in the country of origin to have a decent "subsistence, so that they can contribute to a vital society".

Some parties such as SP, GroenLinks, PvdA and PvdD explicitly mention tackling (root) causes for migration by receiving refugees in the region of origin. However, this does not mean other parties do not share this view. On the contrary, it is safe to assume, the majority of parties also want to tackle push factors for migration. Interesting differences, however, occur for whom this reception areas should be. Sometimes it seems the group is narrower than the 1951 Geneva Convention defines. Sometimes it is wider. Climate change is sometimes explicitly mentioned as a driver to migrate and most parties will agree. Though on the other hand, many parties have a tough stance on economic refugees ("Send them back"). There is however a thin line between people on the move because of continuous droughts making any agricultural activity impossible and an "economic refugee". In Africa only, climate change yearly causes good agricultural areas as big as the Netherlands to become totally unfit to grow anything.

The views of parties towards not only GreenfieldCities mission in general is important of course, but more important is their take on the pilot project in Mafraq (the YBC) as developed, analyzed, and studied in this report. Parties currently represented in government during the last 2 years have been assessed in 1-on-1 meetings with spokespersons on the migration issue in parliament or in government positions. In these meetings, the concept of the campus and preliminary feasibility results for the YBC have been presented and discussed. GroenLinks and the PvdA have been added because since the Senate has been re-elected, they may play a key role in migration policies adopted in Parliament. Table 13 summarizes the outcomes of these meetings.

Table 13 Outcomes 1-on-1 meetings with political and/or governmental representatives.

| Party MPs | Meetings | Quotes | YBC fits party line? |
|--|-------------------------------------|--|----------------------|
| VVD Wybren van Haga | March 2019 | "Fits the vision of the VVD very well" | yes |
| D66 Achraf Bouali Sjoerd Sjoerdsma | March 2019 May 2017 July 2016 | "GreenfieldCities' innovative approach fits the D66 party program well: help the region economically forward, improve the quality of education and (recently added) reception of refugees in the MENA region." "We share the view that we should "invest" much more in the first ring around Europe to keep migration flows under control." | yes |



| | | | |
|---|-------------------------------|--|-----|
| CDA Anne Kuik | March 2019 | "The innovative approach of GreenfieldCities fits the party-political line of the CDA very well, more specifically: sustainable reception in the region." | yes |
| ChristenUnie Joël Voordewind | February 2019 January 2018 | "This initiative is invaluable because it is very visible what will happen with the money to be invested/invested (as opposed to contribution to the UN for similar cases.)" "Thinks the idea of GreenfieldCities interesting and good. Sustainable reception in the region is also required for the rising numbers of "climate" refugees." The concept of GFC/YBC can also be used for the ChristenUnie's idea "Bring the refugees home again" in, for example, Syria and Northern Iraq (plains of Nineveh). The concept is not bound to a location. Obviously, safety is a absolute precondition." | yes |
| PvdA Lodewijk Asscher | June 2017 | "Very interesting idea." Recommends to bring it to the department of Foreign Trade and Development Aid and the European Commission | yes |
| GroenLinks Bram van Ojik | January 2018 | "GroenLinks agrees with the approach GreenfieldCities is advocating, more specifically the reception of refugees by developing sustainable urban areas in the regions of origin" | yes |

Parties listed in Table 13 represent a majority in Parliament and in the Senate. These parties like and support the approach of GreenfieldCities. They appreciate how GFC translated the policy of reception refugees in the region into a tangible concept and design of a Youth Business Campus in Mafraq meant for 1500 Jordanians and Syrian refugees to live, learn and work.

The GreenfieldCities concept fits the policy as outlined in the 2017–2021 Coalition Agreement "Confidence in the Future" [VVD et al. 2017] as hand in glove. The relevant elements in the sections "Development Cooperation" and "A Humane and Effective Migration Policy" are illustrated in Text Box 3.

The policy document on Foreign Trade and Development Cooperation, "Investing in Global Prospects" by Minister Sigrud Kaag [Ministry of Foreign Affairs, 2018] is based on both sections and elaborates and formulates in detail what the current policy of the government is. GFC's mission and actions are aligned with key elements of Minister Kaag's Policy. These include [p. 6-7 : Ministry of Foreign Affairs, 2018]:

- "Gender Equality
- Conflict prevention and poverty reduction
 - The focus of development cooperation is shifting to the unstable regions of the Sahel, the Horn of Africa, the Middle East and North Africa, with a view to tackling the root causes of poverty, migration, terrorism and climate change.
 - An additional €60 million annually for new investment in education, employment, young people and women. An additional €290 million annually for emergency aid and improving the protection and prospects of refugees in host countries in the region of origin.
- Enhancing the Netherlands' international earning capacity
 - Optimizing services for SMEs and startups through establishment of NL International Business, Trade & Innovate NL and Invest NL.
- Sustainable, inclusive growth and climate action
 - A new €40 million a year fund for climate investments in developing countries.
 - Mobilize businesses and knowledge institutions to contribute to the achievement of the SDGs."



The GreenfieldCities approach has employed Syrian refugees currently residing in the Netherlands, giving them a meaningful job while bringing in the local perspective for the design and development of the YBC inherently. This part of the approach also has wide support, both from national politicians as well as local governors.

Text Box 3 Quotes on migration and refugees in the 2017 Coalition Agreement of the current Dutch Government.

Section 4.3 [VVD et al; 2017]:

- "The government will make adjustments to the development cooperation budget to tackle the root causes of poverty, migration, terror and climate change. Additional expenditure will focus particularly on the causes and consequences of migration, including reception in the region and education for refugee children. The Netherlands will tackle the root causes of migration by taking a targeted approach to improving reception in the region.
- Education for refugee children will be given priority, alongside measures to create more employment for refugees in the region.
- Sexual and reproductive health and rights (SRHR), agriculture, water and promotion of the rule of law are issues on which the Netherlands has traditionally made major policy contributions, and these areas will remain the priorities for poverty reduction.
- A national climate fund will be established within the development cooperation budget, aimed at ensuring the greatest possible return on internationally agreed public and private climate finance.
- The government will work actively to foster free and fair trade, promote exports, and work for trade agreements that take account of UN standards and safeguard legal certainty. This includes better access to the EU market for developing countries.

Section 4.5:

Unprecedented numbers of people are moving from one place to another, either to flee war and instability or seek better economic opportunities. The paths and methods they are using to travel to Europe in particular have resulted in countless human tragedies, and people smugglers are abusing the situation. The influx of asylum seekers and issues with reception, combined with integration difficulties, have heightened tensions within Dutch society and between EU member states. If the impact of migration becomes too severe, trust and social cohesion could begin to crumble. The government will therefore work towards a humane, effective policy on migration and integration at both national and EU level, a policy that will encompass tackling the causes of refugee flows, improving reception in the region, accepting refugees in accordance with international agreements and combating irregular migration. To improve opportunities for newcomers who are allowed to remain, they will be required to begin participating in society soon after their arrival.

- By creating places of safety that offer refugees and displaced persons protection, aid and opportunities close to home, we can eliminate the need to migrate further away. This calls for long-term investment in political and economic cooperation with the countries in question through development cooperation in addition to emergency assistance. To this end the government will seek to work together with the International Organization for Migration (IOM) and the UN Refugee Agency (UNHCR).
- In addition, both the Netherlands and the EU should invest in eliminating the root causes of migration. Investments of this kind are needed to improve economic conditions and the rule of law in countries of origin and, in that way, improve opportunities there. The Netherlands will also invest in countries and regions that shelter large numbers of refugees, such as our new partner countries Jordan and Lebanon, with a view to improving the protection they can offer and helping refugees to become self-reliant.

As a social enterprise, GFC can develop, build and manage YBCs, however the organization cannot pursue a political agenda or uphold EU values. This is the prerogative of public authorities. Therefore, GFC invites the Dutch government to jointly explore the possibility to set up a PPP or



(multinational) entrepreneurial organization with key ministries in the board (MinBuza, MinDef, MinEZK, MinSZW, MinV&J) to develop GFC Campuses while pursuing the political agenda on reception of migrants and refugees in their home region and upholding EU values as much as possible.

During some of the meetings with MPs, the status of the war in Syria was discussed as well. Apart from a looming - possibly dramatic - military confrontation in Idlib, the war in Syria seems to be winding down. With Russian and Iranian support, President Assad has reclaimed direct or indirect control over most of the country. Rebel forces and ISIS have been largely defeated or given passage to the Idlib area which is a last stronghold of various militias and groups. After infighting among these groups, it seems that an Al Qaeda offshoot, Hayat Tahrir al-Sham, has imposed its control over all aspects of life in the province, and now rules over some three million people. A ceasefire, brokered in September 2018 by Turkey and Russia has so far held off a full-scale regime attack, but "Idlib" could still trigger dramatic military and humanitarian events.

Some suggest Syrian refugees could be sent back to Syria. GFC sees very few people return from Mafrq to Syria up until now. In addition to the Idlib situation, the vast majority of people does not trust Assad. If or when conditions change for the better, the Syrian villages and cities destroyed during the civil war could be revitalized with the GFC campus concept. It is then paramount that protection and safety has to be guaranteed by the UN, the EU or NATO. The feasibility of this option could and should be explored in the near future as this option will be tabled at various forums with increasing frequency. GFC could undertake this feasibility study very well with its Syrian staff and through its office in Mafrq.

6.10 Risk Assessment

The YBC project is facing several risks that GFC should deal with. This assessment includes a description of the context-specific risks and a description of strategies how to mitigate each of them (see Table 14). In general, the Youth Business Campus is a project with innovations on multiple levels. This means that it spans multiple sectors with multiple stakeholders and combines investing in infrastructure and capacity building with a long-term commitment to sustainably grow the Youth Business Campus in a fragile environment like Mafrq Governorate. However, since GFC uses respected partners and applies existing project development and project management tools to realize the objectives of the Youth Business Campus, most risks can be considered general project development and project management risks that apply to any infrastructure and services project. Innovation is more risky than the repetition of existing concepts, but GFC and partners are convinced that the Youth Business Campus model has the potential to showcase a transformation of classic development assistance to a more impact investable proposition to reach the SDGs. Some friction can be part of this transition, which is not a reason to fail as long as GFC and partners learn from it how to adapt and respond to it

Table 14 Overview risks and mitigation strategies for the Youth Business Campus activities.

| # | Risk | Risk description | Mitigation strategy |
|---|---|--|--|
| 1 | Public sector: Construction- and Operation stage permitting | The project needs various permits for the Construction- and Operation stage. Some permits have to pass through several public entities. The ineffectiveness of public sector processes can delay the project, but if the project | Since MDC is responsible for the obtainment of permits, GFC should work closely with MDC in this regard. By aligning with governmental plans and policies, involving key public entities from the beginning and setting up a technical committee with key entities, such as MDC, JIC and MOPIC, the risk of permitting delays can be mitigated. The technical committee can also |



| # | Risk | Risk description | Mitigation strategy |
|---|---|---|---|
| | | does not get the permits on board, it can also hamper the implementation | avoid delays when key persons change position. In the pop-up stage, GFC will fully abide by Jordan's regulations to avoid any early-stage permitting barriers (see also Section 6.7.3). |
| 2 | Import restrictions and delays | While GFC strives for the utilization of local resources, the project needs to import several construction components (Dutch TGS-Uniqa panels) into Jordan to be able to build the pop-up stage energy efficiently. Delays frequently occur and in the worst-case scenario, customs restrict the import of needed goods. | If possible, GFC aims to avoid the need for imported products. The GIZ-GFC collaboration includes the establishment of a TGS-Uniqa energy efficient wall panel manufacturing facility in Mafraq, which would make important unnecessary. Otherwise, products have to be imported. GFC does not import blacklisted goods, but needs support from the Dutch embassy when importing goods. In addition, GFC aims to learn from entities with importing experience and build up a good relationship with a Jordanian import handling company. Finally, the import regime of the KHBTDA is more lenient compared to areas out of such Free Zones. Close collaboration with MDC and the technical committee in this regard will facilitate the import process as well. |
| 3 | Construction delays or failures | Large infrastructure construction projects include complexities and uncertainties. The construction of the YBC is a necessary step to achieve GFC's objectives. Building with energy efficient wall panels is new in Jordan and requires training of locals. The fact that Jordan has no experience with this type of construction can cause delays or construction failures. | The GIZ-GFC collaboration includes the training of locals on E&D, installation and O&M of energy efficient wall panels. The intended prefab construction system is lightweight and simple to install with tools that exist in Jordan. The inexperience of the contractors and workers can be mitigated by solid planning and intense on-site supervision, inspection and reporting. When the Construction and Energy building blocks will for example be funded without the Water building block, the YBC will use the basic water infrastructure of MDC and vice versa to avoid delays during the Construction stage of the pop-up stage. |
| 4 | Dutch embassy: opportunity for closer collaboration | GFC received a grant from the NL Ministry of Foreign Affairs based on a discussed and agreed working plan for a feasibility study. While executing this working plan in Jordan, GFC received signals that senior embassy staff has little confidence in the YBC project so far. | With the publishing of the final report, it is clear the YBC is feasible. This is excellent timing for GFC to discuss the results with the embassy and ask for feedback. This could help GFC shape its communication and implementation strategy and improve the working relationship with the embassy. The project could help to increase the desired impact of the Dutch presence in Jordan by information gathering, networking or other knowledge- and resource sharing. GFC therefore proposes that in case of continued collaboration, the working plans include budget for partially seconding an (extra intern) embassy staff member to the GFC team in Jordan to foster collaboration. In any case, GFC will keep the embassy informed about progress and aims to benefit from its services. |



| # | Risk | Risk description | Mitigation strategy |
|---|---|--|---|
| 5 | Unwillingness or inability of partners to commit | Partners help GFC with credibility and fund raising, while playing a key role in the development of the building blocks of the YBC. In case of unwillingness or inability of these partners to commit to the project, this will delay or hamper GFC from accessing the necessary donor funding for the pop-up stage. | GFC started committing a small group of respected entities like GIZ, UNDP, Luminus Education and ORANGE. These all have expressed interest to set up activities in Mafraq and letters of intent have already been signed. By making use of their existing strategies and partnerships in Jordan, GFC aligns with vested interests, gains credibility and can get access to funding. It is important to mention to such partners that GFC aims to contribute to their successes and does not execute tasks that are better performed by themselves. In case partners would not commit, GFC has to accept a low pace of development. |
| 6 | Unwillingness or inability of target group (youth) to commit | The YBC project is for youth; if they do not commit to use the YBC, the facilities of the YBC will not be used. This means that the project can neither financially sustain itself, nor will it generate the desired impact. | GFC will communicate to youth that it teams up with successful and respected Education partners (such as Luminus and RBK) with the track record to educate for employment. In addition, GFC will use its good relationships with the youth committee (see Section 8.1 for more information about the youth committee), local education providers (such as universities) and youth associations to reach youth, raise awareness and commit them. GFC will also collaborate with GIZ's CoE in this regard, a facility with community engagement experience in Mafraq. If it is difficult to attract youth in Mafraq, GFC will try to attract youth from other Governorates. The attraction of young women requires its own strategy (see Section 3.1.5). |
| 7 | Lack of jobs created due to lack of private sector commitment | The YBC needs to lead to local job creation. This depends on private sector development. Private sector entities need proven added value by (human) resources (1) in combination with low costs (2), a proven business model (3) and a stable trusted business environment (4). When such conditions exist, people with investment capital will see the opportunity and can start setting up businesses. It is therefore likely that job creation will be gradual and lag initial small-scale successes. If the conditions are not created, private sector entities will not commit and job creation targets will not be met. In addition. | Skilled human resources come from GFC's strong Education Partners with track record in successfully educating for private sector needs (1). The rental prices and energy bills at the YBC are much lower than in Amman (2). GFC starts small scale and invests in assets and services that have already proven success in Mafraq, such as sustainable affordable housing and renewable energy solutions. These interventions will demonstrate that one can earn money with such investments (3). Finally, GFC commits to long-term manage the YBC infrastructure, helping to secure trust in a stable investment environment (4), aligned with the mission of MDC to offer investors a stable business friendly environment in Mafraq. To ensure that the YBC fulfils and keeps fulfilling private sector needs, it will interact with the private sector through existing private sector associations such as Int@j, EDAMA, JEPa and GIZ's NSSC's. |



| # | Risk | Risk description | Mitigation strategy |
|----|---|--|--|
| 8 | Negative cash flow when running out of public funding | After the donor funded start of the YBC, the YBC should generate a positive cash flow to sustain impact and transition to private sector (impact) financing. This depends on the partners at the YBC that have to demonstrate with high levels of confidence that the YBC can reach positive cash flows soon. Delays are a risk, but independent monitoring should show that the YBC is on track to offer positive returns for investors. In case the YBC does not generate a positive cash flow, the project will stop. | GFC and partners should show a robust pop-up stage with a positive cash flow. That is why GFC attracts partners with proven business track record. The costs of the buildings should be conform the local market. An independent partner (e.g. C-Change) can help creating standardized financial and operational performance reports catering for the impact investment community. This will introduce an extra 'pair of eyes' to keep focusing on combined return on investment and impact. |
| 9 | Cost overruns | Cost overruns can occur in case of government-induced or construction-related delays. | Cost overruns can be avoided by mitigation measures 1,2 and 3. The scope of the project can be reduced when overruns occur. Reducing the project scope may lengthen the time to the projected impact, but as long as the project demonstrates income increase benefits to YBC users, it is likely that the project will continue after the donor funding expires. |
| 10 | Underfunding | Underfunding is always a concern for starting entities. It could imply that the infrastructure and services at the YBC cannot be delivered to an extent that it can create enabling conditions for youth and private sector development. | This requires a dedicated funding strategy and a lean and flexible setup. With respect to lean operations, GFC can, in a financial worst-case scenario, scale back to a very slow pace of development that eliminates all insolvency risks. Such a scenario will have impact on the time to impact. As a general starting point, GFC will not start implementing without a high level of confidence of GFC, its partners, the technical committee and its Advisory Board that the available funding is sufficient to cover the planned activities. These entities include persons with long implementation track-records of development assistance projects. |
| 11 | Incapacity of team and its members | An underperforming or incapacitated team and key team members can negatively affect the pace of the project and its outcomes. | GFC teams up with partners with strong human resource policies and strong implementation track records. When such partners are in charge as well of one or multiple building blocks, the chance of incapacity of the team is reduced. GFC develops detailed role descriptions, performance milestones and a temporary replacement system (from within the team or one of the partners). It also requires the creation of a strong database in which replacements can find all the information needed to successfully fulfil the job. In this way, the impact of a |



| # | Risk | Risk description | Mitigation strategy |
|----|------------------------|---|---|
| | | | possible loss of a team member is reduced to time delays only. |
| 12 | Corruption and Fraud | On the Jordanian public side, GFC may encounter corruption. Starting a new (business) activity that includes construction and multiple stakeholders, while sponsored by donors may be perceived by some people in the permitting and licensing process to solicit favors- and/or non-merits based compensation. | In general, GFC works with respected partners and handles a zero tolerance policy with respect to corruption. This means that GFC's management is committed and controlled by an independent M&E partner (e.g. C-change). The YBC governance system should be clearly organized and structured, so that rights and responsibilities are allocated between persons within this system. This makes tracking of misconduct easier. Additionally, it will be important that project designs include control mechanisms by other parties. This includes that project spendings should be made public and traceable by other parties. |
| 13 | Political Risks Jordan | <ul style="list-style-type: none"> a. Stability is a Leitmotiv; b. Dominant public sector, fearing private sector development; c. Changing sentiment w.r.t. Syrian refugees; d. Keep Mafraq weak doctrine; e. <i>Wasta</i> practices. | Political risks can be mitigated by building up a strong network and by proving to be a reliable long term partner. The GFC strategy to work with small steps should help overcome the fear for change and creating an economically stronger governorate. GFC knows from other experience that, by measuring and rewarding performance, impact of <i>wasta</i> can be avoided. The worsening sentiment towards keeping Syrians in Jordan can be partly mitigated by demonstrating YBC benefits for the host community. |



7 GreenfieldCities Partners and Supporters

The Youth Business Campus is a cross-sectorial project aiming to simultaneously tackle multiple challenges in Mafrq Governorate. Since GFC itself cannot fulfill all activities at the Youth Business Campus, partnerships are essential for GFC's success in Jordan. That is why an important indicator for the feasibility of the Youth Business Campus is the commitment of public- and private partners, donors and (impact) investors. The role of GFC is to attract partners to take ownership for activities at the Youth Business Campus and support these partners with enabling conditions to collaborate and thrive. GFC tested the interest of these entities during the feasibility study and asked Partners and Supporters to translate their interest in letters of intent and/or letters of support.

7.1 Partnership Study and Strategy

The identification and categorization of stakeholders is described in Section 3.1 and 3.2. GFC applied its own study methodology and strategy for the development of partnerships and support from key stakeholders. The study methodology consisted of an iterative partner and stakeholder process. Interactions with the stakeholders shaped the Youth Business Campus concept into compliance and alignment with key stakeholder interests and positions. Their early involvement helped to create ownership for the Youth Business Campus, while they also helped to develop the sketch design and strategy itself. The Mid-Term workshop brought many stakeholders together after which partnerships and stakeholder commitments became more firm. GFC noticed during the workshop that many stakeholders in Jordan are very keen on seeing the strategic plans for the country turning into tangible projects on the ground.

GFC applied a general and 'stakeholder group specific' strategy for partnership- and support development. In general, GFC simultaneously consulted and attracted hundreds of people through face-to-face interactions and interactions during workshops. Different partnership needs and opportunities appeared from these interactions⁶⁹:

1. There is a group of mostly domestic Jordanian partners in the public domain with aspirations for a more knowledge based, circular and green economy. These partners are aware of their challenges to turn aspirations into reality as they suffer from budgets constraints, the need for implementation capabilities and trusted links to the private sector and investors. GFC aims to align with the policies and regulations of these partners, especially for the pop-up stage.

Results are:

- a. The Youth Business Campus is on the way to become a national priority by being mentioned in plans on the level of Mafrq Governorate, ministerial level and the Prime Ministry's level:
 - i. On the level of Mafrq Governorate, GFC aims to get embedded in the Strategic and Executive Plan for Mafrq Governorate 2019-2021;
 - ii. On ministerial level, GFC aims to get embedded in the NDC Action Plan and National Green Growth Action Plan;
 - iii. On the Prime Ministry's level, GFC aims to align with the Prime Ministry's plans for the upcoming years, and eventually get embedded via several Parliamentary committees.
- b. Support letters and letters of no-objection have been obtained from MDC, the Governor of Mafrq, the Prime Ministry, MOPIC, Ministry of Interior and other line ministries;
- c. The Women Committee of the Jordanian Parliament has expressed explicit support for the project. The chair of that committee is championing GFC in Mafrq;

⁶⁹ Results are not complete, but give an overview of the kind of partnership needs and opportunities that GFC utilized to yield partnerships and support.






- d. Strong personal relationships have been built with cabinet ministers Mary Kawar (MOPIC) and Majd Shweikeh (Public Sector Development);
- e. Buy-in from JREEEF and JEF, Jordanian public funds;
- f. A strong and very committed Jordanian Advisory Board is in place. The Advisory Board was founded in 2018 and helps GFC with strategic advice, network building, governmental support and local embedding. The Advisory Board Members have helped shaping and modernizing Jordan over the last decades in roles as Cabinet Ministers, Senator, leading sustainability- and women advocates, entrepreneurs and scientists. The members support GFC on a strictly voluntary basis, which shows heartfelt commitment and conviction. The Advisory Board Members cover all six sectors of the Youth Business Campus. An overview and short bios of the GFC Advisory Board Members is presented in Table 15.
- g. Next to an Advisory Board on national level, GFC also established an Advisory Board on the level of Mafrqa Governorate. This Board will be especially important for interactions with local residents during the next stages of the project (see Section 3.1.5). Since community engagement will be intensified during the development stage, this Board will be made definitive during this stage as well. For now, this board consists of a mix of local youth (target group) from several youth associations and respected and well-known local residents (outside target group).


Table 15 Jordan Advisory Board.

| | |
|---|--|
|  <p>Prof. Mahmud Ayed Duwayri</p> | <p><i>Agri-Food and Water sector</i></p> <p>Mahmud is a freelance consultant and very much engaged in the development of Jordan. He has served Jordan as the Minister of Agriculture, has been the head of the Plant Production and Protection Division of FAO (United Nations Food and Agriculture Organization) in Rome and Director General of the NARC (National Agricultural Research Center) in Jordan. The academic passion and skills of Al-Duwayri brought him a PhD in agriculture from the University of Wisconsin (US), the Presidency, Deanship and grades of Professor at several Jordanian universities (University of Jordan, Jordan University of Science and Technology, Ajloun National University) and the United Arab Emirates University. He has in-depth knowledge in barley and wheat production, processing and the establishment of value chains. Mahmud advises GreenfieldCities on the Agri-Food and Water business cases, farmer cooperatives, strategic communication and is a strong link to Jordanian universities and public sector stakeholders.</p> |
|  <p>Mary Nazzal-Batayneh</p> | <p><i>Hospitality sector (& women in private sector)</i></p> <p>Mary is a barrister, political and social justice activist, and Founder of Landmark Hotels Company. Mary has been chosen as one of Forbes “Most Powerful Arab Women” for consecutive years. She is also a Young Global Leader at the World Economic Forum. Mary has positioned Landmark as a model of private sector engagement with the SDGs related to gender equality, decent work and economic growth. She is also a member of the Young Presidents’ Organization (YPO) and the International Women’s Forum (IWF). She is a partner and brand ambassador for the Social Enterprise Project (SEP) in the Gaza/Jerash camp. Nazzal-Batayneh completed a BA in political science from Columbia University, and law degrees from SOAS, University of London, the College of Law London and the Inns of Court School of Law London. Mary advises GreenfieldCities on the Hospitality business case, private sector engagement with SDGS, blended finance, social impact, hotels and creating gender-sensitive environments.</p> |



| | |
|--|--|
| <p>Ruba Al-Zu'bi</p>  | <p><i>Water and Energy sector (& women in public sector)</i></p> <p>Ruba has received certificates in Agricultural Technology (BSc) and Water & Environmental Engineering (MSc) from JUST and senior-level training on Sustainable Development, environmental policy, leadership, change management and institutional development. During her 18 years of professional experience, she strived to position Jordan as a model in cascaded and shared public-private responsibility for sustainability management and succeeded to pursue environmental reform, institutional strengthening and engaging the private sector in environmental management. Ruba was the first female Director at the Ministry of Environment, co-founded the Jordan Green Building Council and functioned as CEO for EDAMA, the first leading Jordanian business association that seeks innovative solutions for green economic growth. She is currently leading the applied scientific research and innovation portfolio at Abdul Hameed Shoman Foundation. Next to her regular job, she is engaged through several roles with youth development and social and green entrepreneurship. She recently became a Plus Social Good Advisor with the United Nations Foundation where she provides awareness and training sessions to CBOs and NGOs across Jordan on the SDGs and initiated #InspireMENA as a storytelling platform for innovation in the MENA region. Ruba advises GreenfieldCities on the Water and Energy business cases, strategic stakeholder engagement, public- and private sector as well as NGO partnerships, policy, legal and institutional frameworks, strategic communication, the environmental dimension and the link to local economic development.</p> |
|  <p>Prof. Laila Abu Hassan</p> | <p><i>ICT sector (& women in science)</i></p> <p>Laila is Professor in Physics at the Physics Department of the University of Jordan in Amman. During her academic career, Laila obtained a PhD in Physics from the University of Sussex-United Kingdom, MSc from the American University of Beirut-Lebanon and BSc from the University of Jordan, all in the fields of Physics. She is one of the pioneers in the field of nanotechnology and its applications and has been involved in the popularization of this technology at national and regional level. Besides her publications, she has three International Patents shared by the University of Jordan and University of Illinois at Urbana-Champaign. She served as the Chairperson of the Physics Department and a Member of several Councils and Committees such as the University & Faculty Councils and University Board of Trustees and Conference Organization Committees. In addition, Laila is a former Senator (2011-2013) and former Member of the Council for Higher Education (2015-2018). Laila has been active in women empowerment as a Member of the L'Oreal- UNESCO 'Women in Science' expert panel and has been awarded the 'Women in Science Hall of Fame' for the Middle East and North Africa in 2014 and the University of Jordan Distinguished Researcher Award in 2009/2010. Laila advises GreenfieldCities on the ICT business case, women empowerment, improvement of scientific education, political affairs and strategic communication.</p> |
|  <p>Dr. Abdelnabi Abdelkarim Fardous</p> | <p><i>Water, Agri-Food and Energy sector</i></p> <p>Abdelnabi holds a PhD from Washington State University in Water Management and Environmental Biophysics. He has worked as Director General for The National Center for Agricultural Research and Technology Transfer (NCARTT) for 8 years (now the NARC), he has chaired the Association of Agricultural Research Institutions in the Near East and North Africa for 4 years and he has worked as a representative for FAO in Sierra Leone. Abdelnabi was furthermore in charge for the UNCC program in Jordan for 5 years in which he developed four major national documents including research and technology strategies, water strategy, and strategic community action plan for the Badia region. Finally, he has published many scientific papers and studies.</p> |



| | |
|---|---|
| | Abdelnabi advises GreenfieldCities on the Energy, Food, Water Nexus, strategic planning and the regional public sector. |
|  <p>Prof. Ahmed Al-Salaymeh</p> | <p><i>Energy sector</i></p> <p>Ahmed holds a PhD from Friedrich Alexander University in Erlangen, Germany. As an expert in the fields of renewable energy and energy regulations, he coordinates several Erasmus+ projects in the fields of renewable energy, environment and climate change. Ahmed is the founder and director of several new MSc programs at the University of Jordan including MSc Renewable Energy and the MSc Environmental Technology and Climate Change. Previously he was the director of the Water, Energy and Environment Center at the University of Jordan. He is a Certified Energy Manager (CEM) and Certified Carbon Reduction Manager (CRM) and helps GreenfieldCities with the design of the energy business case for the Youth Business Campus.</p> |

2. There is a second group of international partners that seek impact for a mix of humanitarian, development, trade and domestic political reasons (see Sections 3.1.4, 3.2.1 and 3.2.5). Increasing impact often requires a long-term local commitment and branching out into local public and private sector actors. GFC activities can help these partners to get more impact out of every euro invested in development assistance and foreign trade. GFC seeks long-term core funding from this partner group. Results are:
 - a. Joint fundraising for building blocks of the Youth Business Campus with strong international players like GIZ, UNDP, UN-HABITAT and WUR;
 - b. Exploring (early stage) investments by impact investors such as 17Asset Management, OSF and others;
 - c. A request for €3.000.000 (total) in base funding for the next 4 years will be submitted to the Dutch Ministry of Foreign Affairs. This base funding will enable GFC to further develop and fundraise for the building blocks with strong international players; this is described in more detail in Section 8.3);
 - d. There is increasing and broad support by Dutch MPs and by a number of national political actors in Germany.
3. The third group of partners are advocacies for green- and clean-tech projects, education institutes and implementing agents that could be supported in sustaining the impact of their efforts in the long-term (see Section 3.1.2, 3.1.6. and 3.2.2). The Youth Business Campus offers these partners the opportunity to get structurally embedded within a stable and supportive environment. GFC seeks practical collaboration agreements with partners in this group to help them increasing (sustained) impact. Results include:
 - a. GFC attracted many high-quality Education Partners that can cover the educational component of all the building blocks of the Youth Business Campus (see Section 3.1.2 and 6.2);
 - b. GFC has support from Advocacy entities and Interest Groups (see Section 3.1.6) that can lobby within the public sector and can help attracting private sector stakeholders;
 - c. GFC has enough implementing partners (also called "Fundraising partners") divided over all building blocks that can help creating interesting consortia for donors. Examples are the Jordan Green Building Council, Wageningen Research and Cewas;
 - d. Due to GFC's local presence in Mafraq, the capacity of the team can also help other operating entities with achieving impact in Northern Jordan. Discussions are underway with Cowater and ACTED about teaming up.



4. The fourth group of partners are private sector entities that seek high quality infrastructure and services for a reasonable price, visibility, skilled human resources, access to markets, liaison services to (local) governments and increasingly (CSR) driven ways to combine business benefits with (societal) impact (see Section 3.1.3 and 3.2.4). With these partners, GFC works on business partnership agreements. Results are:
 - a. Joint fundraising efforts with MEI on an energy development project and interest of ICT, Energy and Construction start-ups to use the Youth Business Campus as their basis;
 - b. Teaming up with construction technology companies such as CD20, TGS-Uniqa and BLOOMS for showcasing and marketing their solutions;
 - c. Teaming up with Education providers such as Luminus Education and RBK.org for joint fundraising and agreement preparations for a Youth Business Campus based company;
 - d. Negotiating a CSR ICT infrastructure investment by Orange telecom;
 - e. Exploring teaming with HochTief.

The effect of the partnership strategy is visible in the support letters and letters of intents in Annexes 1-50:

1. Request Letter *Mafraq Development Corporation* to *Prime Minister* (Annex 1)
2. Support Letter from *Mafraq Development Corporation* to *H.E. Sigrid Kaag* (Annex 2)
3. Letter *Prime Ministry* to Request *Mafraq Development Corporation* (Annex 3)
4. Endorsement Letter from *Ministry of Investment* to *Prime Ministry* (Annex 4)
5. Endorsement Letter *MOPIC* to *Prime Ministry* (Annex 5)
6. Letter of Intent *EDAMA* (Annex 6)
7. Letter of Intent *Millennium Energy Industries* (Annex 7)
8. Joint *GFC* and *GIZ* Request Letter for Support from *JREEEF* (Annex 8)
9. Support letter *Ministry of Interior* to *Prime Ministry* (Annex 9)
10. Support letter by *Governor of Mafraq* (Annex 10)
11. Support Letter by *Decentralized Council of Mafraq* (Annex 11)
12. Letter of Support by *Global Green Growth Institute* (Annex 12)
13. Endorsement Letter *Jordan Ministry of Foreign Affairs* to *Prime Ministry* (Annex 13)
14. Letter of Intent by *Water, Environment and Arid Regions Research Center* (Annex 14)
15. Letter of Intent by *Al al-Bayt University* (Annex 15)
16. Letter of Intent by *Wageningen University & Research* (Annex 16)
17. Letter of Intent by *Luminus Education* (Annex 17)
18. Letter of Intent by *Ammon Applied University College* (Annex 18)
19. Letter of Intent by *Education for Employment – Jordan* (Annex 19)
20. Letter of Intent by *ReBootKamp* (Annex 20)
21. Letter of Intent by *Bayanat* (Annex 21)
22. Letter of Intent by *CD20* (Annex 22)
23. Letter of Intent by *Cewas Middle-East* (Annex 23)
24. Support Letter by *SPARK* (Annex 24)
25. Letter of Intent by *IMDAD* (Annex 25)
26. Letter of Intent by *SahabwaHattab* (Annex 26)
27. Letter of Intent by *Uniqa* (Annex 27)
28. Letter of Intent by *Deerns* (Annex 28)
29. Letter of Intent by *BOOMS* (Annex 29)
30. Letter of Intent by *Our Electricity from the Sun* (Annex 30)
31. Letter of Intent by *Semilla* (Annex 31)
32. Letter of Intent by *Anakeed Al-Khair Cooperative* (Annex 32)



33. Support Letter by *JEPA* (Annex 33)
34. Letter of Intent by *HollandDoor* (Annex 34)
35. Letter of Intent by *17 Asset Management* (Annex 35)
36. Letter of Intent by *UNDP Jordan* (Annex 36)
37. Letter of Intent by *Int@j* (Annex 37)
38. Letter of Intent by *Danish Refugee Council* (DRC) (Annex 38)
39. Letter of Intent by *UN-HABITAT* (Annex 39)
40. Letter of Intent by *Jordan Green Building Council* (Annex 40)
41. Support Letter by *IPA | Switxboard* - Kilian Kleinschmidt (Annex 41)
42. Letter of Intent by *DesertTulip-Jordan* (Annex 42)
43. Support Letter by *General Federation of Women Union* (Annex 43)
44. Support Letter by *AJDT Youth Association in Mafraq* (Annex 44)
45. Support Letter by *Fena al-Khair Youth Association* in Mafraq (Annex 45)
46. Support Letter by *Alliander* (Annex 46)
47. Support Letter by *Maatchappelijke Alliantie* (Annex 47)
48. Letter of Intent by *Futurability* (Annex 48)
49. Support letter by *Priva* (Annex 49)
50. Support letter by the *Amman Chamber of Industry* (Annex 50)

Clearly, the objectives for GFC's partnership- and support development during the feasibility study are reached and have resulted in:

1. GFC is very well embedded in the context of Jordanian needs, opportunities and aspirations with public-private sector partnerships and support. Looking at the high number of partnerships and support statements, GFC expects that with some base funding, GFC has the partners in place to obtain donor funding for the building blocks of the Youth Business Campus and attract impact investment capital for the growth stages;
2. The Youth Business Campus is recognized by many to showcase and accelerate the achievement of several SDGs, green growth objectives, CO2 emission reduction objectives and turning migration policy of reception in the region of origin into tangible pilot and model for replication;
3. The partners are in place to implement all the activities at the Youth Business Campus in a way that GFC itself can mainly focus on developing infrastructure and O&M during the Operation stage of the project;
4. GFC and the Youth Business Campus are recognized (by many) as a potential change agent that can help stakeholders turn aspirations into (sustained) impact, while being embedded in Mafraq Governorate and helping local institutions to build capacity. An example is the potential of the YBC to strengthen the Decentralized Council of Mafraq;



8 Roadmap to Realization

8.1 Implementation Strategy

GFC's concept is holistic in the sense that its feasibility and success require collaboration with multiple stakeholders in various sectors over a long period of time. GFC found out that the holistic concept can be complex for some stakeholders. In order to maximize the chance of success of the concept, GFC therefore developed an implementation strategy. This implementation strategy is based on the following starting points:

1. Take small steps. Each step must show revenue generation potential;
2. Secure multiyear seed funding;
3. Sell the project per sector and/or activity (building blocks) as a part of the integral YBC;
4. Seek private sector leadership (tag along public sector, but not in the lead);
5. Focus on community engagement;
6. Create opportunities for specific (private & education) partners;
7. Be clear about the division of roles.

Ad 1. Take small steps and show revenue generation potential

By taking small steps, perceived risks are lower and time between successes is shorter. Especially in a context with so many existing development assistance efforts, it is important to demonstrate implementation capabilities to earn trust from partners, donors and the local residents. Practically this means that GFC divides the development of the Youth Business Campus in three stages, starting with the *pop-up* stage.

Ad 2. Secure multiyear seed funding

GFC needs multiyear seed funding from public donors to show 'proof of concept' of the innovative project in Mafrq Governorate, an area that suffers from a lack of trust. Innovations include the transition of the Youth Business Campus from donor funding to local- and international impact financing. Additionally, the project includes several other innovations compared to traditional development assistance, such as the long-term focus, the cross-sectorial approach and the focus on talented youth rather than the most "vulnerable" ones. This innovative and in many ways unconventional approach has led to challenges to access public funding. For impact investors it is too early to step in; they will wait until the 'year of proof' shows positive financial results. This is the most important reason why multiyear seed funding must be secured. Many donors are interested in parts and/or aspects of the YBC but cannot finance the YBC in its entirety. Many advantages would evaporate in thin air. These donors will commit much faster when there is multiyear seed funding that more or less guarantees the entire campus will be built. In Section 8.3 "Financial Roadmap" this is explained in more detail.

If and when multiyear-seed funding is secured, GFC will develop and build a small scale information and exhibition center to attract donors, co-funders and impact investors faster. This building and the public area around it already demonstrate many of the project's

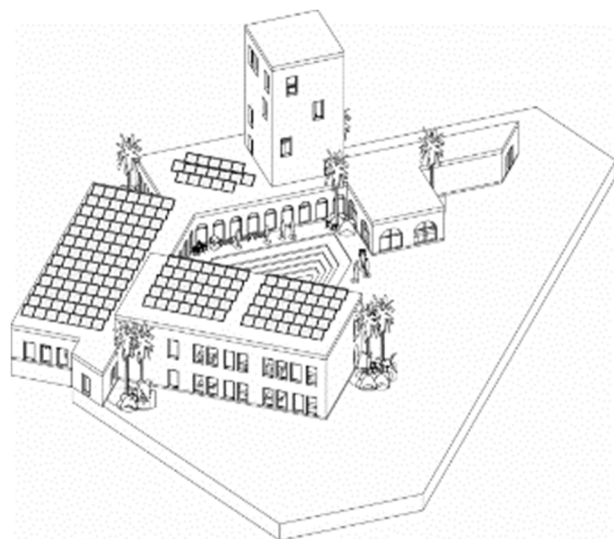


Figure 88 Sketch for an Information and Exhibition Center for the YBC.



features in terms of sustainable energy, water performance and the application of an energy efficient, affordable and innovative construction methods. The Sketch Design has already been made and is shown in Figure 88.

Because of the modular size of the panels it can be built (and removed) in no-time. The center will be home to the GFC team in Jordan. FUTURABILITY has already expressed a wish to organize an exhibition of Syrian artist in the center (see Annex 48). The key goal of the center is to attract co-funders and impact investors (faster). Information in the form of a maquette of the YBC in the various stages, videos for showing activities will therefore be on display as well

[Ad 3. Sell the project per sector and/or activity \(building blocks\) as a part of the integral YBC](#)

As part of the stakeholder analysis, GFC found that many donors and (potential) partners focus only on one or two specific sectors or activities (see Section 3.1.4). This resulted in the strategy to break down the holistic concept of the Youth Business Campus into building blocks that are of interest for sector specific (ICT, Hospitality, Construction, Energy, Water, Agri-Food) and/or activity specific stakeholders. Examples of specific crosscutting activities include: infrastructure, education, business development or women empowerment. Sectors and activities can also be combined if this fits the interests of a specific donor or partner. Most building blocks consist of a combination of infrastructure, education and job creation activities in one or two sectors. By doing so, GFC presents the Youth Business Campus as a large project divided in multiple smaller sub-projects. The sub-projects represent the building blocks. For these building blocks, GFC seeks owners with the capacity to raise funds for and implement the building blocks. Figure 89 provides an overview of the possible building blocks (horizontal axis) and the crosscutting activities (vertical axis). One example of this approach is the collaboration with GIZ/NET on the Energy and Construction building blocks, shown in the same figure. GIZ has a specific focus on renewable energy in Mafrq and sponsors the Mafrq-based German-Jordanian Center of Excellence (CoE) in solar energy. The CoE has a clear wish and capacity to expand. GIZ also supports the development of the National Sector Skill Councils (NSSC's) in Jordan to secure connectivity between education and demand for labor. The NSSC for Water and Energy (NSSC-WE) does this for the Energy and Water sectors. GIZ is looking for opportunities (revenue streams) to keep the activities of the CoE and NSSC-WE activities up and running beyond GIZ's subsidy period. This requires scalable and repeatable energy and water projects. In that sense, GFC and GIZ found each other in the Youth Business Campus as the accelerator of private sector development in the Energy and energy efficient Construction sectors in Northern Jordan. GFC and GIZ have worked out a plan to take this idea forward and GIZ is raising the funds for this project. A similar approach is being applied for other building blocks of the Youth Business Campus. In this way, the realization of all the building blocks together will create the fully functional Youth Business Campus. This is also how the objectives of SDG17 will be achieved. GFC aims to continue attracting partners (owners) to raise funds for the building blocks during the Development stage of the project. In addition, GFC considers organizing a donor conference for funders and key partners where the jigsaw-puzzle of the entire Youth Business Campus could be laid.

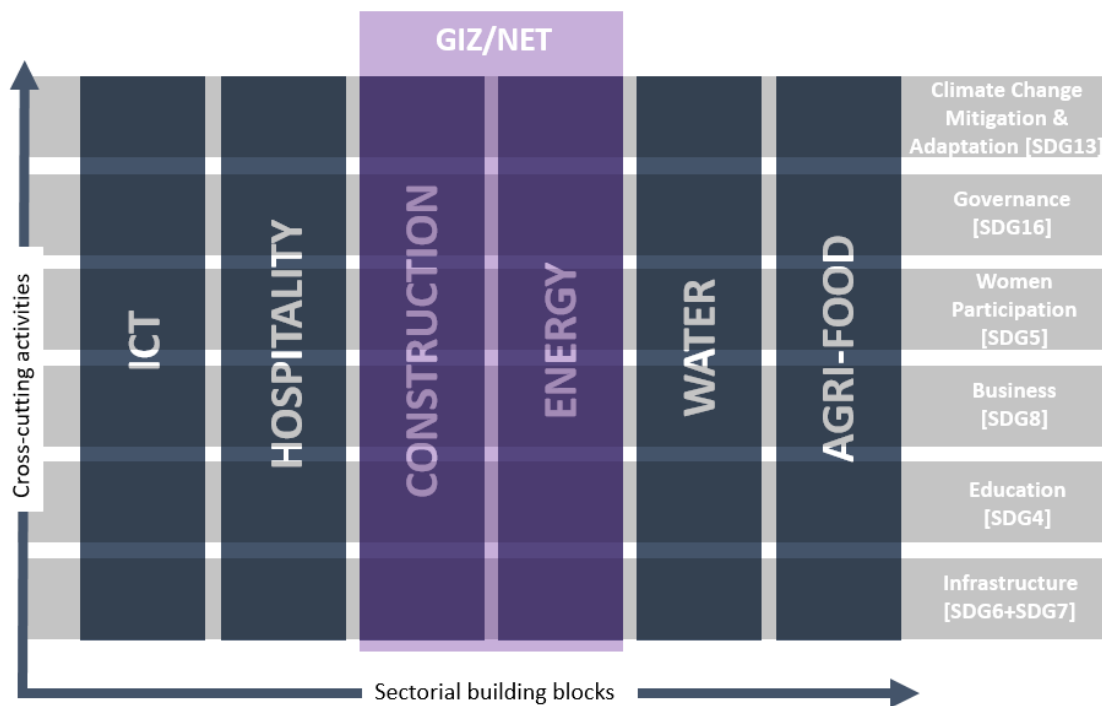


Figure 89 Overview of the potential building blocks, consisting of sectors and activities at the living, learning and working environment of the YBC.

[Ad 4. Seek private sector leadership](#)

In order to foster economic sustainability of the building blocks, they should be led by at least one private sector entity. The private sector in Jordan is reasonably efficient and each sector of the economy has private sector examples that set benchmarks in terms of productivity and impact. An example for Hospitality is the Landmark Hotel, empowering female employees in the hotel with childcare and gender-sensitive operations [Landmark Hotel, 21-10-2018]. By contrast, Jordanian private sector partners informed GFC that the Jordanian public sector is (depending on which public entity) generally underfunded, inadequately staffed and therefore struggling to convert policies into projects that truly enable citizens. GFC has studied recent budgets for the Mafrq Governorate and its municipalities and this confirms this picture. Whatever the real situation is, it is generally acknowledged that the private sector is more flexible, innovative and has more intrinsic knowledge of sectors (because they are in the sector, for instance) or activities. Therefore, it is most effective to seek partnerships with successful Jordanian private sector actors, co-invest with them, and tag along the public sector when developing, constructing and operating projects. In this way, public institutions and regulatory frameworks can be strengthened. This will ultimately also be good for the legitimacy of the political leadership.

In its search for private sector leadership, GFC found private sector partners that are willing to take on leadership positions to reach the objectives of the project. Table 16 provides an overview of these private sector partners during the project stages. Step 1 is the Development- and Construction Stage, whereas step 2 and step 3 represent the Operation Stage. Partners in Step 1 have an interest to physically showcase one or more products or services on the Youth Business Campus. These partners can help designing, engineering and constructing the built environment of the Youth Business Campus according to their (business) needs. Partners in Step 2 have an interest to place students into jobs. By placing these partners in the lead for the educational- and enterprise development activities, the project is assured of quality education (SDG4) with a high



chance of increasing employment rates in Mafrq Governorate. Some sectors include multiple Education Partners, but only the most dedicated partner(s) will commit. Partners in step 3 have an interest to reduce costs compared to business-as-usual, make profit, and have (SDG) impact. By placing these partners in the lead for the job creation activities via self-employment, hiring partners or salaried employment with employers at the Youth Business Campus, the project can achieve its job creation targets (SDG8). GFC will safeguard the enabling conditions for these partners and its staff members, so that the job creation targets will be achieved in line with the targets for gender equality (SDG5) for example. Ad. 7 will provide more information about the intended division of roles between GFC and its partners throughout the course of the project.

Table 16 Overview intended sectorial private sector leadership during the project stages (status April 2019).

| Sector | Project Step | (Potential) private sector leadership | Role at Youth Business Campus |
|-------------|---|--|---|
| ICT | 1 | ORANGE | Design, engineer and install ICT communication- and data infrastructure |
| | | 2 | RBK.org |
| | 2 | Luminus Education | Education for employment |
| | | Bayanat | Education for employment/ ICT business incubation |
| | | Luminus Shamal Start | ICT business incubation |
| | | ORANGE | ICT business incubation |
| | | 3 | Hiring partners of RBK.org |
| | 3 | Hiring partners of Luminus Education | Job creation via hiring partners |
| | | Start-ups (via Luminus Shamal Start) | Job creation via self-employment |
| | | ORANGE and linked start-ups | Job creation via salaried employment & self-employment |
| | | Bayanat and linked start-ups | Job creation via salaried employment & self-employment |
| | | IT businesses (other) such as MonstarLab | Job creation via salaried employment |
| Hospitality | 1 | ORANGE (together with hotel operator) | Design, engineering and install hospitality ICT infrastructure |
| | | <i>Contractor(s) (not determined yet)</i> | Install hospitality infrastructure |
| | 2 | Luminus Education | Education for employment |
| | | AAUC | Education for employment |
| | 3 | Hiring partners of Luminus Education | Job creation via hiring partners |
| | | Hiring partners of AAUC | Job creation via hiring partners |
| | | <i>Hotel operator (not determined yet)</i> | Job creation via salaried employment |
| | | IMDAD | Job creation via salaried employment |
| | | Hospitality businesses (other) such as DahabwaHattab | Job creation via salaried employment |
| | | Construction | 1 |
| 1 | <i>Local Contractor(s) (not determined yet)</i> | Install buildings | |
| | 2 | NET | Education for employment |



| Sector | Project Step | (Potential) private sector leadership | Role at Youth Business Campus |
|------------------|--------------|---|--|
| | 3 | Luminus Education | Education for employment |
| | | EDSCO | Job creation via salaried employment & self-employment |
| | | Hiring partners of Luminus Education | Job creation via hiring partners |
| | | Start-ups (via Luminus Shamal Start) | Job creation via self-employment |
| | | Construction businesses (other) such as TGS-Uniqa, CD20 and BLOOMS | Job creation via salaried employment |
| Energy | 1 | MEI, Alliander and/or German private sector <i>Contractor(s) (not determined yet)</i> | Design and engineer Energy infrastructure |
| | | <i>Local Contractor(s) (not determined yet)</i> | Install Energy infrastructure |
| | 2 | NET | Education for employment |
| | 3 | EDSCO (supported by NSSC-WE) | Job creation via salaried employment & self-employment |
| | | RE businesses (other) such as Our Electricity from The Sun | Job creation via salaried employment |
| Water | 1 | Semilla / Nijhuis Industries | Design and engineer Water infrastructure |
| | | <i>Contractor(s) (not determined yet)</i> | Install Water infrastructure |
| | 2 | Luminus Education | Education for employment |
| | | Cewas/ Luminus Shamal Start | Water business incubation |
| | 3 | WADSCO (supported by Semilla) | Job creation via salaried employment & self-employment |
| | | Start-ups (via Cewas/ Luminus Shamal Start) | Job creation via self-employment |
| Agri-Food | 1 | HollandDoor, Priva and other suppliers <i>(not determined yet)</i> | Design and engineer Agri-Food infrastructure |
| | | <i>Contractor(s) (not determined yet)</i> | Install Agri-Food infrastructure |
| | 2 | Luminus Education & WUR | Education for employment |
| | 3 | ADSCO (supported by WUR) | Job creation via salaried employment & self-employment |
| | | BLOOMS | Job creation via salaried employment |
| | | Start-ups (via Luminus Shamal Start) | Job creation via self-employment |
| | | Agri-Food businesses (other) such as Deserttulip | Job creation via salaried employment |

[Ad 5. Focus on community engagement](#)

GFC perceives engagement with local residents, including residents from the target group, in all project stages as key to achieve the project objectives (see also Section 3.1.5). This is why GFC already actively engaged with youth through youth associations, universities and the local TVET institutions during the feasibility stage. By having the office and full-time staff in Mafraq, GFC



applied an almost anthropological approach to find out what local residents need and how this can be achieved in accordance with the social dynamics on the ground. This is why a community engagement strategy is developed to strategize interaction and mobilization of the local residents during the stages of the project. The development stage will be the moment to pre-select and mobilize youth and generate general community support for the project.

The community engagement strategy is based on an analysis of the social dynamics of Mafraq. Mafraq Governorate consists of 4 main districts (Qassabat Mafraq, North-Western Badia, Northern Badia and Ruwayshed) divided in 12 sub-districts (Bal'ama, Erhab, Qassabat Mafraq, Manshiyya, Hosha, Sama Sarhan, Khaldiyah, North-Western Badia, Um El-Jimal, Sabha, Northern Badia and Ruwayshed). The districts and sub-districts on the Western side of Mafraq city mostly consist of the *Beni Hassan* tribe, whereas the districts on the Eastern side of Mafraq city consist of *Bedouin* tribes. The districts consist of villages and small towns, except for Qassabat Mafraq that includes Mafraq city. All villages and towns have their own mayors and community leaders (*mukhtar*). Although the power of the community leaders is decreasing, they are opinion makers within their communities. Most community leaders are aged men, but there are female community leaders as well. GFC experienced that the female community leaders often speak better English than the male community leaders and are more motivated to participate than their male peers are. The community leaders will be informed about the project through social media (FB and Instagram), but GFC follows the advice of the Governor of Mafraq and Mafraq Decentralized Council to not engage the community leaders too much. It was stated that the community leaders only think about their own people and that working through them will frustrate the project.

GFC is already creating a pre-selected group of youth. For this reason, GFC uses existing channels of the German-Jordanian Center of Excellence in Solar Energy (CoE), youth associations and universities to pre-select and mobilize youth for the first 250 internship, training and job opportunities at the Youth Business Campus. The project in collaboration with FUTURABILITY (see Annex 48) includes the mobilization of the artistic community (provided ample funding). Among the artistic community, there are 'free thinkers' who are very positive about the project. Art in general has the power to connect people and groups of people. GFC also aims to start working with passionate young people linked to the youth associations. Their commitment to serve as a volunteer for the youth associations indicates an intrinsic motivation to contribute to society.

Since the start of the feasibility stage, GFC developed a local Advisory Board consisting of youth leaders. This Board will be expanded during the development stage into a youth committee with members from all 12 sub-districts of Mafraq Governorate. In this way, obtaining valuable input is combined with the creation of community ownership and pre-selection of intrinsically motivated youth for the project. The youth committee will be used to reach out to youth in the Governorate. For the inclusion of young women, specific measures will be taken (see Section 3.1.5). UNHCR and DRC will help in reaching out to the Syrian refugee community to also involved Syrian youth in the committee as well. These agencies have lists of pre-occupations and education records, whereas youth associations have this information about Jordanian youth. Ultimately, the selection of the Education Partners and interaction with family members of potential participants will determine who can take part in the education for employment programs. Hence, this does not mean that all young people in the committee have to be GFC citizens per se.

[Ad 6. Create enabling conditions and opportunities for specific \(private & education\) partners](#)

In order to attract Education and Business Partners to Mafraq, GFC creates specific enabling conditions and opportunities for those partners at the Youth Business Campus. So far, GFC



identified around 50 potential partners. They differ in focus and their needs, but they all have in common that they seek impact, profit and that they are already active in Mafrag or consider executing activities in this geographical area. Next to the already existing incentives and opportunities that the KHBTD offers to private sector entities, the Youth Business Campus offers the following conditions and opportunities for partners (in sum):

1. **Reliable infrastructure:** GFC's core business is to keep the Youth Business Campus an attractive physical environment for all GFC partners. This includes good management of the water- and electricity services, cleaning services and maintenance services. The rental prices of the living- and hospitality space will be according to the current Mafrag's market price levels, whereas the rental prices of the learning and working space will be two or three times lower than the prices in Amman (50-60JOD/m²). In addition, the energy efficiency of the buildings will reduce the energy bills compared to business as usual. GFC's financial core business is to earn revenues from the infrastructure (buildings and utilities) and therefore has the incentive to safeguard the quality of the infrastructure for its Education and Business partners.
2. **Reliable governance:** transparent and performance based management of the Youth Business Campus infrastructure and conditions is part of the enabling conditions. This includes the involvement of its Education and Business partners and youth in decision-making processes. This involvement includes the execution of group discussions with two committees: one committee that represents the Education and Business partners and the youth committee (see Ad. 4). The formation of the youth committee has already started, but will be intensified during the development stage of the project (see Ad.4). The Decentralized Council of Mafrag will be involved in the governance system of the Youth Business Campus and thereby improve their professional skillset in administration and governance. The voice of the youth can be heard better by linking the youth committee to the Decentralized Council of Mafrag. The members of the Decentralized Council of Mafrag were enthusiastic about this idea. This ultimately aims to help improving the governance system of Mafrag Governorate.
3. **GFC management services:** based on consultations with private sector businesses, it was clear that the GFC management team can offer distinctive services to facilitate SMEs and companies to kick-off and accelerate their business in Jordan. First, companies struggle with unclear and fluid legal procedures. In addition to that, they do not know which doors in the bureaucratic sector to knock to obtain legal papers and permits [BLOOMS & MDC, 15-04-2019]. That is why some Jordanian entities employ a so-called "Mr. Fix It", a preferably well-known male retired army officer (with a high rank) who can open doors of decision-makers to speed up permitting processes and be the facilitator between the business and the public sector [Luminus Education, 11-02-2019]. In addition, start-ups need help in accessing public funding and (impact) investment. Since GFC initiates projects and has a large international network, it can help these businesses in this matter.

These examples indicate the demand-driven opportunity for GFC and MDC to help Education and Business partners flourishing by working closely together as a team, linked to the youth committee, the Decentralized Council of Mafrag and relevant public entities. The GFC management team complements the team of MDC, looking at the strengths and weaknesses of MDC. GFC could deliver an in-house lawyer and a "Mr. Fix It" (who are mostly based in Amman), a fundraising/ investment expert and an international marketing expert. MDC already has, but should continue delivering the engineering-, exporting- and public representation expertise. The organogram of this team and its links to relevant entities could look like in Figure 90.

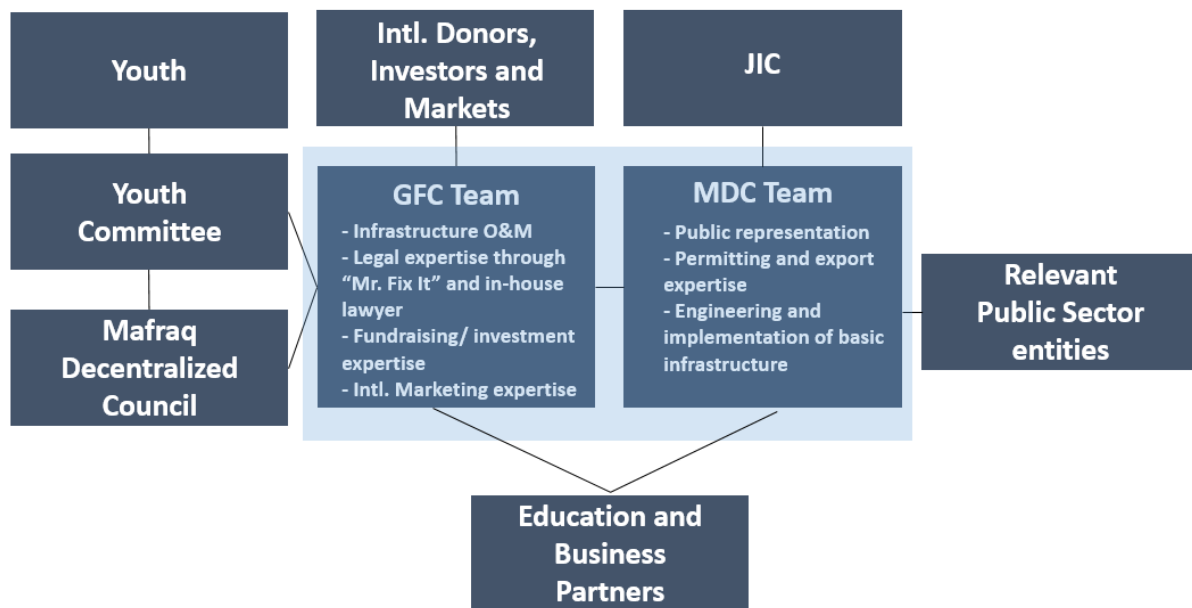


Figure 90 Organogram of GFC management team, MDC team and related entities important for Education and Business Partners.

4. Cross-cutting opportunities: partnerships only tend to work when partners are complementary to each other. Therefore, GFC offers continuity and cross-sectorial integration to these partners. This offers business and business development opportunities for private sector businesses. One example is the need for IT solutions for the Agri-Food partners. The international network of GFC will furthermore stimulate business development for partners. This was identified as a real opportunity by private sector entities during the joint Int@j/GFC workshop for IT companies in September 2018.

Ad 7. Be clear about the role division

To be successful, it is important that GFC is clear about its scope of work. To clarify the roles of stakeholders during the project stages, GFC developed an overview of the role division during the Feasibility & Project Development (1), Construction (2) and Operation (3) stages. This clarification is especially important for the Operation stage of the project. An overview can be found in Figure 91.

During the Feasibility & Project Development stage (1) GFC initiates projects based on local needs, opportunities, consultations of youth and existing activities of (potential) partners. GFC keeps this 'initiating' role during the Operation Stage (3) to grow the Youth Business Campus. GFC works together with fundraising partners to shape the building blocks in such a way that they can be publically funded during the Feasibility & Project Development stage (1). The Engineering & Design (E&D) of the Youth Business Campus is done in collaboration with MDC for the basic infrastructure and contracting partners such as Deerns and private sector leaders (see Ad. 3) for the buildings and water- and energy infrastructure. MDC takes care of the permits for the Youth Business Campus.

During the Construction stage (2) GFC keeps oversight of the construction activities, but MDC and contracting partners actually build the physical components of the Youth Business Campus. During the Operation stage (3), there is a clear division between the activities of GFC, youth and the Education and Business Partners. GFC facilitates the partners (see Ad. 6), initiates new projects, and monitors and safeguards enabling conditions for youth and private sector development.



| Feasibility & Project Development Stage (1) | | | Construction Stage (2) | | | Operation Stage (3) | | | | |
|---|--|------------|------------------------|-----------------------------|------------|---------------------|----------------------------|----------------------------------|--------------------|--------------|
| Project Initiation and Development | E&D | PERMITS | INFRA BASIC | INFRA | OVER VIEW | LIVING | EDUCATION | JOB CREATION | INFRA O&M & GROWTH | |
| GFC & Fundraising Partners | GFC, MDC & Contracting partners | MDC | MDC | Contracting partners | GFC | Youth | Education Providers | Private sector businesses | GFC | |
| | | | | | | | | | | ICT |
| | | | | | | | | | | HOSPITALITY |
| | | | | | | | | | | CONSTRUCTION |
| | | | | | | | | | | ENERGY |
| WATER | | | | | | | | | | |
| AGRI-FOOD | | | | | | | | | | |

Figure 91 Overview of the role division at the Youth Business Campus during the development, construction and operation stages of the project.

The actual education and job creation for youth in Mafrag are taken care off by the Education and Business Partners. Depending on the commitment of partners and obtaining of public funding, some building blocks may be realized earlier than others. This means that steps 1, 2 and 3 might not run simultaneously for each building block, but that GFC strives for the realization of all the building blocks in the upcoming years for the highest possible impact as a result of the cross-sectorial pollination.

The clear division in roles between GFC and partners helps donors and other entities to understand the concept. Whenever possible, GFC seeks local partners to execute (even) parts of its own tasks, such as the infrastructure O&M. It might occur that GFC establishes itself a local O&M company or that GFC contracts an existing specialized O&M company to execute the infrastructure O&M. This will contribute to the gradual embedding of the Youth Business Campus in the Jordanian (economic) landscape. However, safeguarding the enabling conditions for youth and the private sector, and monitoring impact will remain in the hands of GFC until the youth committee and Decentralized Council of Mafrag have the capacity and capability to do it themselves. This is exactly why the long-term commitment of GFC is needed, because it is expected that capacity development and change in this domain will take time.

8.2 Development Steps

During the feasibility stage, GFC prepared for the next steps to be taken during the Development stage of the project (2019-2020). These are based on the strategic starting points as described in Section 8.1. Timing of these steps is contingent to funding and revenue streams. Next steps include:

1. Further fundraising

This is a continuous activity based on GFC's fundraising strategy based and outlined in the previous section:

- a. Secure multiyear base seed funding;
- b. Search for (a) building block(s) that 'matches' local needs, GFC's objectives, objectives of the fundraising partner(s), objectives of other consortium partner(s) and the interest of the



available donor(s). After the identification of the 'match', GFC initiates that the consortium develops concept notes and proposals to obtain funding for the building block(s).

The financial roadmap for this strategy is outlined in Section 8.3) and includes an overview of the fundraising and co-financing opportunities.

2. Become a national priority for Jordan

Based on discussions with MOPIC [MOPIC/Harahsheh 17-12-2018], GFC was informed that the Youth Business Campus project can become a national priority when being embedded in several national (action) plans, such as the NDC Action Plan (see Section 3.1.1), the Strategic and Executive Plan for Mafraq Governorate 2019-2021 (GDP 2019-2021) and the Prime Ministry's plans. GFC already yielded full support on the level of the Governorate (see Annex 10-11), the Prime Ministry (see Annex 3) and verbal support by MoE and MOPIC to include GFC in the NDC Action Plan [MoE, 17-01-2019; MOPIC, 21-04-2019]. GFC aims to pursue this route in 2019 to ensure that MOPIC and other public advocates can promote the project in front of donors without technical consultations of several line ministries [MOPIC, 21-04-2019].

3. Intensify community engagement

Although GFC has intensely and pro-actively consulted the local community of Mafraq during the feasibility stage, the community should be prepared for the project in the Development stage. This means that the youth committee will be established and linked to the Decentralized Council of Mafraq (see Section 8.1 Ad. 5).

4. Conclude a development and land lease agreement with MDC

MDC is the main counterpart for GFC on the side of the Jordanian public sector. After the Prime Ministry's approval, MDC is ready to conclude a development and land lease agreement with GFC (see Annex 2). This agreement includes a high-level agreement for collaboration including a land lease for the Pop-up stage of the project, based on the current sketch design and the collaboration with GIZ aiming at financing having the building block Energy & Construction. It is expected that this can be completed before the end of 2019.

5. Engineering & Design (E&D) Pop-up stage

The sketch design for the Pop-up stage of the Youth Business Campus are ready. Based on this pre-work, the designs will be worked out in detail, including the detailed engineering for the water and energy solutions in collaboration with partners.

6. Permitting for Pop-up stage

The design need to be approved by the Jordan Engineers Association (JEA) and JIC. In addition, they will be submitted for a (limited) EIA.

7. Contracting for Pop-up stage

Jordanian, Dutch and international partners will be formally selected as contracting partners. The site for the Pop-up stage will be made ready for the Construction phase. It is expected that step 5, 6 and 7 will be concluded before the end of 2019. The exact starting date of the Construction stage depends on the agreements and financial close.

8. Construction and Operation of Pop-up stage

MDC will construct the basis infrastructure of the Pop-up stage.

If sufficient multiyear seed funding is granted, the Information and Exhibition center can be built and three steps will be inserted after step 4: the steps 5 to 8 have to be done for this center. Medio 2020 the Pop-up stage could be up and running.



8.3 Financial Roadmap

The financial goal of the Youth Business Campus consists of the transition from a publicly funded start-up of the infrastructure, training and job creation activities to impact investor funded growth. GFC believes that this type of transition is a broader necessity to leverage the USD 140 Billion globally available annual development assistance money⁷⁰ with the USD 2- 3 Trillion worldwide available impact investment capital [17 AM, 10-12-2018]. GFC calculated that realizing the pop-up stage (up to 250 jobs) requires between €7.5M and €9M and will need to be covered largely by public/donor funding. Figure 92 shows that after an initial donor-funded start of pop-up stage in 2019-2020 (90-95% public funding), 2020-2021 are the 'years of proof'. After all, the concept of the Youth Business Campus has never been implemented before in this way and in this area. This means that the 'proof of concept' of the Youth Business Campus includes showing a positive cash flow from the attraction of youth, Education and Business partners. Based on a successful, publically funded *pilot* stage (pop-up stage) and updated research about the local needs and opportunities, GFC can attract (impact) investment in 2022 to develop, build and operate the next stages of the Youth Business Campus. Blended finance (partly donor funding, partly (impact) investment) is an option that is applicable for all stages of the Youth Business Campus. For the growth stages (2021-2024), 70-90% can be funded by impact investors. This option is currently being explored with 17 Asset Management (see Annex 35). GFC is furthermore in touch with some other impact investors and key individuals that could lead to impact investment.

| | 2019-2020 | 2020-2021 | 2021-2022 | 2022-2023 |
|---|------------------------------|-----------------------------|-------------------------------|-----------|
| Investment Need | €7,5M-€9M | | €15M-€18M | |
| Possible Sources: | | | | |
| Gov. Grants & Donors | €7,5M-€8,5M | | €3M-€4M | |
| Impact Investment | €250-€500k | €300-€500k | €12M-€14M | |
| Campus Services Revenues per year | €200-€300k | €400-€700k | €400-€700k | €1,5M-€2M |
| | 90-95% Public Funding | "The years of proof" | 70-90% Private Funding | |
| Added value for Mafraq Economy per year | €300-€500k | €700-€900k | €1.5M-€2M | €5M-€10M |

Campus service performance and first campus revenues tip the balance towards impact investment during "Years of Proof"

Figure 92 Funding needs and possible sources including transition from donor funding to impact financing.

To make the transition from donor funding to impact financing work, a number of sub-goals need to boost confidence and trust levels of impact investors:

- a. The country- or area risk (as perceived by investors) needs to be *acceptable*: the proximity of the YBC site to conflict-areas (such as Syria) and the prejudices about Mafraq (see Section 6.9.1) lower the trust in Mafraq for investors. The Youth Business Campus aims to be a safe, sustainable environment in which GFC and partners aim to increase skills and labor productivity, thereby increasing trust of investors in Mafraq Governorate as an attractive investment area. This will be fostered by becoming embedded in national and local Jordanian plans (see Section 3.1.1), in addition to being embedded in Mafraq Governorate to maximize local (tribal, public and private) buy in.

⁷⁰ Money from public sources and charities



- b. The management risk needs to be *acceptable*: GFC mitigates that by starting small, working with reputable Engineering-Procurement and Contracting (Education and Business) partners, and demonstrating the potential of the pop-up stage with public funding. World-class partners (both Jordanian and international) in domains such as education, research and business development will ensure good performance in these domains. This will enable GFC to focus on the management of the YBC infrastructure.
- c. The technology risk needs to be *acceptable*: GFC manages this by separating innovative technology and proven technology in the business model of the Youth Business Campus. GFC avoids the inclusion of bleeding edge technology in the business model. GFC aims to use best in class, but proven solutions that can preferably be locally manufactured and maintained, also to increase the number of employment opportunities for youth. Additionally, GFC will abide by Jordanian regulations for the realization of the pop-up stage to avoid any permitting risks in this stage.
- d. The expected financial returns need to be *predictable with a high level of confidence, preferably with a P90 or higher*. GFC manages this by demonstrating the revenue generation potential of the Youth Business Campus during the publicly funded pop-up stage. In addition, GFC takes into account what the Mafrq market can currently bear (in rents, energy costs etc.) before any labor productivity increases. In this way, GFC avoids inflated expectations.

GFC has been intensely fundraising during the feasibility stage and aims to continue fundraising during the Project Development Stage. The current fundraising efforts include:

- Waiting for feedback from BMZ on a joint GIZ-GFC proposal that combines the existing GIZ vocational training efforts in the German-Jordanian Center of Excellence in Solar Energy (CoE) with the Youth Business Campus efforts in the Energy and Construction sectors (see Section 3.1.4, Section 6.3.4 and Section 8.1). This may result in donor funding for the Energy and Construction building blocks (around €4M) in early 2020. The board of the Jordan Renewable Energy and Energy Efficiency Fund (JREEEF) approved €1.7M in co-funding for this project. JREEEF may also open an office at the Youth Business Campus to facilitate the replication of renewable energy and energy efficiency solutions in Northern Jordan. The focal points for the NDC Action Plan from MOPIC and MoE aim to include the GIZ-GFC project within this action plan to attract further interest from donors.
- Negotiating a *CSR based* investment (up to €1M) with Orange Telecom for the ICT building block of the Youth Business Campus. Orange Telecom aims to engineer and install ICT data infrastructure in lieu of limited exclusivity on provision of services at the Youth Business Campus.
- Waiting for feedback from DOEN Foundation on a joint FUTURABILITY-GFC proposal (€25k) for the Exhibition Center, including community mobilization for the YBC project and the development of an educational module to bring Syrian and Jordanian youth in Mafrq closer to each other through art and awareness about shared history and identity.
- Adapting the full proposal (€2.5M) as prepared by Wageningen Research (WR), GFC and Luminus Education for the *Migration and Development Tender* issued by the Dutch Ministry of Foreign Affairs. The full proposal that was targeting the Agri-Food and ICT building blocks of the Youth Business Campus, was not awarded with a contract. The same proposal will be adapted and submitted to other donors:
 - Wageningen University and Research (WUR) and GFC discuss collaboration in other draft proposals for project work in Jordan (see Annex 16);



- A consortium led by HollandDoor (see Annex 34) also seeks funding opportunities for project work for the Agri-Food and Water building blocks within the concept of the Youth Business Campus.
- Adapting the full proposal (€4M) as prepared by Millennium Energy Industries and GFC for *Japan's Supplementary Budget 2018* issued by the Japanese Ministry of Foreign Affairs. The full proposal, that was targeting the implementation of a solar thermal project in Ramtha and the establishment of the EDSCO (see Section 6.3.4), was not awarded with a contract. The same proposal will be adapted and submitted to JREEEF for the 'soft' elements of the project, while the 'hard' elements of the project could be covered by Catalyst Group;
- Creating a concept note for Agence Française de Développement (AFD) with Luminus Education for the Hospitality and ICT building blocks of the Youth Business Campus. In addition, Luminus Education and GFC expect to hand in a proposal for the upcoming call from DFID about private sector development.
- Discussing with UNDP how GFC can apply aspects of the Mafraq Youth Business Campus to their "Heart of Amman" project (see Annex 36). Although GFC prefers to implement in Mafraq, this could be an opportunity to generate track record in Jordan as an implementing partner with UNDP. In addition, UNDP could become the accredited entity for a Green Climate Fund proposal. MoE has encouraged GFC to start working on a formal application process through their Simplified Application Process. GFC representative for the region, Binu Parthan, stated that he is impressed with the work of GFC so far and looks forward to receiving a UNDP-GFC concept note.
- Discussing with UN-HABITAT how a part of their proposed activities in their proposal (€14M (€7M for Lebanon, €7M for Jordan) for the National Adaptation Fund (NAF) can be implemented at the Youth Business Campus. This would target the Water and Construction components of the Youth Business Campus.
- Exploring options with Baljon Landschapsarchitecten in the Netherlands to jointly propose the startup phase of the Youth Business Campus as a pilot project for the Atelier of the Rijksbouwmeester (Architect General of the Netherlands). This entity is developing concepts for affordable climate proof building designs for fragile regions (Project Bouwen voor de wereld/Project Building for the World).
- Becoming part of the project pipeline of the National Green Growth Action Plan (NGGAP), pursued by MoE and GGGI (for the Agri-Food, Water, Energy and Construction building blocks) and the National Adaptation Plan (NAP) pursued by GIZ (for the Agri-Food and Water building blocks).
- Becoming part of the project pipeline of 17 Asset Management⁷¹, with help of UNDP (see Annex 36).

Once operational, the Youth Business Campus will generate rent and service revenues necessary to attract more impact investors to finance the further growth stages. The expectation that this transition will happen is based on three observations during discussions with impact investors:

- They like that the developed sector business cases offer financial returns and impact;
- They confirm their interest in the Youth Business Campus. The financial needs for the Youth Business Campus (see Figure 92) fit the investment scale of impact investors and they like the 'proof of concept' stage, meaning that the concept is demonstrated in practice, offering repetition and scaling potential;

⁷¹ <https://www.17assetmanagement.com/>



- The increased interest for the Youth Business Campus by partners, resulting in first commitments in Lols, support letters and joint fundraising concept notes and proposals. The donor funded start is an opportunity to keep interested impact investors engaged from the beginning, which will speed up the process of attracting impact investment after the 'proof of concept'.

The roadmap to impact investment requires donor funding for the building blocks and commitment from impact investors based on the donor funded start of the Youth Business Campus. To secure a robust seed funding base to obtain these commitments, GreenfieldCities intends to request €3M (average €750k per year for a period of 4 years (2019-2022)) in milestone based base funding from the Dutch Government. Additionally, GFC seeks an equal amount of equity and grant funding from donors and (impact) investors. The growing support and commitment for the Youth Business Campus concept justify this intended request. After the “founders phase” and the initial support by the Dutch government for the feasibility stage, timing is good for the first PPP steps, offering each stakeholder and shareholder the benefits of leverage and de-risking. Although subject to change, Figure 93 shows how the financial side of the project is developing and how the transition from donor funding to private impact funding is expected to materialize.

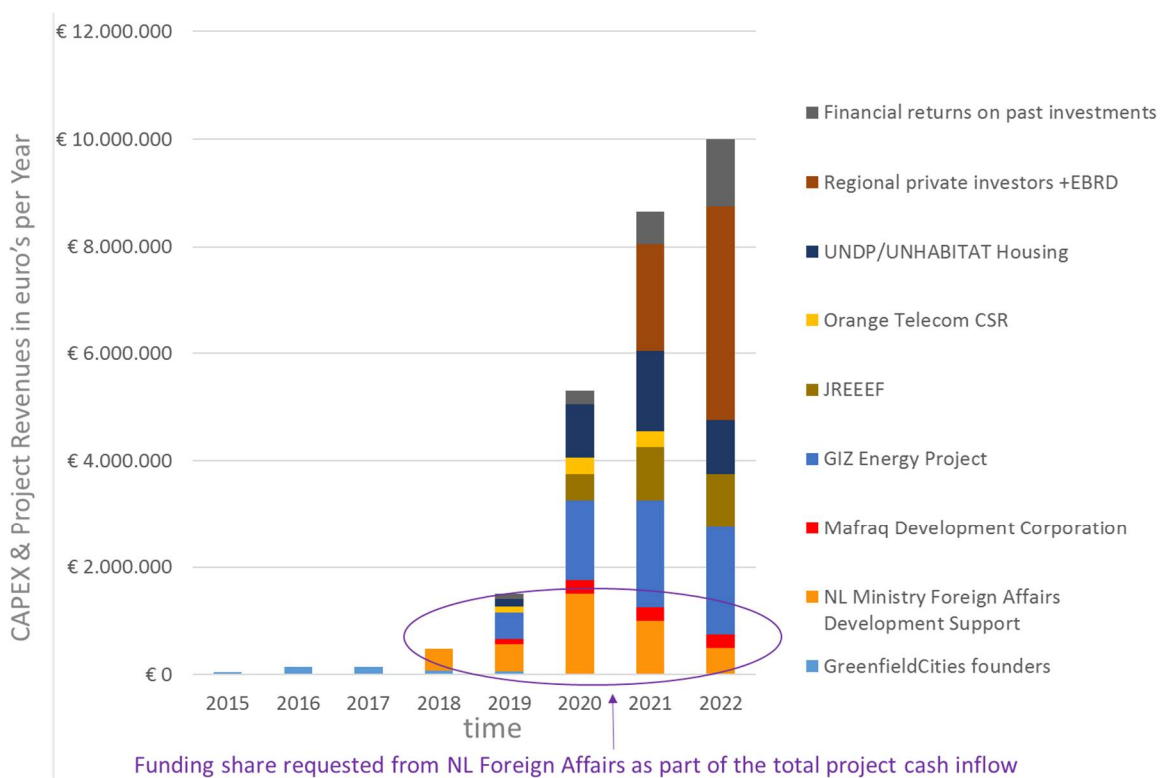


Figure 93 Capex and project revenues for the Youth Business Campus

The probability that partners commit to the Youth Business Campus will significantly grow when the next milestones are reached with the same development pace as demonstrated to date. Donors and private sector (impact) investors tend to connect with entities that show presence and impact in Jordan. The orange blocks at the base of the stacks 2020-2022 indicate the seed funding asked from MinBuza/DSH. It is key to have base funding for a few years ahead to get co-funding from donors of building blocks, to have impact investors on board and to keep the project



development pace high. Table 17 shows a high-level overview of the planned activities and allocation of the €3M from the Dutch Government.

Table 17 Overview yearly allocation of potential seed funding from Dutch Government.

| | 2018 | 2019 | 2020 | 2021 | 2022 | |
|---|-----------|-------------|-------------|-------------|-------------|--------------|
| Feasibility Study | € 398.000 | | | | | |
| Project Development and Management | | | | | | |
| Engineering | | € 250.000 | € 50.000 | € 25.000 | € 25.000 | |
| Permitting | | € 150.000 | € 50.000 | € 25.000 | € 25.000 | |
| Contract Management | | € 50.000 | € 50.000 | € 25.000 | € 25.000 | |
| Partner Management | | € 200.000 | € 200.000 | € 100.000 | € 50.000 | |
| Project Management | | € 140.000 | € 150.000 | € 10.000 | € 10.000 | |
| Contribution to constructions | | | | | | |
| 600m2 education buildings | | | € 210.000 | € 210.000 | | |
| 600m2 "Women Oasis" | | | € 210.000 | € 210.000 | | |
| 300m2 O&M center | | € 210.000 | | | | |
| YBC operational start up support | | | € 80.000 | € 100.000 | € 150.000 | |
| Total requested support from Foreign Affairs | € 398.000 | € 1.000.000 | € 1.000.000 | € 705.000 | € 285.000 | € 2.990.000 |
| Targeted partner contributions (GIZ, GCF, Orange, etc.) | € 100.000 | € 950.000 | € 4.500.000 | € 7.900.000 | € 9.600.000 | € 23.050.000 |

GFC predicts substantial returns on eventual base funding by the Dutch Government:

- The feasibility study demonstrates the potential of achievable and measurable impact in the fields of Economics, Climate, Environment and Gender.
- The Youth Business Campus is an innovative concept for sustainable reception of migrants in their own regions of origin. This can help shaping the Dutch policy on migration. The concept has repetition and scaling potential and can reduce or avoid costs of reception and integration in the Netherlands or the EU.⁷²
- The Netherlands can lead the EU policy development on migration by further developing GFC.
- The combination of sustainable assets, services and capacity building immediately yields financial revenues. This secures a sustainable operation of the Youth Business Campus and reasonable returns for impact investors.
- GFC has the support to attract co-funding in the short-term and private (impact) financing in the medium-term. The expected leverage on the Dutch government base funding is at least a multiplier of 5.
- The strong local embedding in Mafraq and the long-term commitment to support the host community increases tribal, public and private buy in and create export opportunities for Dutch companies and knowledge institutions.

GFC is aware of the project risks, but perceives innovation in development assistance and migration rather as an urgent need than as an option. The public sector can kick-start innovation in these domains to secure 'pull-conditions' in migrants' regions of origins in the form of sustainable infrastructure, high labor productivity and employment in emerging green sectors of developing economies. This will unlock available impact capital to mitigate the current trends in both climate change *and* migration. In that sense, GFC is a very small investment with a potentially huge upside, both financially as well as in terms of impact. The worst-case scenario (apart from all-out war) is that the conclusions of the feasibility study about the Youth Business Campus are off the mark. In that case, small-scale high quality assets of the pop-up stage remain in a region that very much needs such assets. The initial small scale makes the risk of 'white elephants' very low, while the

⁷² Reception and integration costs of non-western refugees over a 5 year period add up to an amounts between € 150.000 and € 170.000 per person. The public part of the costs for building a YBC are much lower. For the proposed pilot project, approximately € 10 million has to come from public sources, only once during its life time. Per migrant, refugee or host community member on campus this costs between 3 and 5 k€.



demand for infrastructure in Mafraq is higher than the supply so that infrastructure will be put to good use with a near 100% probability [Governor of Mafraq, 12-08-2018].



9 Scalability Potential

GFC experienced during the feasibility stage that the road to successful (social) entrepreneurship depends for 20% on professional tools, product and services features (“hard” elements of the Youth Business Campus), while for 80% on the contextual fit. To be successful the interests of the Youth Business Campus and the context need to be aligned. During the feasibility stage, GFC continuously validated the Youth Business Campus concept with Jordanian stakeholders. This was a valuable process to adapt the concept to the context of Jordan and Mafrq Governorate in particular.

Jordan offers a very complex context with fluid and fragmented power- and governance structures (see Section 6.9.1). This context differs in each Governorate due to different tribal-, public- and private sector representations. This underlines the necessity and value of a thorough study of the local context. It is furthermore key to start a new initiative (for a Youth Business Campus) with a small-scale pop-up stage. Study results can be tested in a real life context and concept and design can still easily be adapted. It took GFC a full year of research with hundreds of meetings, setting up local boards and setting up links between local- and international public- and private stakeholders before the concept was sufficiently aligned with its context including its stakeholders. In the end, it paid off with an overwhelming expression of support. This lesson learned should be the basis for any new GFC project.

Within GFC’s mission and strategy, scalability can be decomposed in two interrelated types of scalability:

1. Scalability of the Mafrq Youth Business Campus itself;
2. Scalability in terms of repeating the Youth Business Campus concept elsewhere.

[Ad 1. Scalability of the Mafrq Youth Business Campus itself](#)

This type of scalability means that the Youth Business Campus would scale into a private sector (impact) investment grown city district with a lot of youth and private sector activity. On the current location the number of citizens could easily grow to 10.000 or more. The working assumption for this type of scalability is that trust of (impact) investors can be boosted by providing an environment with high quality assets (e.g. buildings & tools), complementary education and business development, and the commitment to a permanent presence of reliable management. The pop-up stage should demonstrate to investors that the assets yield financial returns, while young women and men can turn their skills into paid jobs (impact). The permanent presence of GFC’s management should reduce the perceived risks for investors. If this works, a gradual transition from donor funding to impact investment growth is possible. In this case, the Youth Business Campus can grow as a whole, further strengthening the confidence of local stakeholders. The potential is clear, but an initial base funding is required to show ‘proof of concept’ to make the growth of the YBC beyond the 250 and eventually beyond the 1500 people mark possible in Mafrq.

[Ad 2. Scalability in terms of repeating the Youth Business Campus concept elsewhere](#)

This type of scalability means that the Youth Business Campus would be repeated in other geographical areas in Jordan or outside Jordan. By the time that the Youth Business Campus in Mafrq becomes a success, GFC has learned how to get the Youth Business Campus concept in place in the context of Mafrq. However, as argued above any other contexts require a contextual study before a new Youth Business Campus can be realized. The required time for this study can be



reduced by repeating the concept in areas with similar contexts⁷³. Time could also be reduced in case real estate investors embrace the concept and want to use the GFC approach to develop their own 'city'. However, GFC's selection of new geographical locations for the development, construction and operation of Youth Business Campuses would depend on several factors:

- The need for a Youth Business Campus: GFC would only invest in geographical areas with a high *migration risk* profile. Such areas face economic and climate-change related issues (root-causes of migration) that already push young people out of these areas or have a high probability of pushing young people out of these areas in the near future. The migration risk profile of Ma'raq is high; the combination of a high youth unemployment rate, limited decent jobs and a lack of water creates a cocktail of factors that already push, but might push even more young people out of this Governorate (see Chapter 4). In that sense, GFC looks at current and future migration risks.
- The public sector demand or support for a Youth Business Campus: GFC preferably only replicates the concept in geographical areas where the public sector (or at least a public entity) demands and fully supports GFC's approach to tackle root-causes of migration. In the context of Jordan, MDC is the demanding public entity. Such an entity should even be willing to provide seed funding for the development of a Youth Business Campus. MDC has not enough funds, but contributes by paying in kind ("hard" infrastructure at a very low price) GFC already received requests from Parliament Members from other Jordan Governorates to develop a Youth Business Campus in Aqaba and Ma'an Governorates, Governorates in Southern Jordan [Women Committee of Jordanian Parliament, 11-12-2018]. In addition, MOPIC expressed that the Youth Business Campus should become a replicable innovative model to reduce CO2 emissions and create jobs in green growth sectors [MOPIC, 25-04-2019]. Finally, several sources have stated that the Youth Business Campus should become a model that could be rolled out in the MENA region with Jordan as the basis for knowledge, tools and skilled human resources.
- Focus regions of donor community: In case the pop-up stage of the Youth Business Campus in Ma'raq yields positive financial returns and impact, (impact) investors might be willing to invest in Youth Business Campuses in other geographical areas without a donor-funded start. However, this is not yet the case and seed funding from the donor community remains a need until the 'proof of concept' can convince (impact) investors to step in. The initial need for seed funding from public entities and donors would force GFC to repeat the concept in regions with interest and presence of the donor community.
- Safety of citizens, staff and assets: YBC citizens, GFC staff would need UN-protection to operate in dangerous areas. This was one of the reasons why GFC selected Ma'raq, Jordan to test this *pilot* project under safe conditions (see Chapter 4). Safety should not hamper GFC from developing a Youth Business Campus if the need and public sector demands are high. However, safety of YBC citizens, GFC staff and assets should be taken care off in any context, either by the UN or another public entity that can secure safety for GFC. GFC would not repeat its concept in an area where the safety of staff and assets cannot be reasonably guaranteed during the feasibility, project development and construction stages of a Youth Business Campus project.
- Availability of zones with enabling conditions: the Youth Business Campus in Ma'raq is located within a Special Economic Zone. Its regulatory framework and services by MDC and JIC already provide advantages for GFC itself and private sector investors. GFC does not want to- and cannot change regulations around tax or permits in a random site, but can thrive on the

⁷³ A practical rule-of-thumb for the geographical location for the first repetition of the concept may be within a 2-3 hours travel distance from the YBC site in Ma'raq.



enabling regulations in an already existing zone with special tax and permit arrangements. For repetition of the Youth Business Campus concept in other geographical areas, GFC would therefore prefer to realize the concept in a zone with already (some) enabling conditions for private sector development. This fits within the wider debate about the realization of Special Development Zones (SDZs). It may be worthwhile to consider creating a specific platform for repetition and scaling: a platform for the development of SDZs worldwide. GFC is part of the discussions about the creation of such a platform with a number of European and US actors (see Annex 41).

The concept of the Youth Business Campus could be repeated within Jordan and outside Jordan. Looking at the factors above, a potential area within Jordan for a next Youth Business Campus could be Ma'an Governorate, a Governorate with extremely high youth unemployment, drought, demand from Parliamentarians, a sufficient amount of attention by the donor community, guaranteed safety for GFC staff and assets, and a Special Economic Zone.

The selection of areas outside Jordan is less clear-cut and is dependent on the situation. Table 18 is non-exhaustive and presents 4 different type of situations, including key characteristics a YBC should have in that situation.

Table 18 Migration Situation, focus and character of a YBC.

| Type | Description of Situation | Focus on: | Characteristics YBC |
|-----------|---|---|--|
| A. | Host countries in the neighborhood of a (natural) disaster, or war. Host country is not a (fully) developed country and cannot bear the burden, but is relatively stable and safe. <i>Examples:</i> Jordan, Lebanon & Turkey because of the War / uprising in Syria. | Hosts and Migrants. Aim for local transition to impact investing | <ul style="list-style-type: none"> ▪ Up to 50-50 host citizens-refugees ▪ Profit lands in host-country ▪ No extreme safety measures necessary |
| B. | Collection points at the edges of the European Union; this can be outside (<i>Examples:</i> Libya, Morocco, Tunisia) or just inside the EU (<i>Examples:</i> Greece, Spain, Italy) | Migrants, this is a publicly funded effort focused on managing migration flows | <ul style="list-style-type: none"> ▪ Variety of nationalities >complex to mix hosts and migrants >temporary solution to be combined with type D Campuses for returnees. <ol style="list-style-type: none"> a. preps for return b. preps for integration in country of destination ▪ Host community should benefit, but military protection can be necessary outside the EU |
| C. | Post-conflict, Post-disaster and reconstruction of the country and its cities, campuses. <i>Examples:</i> Syria, Iraq (plains of Nineveh) | Hosts, and transition to equity based Impact investment, security, good governance and access to resources. | <ul style="list-style-type: none"> ▪ 100% returnees ▪ Profit lands in country of origin ▪ Military and civil protection (UN, EU, NATO) |



| | | | |
|------------------|---|---|---|
| <p>D.</p> | <p>Countries of origin having a hard time fighting climate change induced phenomena (draughts, floods, hunger, conflicts over fertile lands, ...) <i>Examples:</i> entire Sahel region, Congo (extreme risks), but also Morocco and Algeria (high risk)</p> | <p>Hosts, and transitioning to strong governance and sustainable green growth</p> | <ul style="list-style-type: none"> ▪ 100% inhabitants of the country ▪ Limited safety precautions ▪ Learn and implement ways to fight water & energy scarcity; how to keep the lands fertile |
|------------------|---|---|---|

[Situation A: Host countries in the neighborhood of a \(natural\) disaster, or war](#)

Because of a war or a natural disaster people flee first to neighboring countries that are relatively stable and safe. If the cause for migration is not resolved in a short period of time, and the neighboring countries cannot bear the burden of reception of refugees, refugees will want to move onwards to the EU. Basically this is the situation in Jordan hosting a high number of refugees fleeing the war in Syria. Other examples are Lebanon and Turkey. Typical characteristics of an YBC: economic benefits land in the host country, aim campus citizens: 50-50 refugees-inhabitants host country, no special safety measures.

[Situation B: Collection points of at the edges of the European Union](#)

When migrants including refugees try to reach Europe, they use specific routes. Before or just after crossing the border with the EU, collection points have come into being. Examples of these points outside the EU are Libya and Tunisia. Circumstances these camps are qualified by many as “undignified” or “inhumane”, allegedly on purpose to prevent migrants from travelling to the EU. More or less the same goes for the collection points just inside Europe (Lesbos / Greece for instance). A YBC model could work to receive migrants in a dignified and humane manner. The economic benefits of the campus should land 100% in the host country. YBC staff will be close to 100% host country. All YBC citizens obviously will apply or already have applied for asylum in the EU. There are two possibilities: (a) the application is rejected and the migrant has to return to her/his country. Education and training will prepare him for a successful return. And (b) his application is accepted and she or he will travel to the destination country inside the EU. Education and training will prepare him for successful integration. In both cases, the education and training will be high quality, intensive and will last for at least half a year. GFC will seek (multinational) businesses and education providers connected to the region of origin and the EU. For YBCs outside the EU, additional safety measures have to be taken. For Libya, this could include military protection of the campus.

[Situation C: Post-conflict, Post-disaster: reconstruction](#)

In a post-conflict or post-disaster situation, reconstruction and rebuilding will start. In many cases, the level of destruction is substantial and local economies have to be rebuilt from scratch. A YBC can give a boost to the process of reconstruction; and may even prevent a second wave of migration because the situation turns out to be hopeless. Examples are post-war Syria and Iraq in the plains of Nineveh where ISIS has driven out hundreds of thousands of mainly Christians. The rise and fall of ISIS has done substantial of damage to the regional economy. All campus citizens could be returnees; Economic benefits entirely for the country under reconstruction. Military protection for sure necessary in the first years (UN, EU or NATO). In post-war Syria, because returning Syrians do not trust Assad. In Iraq, because of religious rifts that have become much more outspoken and even violent after the wars in Iraq.



Situation D: Countries of origin having a hard time fighting climate change induced phenomena

Climate change induced push factors such as draughts, floods, hunger, conflicts over fertile lands are causing and will cause many people to want to migrate to Europe. Most vulnerable areas are the Sahel region and Congo (extreme risks), but also Morocco and Algeria (High risk). YBCs in these regions can prevent people (in particular youths) from migration to the EU or elsewhere. Its citizens will be 100% inhabitants of the country. It could also be a stepping stone for returnees whose application for asylum in the EU was rejected (see under Situation B). The YBC should focus on learning about and implementing measures to fight water & energy scarcity; how to keep the agricultural lands fertile, in short, how to adapt to and fight the effects of climate change (without making it worse: hence mitigate). As conflicts have started or loom over the region because of a lack of vital resources, limited safety precautions may be necessary.

In all situations economic benefits land in the EU as well because the number of migrants traveling into Europe is reduced (see Section 6.6.2)

If successful, the concept could even be rolled-out in the context of migration streams from Latin America to the US. The recent movements of migrants from countries like Honduras to the US-Mexican border could potentially state the relevance for aspects of the Youth Business Campus concept in this context. Some regions fall within multiple categories. The Youth Business Campus concept can be shaped into various options depending on the context. This underlines again the importance of a context-driven Feasibility study for each potential geographical location.

Concluding on scalability, GFC believes that the potential depends to a large extent on the success and learning curve of the first- Mafrag Youth Business Campus. Therefore, the primary focus for the upcoming 3-4 years of GFC and partners should be on making the Youth Business Campus in Mafrag successful. Once the transition from donor funding to impact investment financing is beginning, there are no limits towards scaling and repeating. When other countries and development organizations copy the concept there could be YBCs in any critical part of the world within 10-15 years.



10 Conclusions and Recommendation

- GreenfieldCities is about creating sustainable cities in fragile regions together with local and international partners. During the past 10 months, GFC executed a study to test the feasibility of a pilot project for a Youth Business Campus in Mafrqa, Northern Jordan. In the feasibility study proposal, the key goal was phrased as creating a truly lasting (hence sustainable) enabling environment for job creation for Syrian and Jordanian people⁷⁴. The main conclusion is that creating a minimum viable product in the form of a Youth Business Campus can lead to reaching the aspired goals.
- This study is not a classical economic feasibility study using (sectorial) theoretical models. Instead a method of intense interaction with all stakeholders potentially contributing to the economic success of the YBC (including education providers offering job guarantees) and asking them the bottom-line question: are you willing to participate, rent office space, exploit a farmer field school and so on and so forth. For GFC (as developer and long-term operational and social real estate manager), potential funders and impact investors alike, this appeared to be a more reliable base for capital allocation decisions and potential buy-in than the theoretical models mentioned above.
- GFC generated high levels of support and interest in the project from multiple stakeholder groups in Jordan. The key Jordanian public stakeholders for the project like MDC, JIC and MOPIC support GFC in its local mission. In addition, GFC is supported by advocacy entities and interest groups with strong lobbying capacity at the level of relevant public entities. GFC also obtained high levels of interest from young people, education providers and private sector entities to become users the Youth Business Campus. These people and partners will help to show that the YBC can generate positive financial returns. Many Education and Business Partners are also fundraising partners. GFC raises funds with these partners for the donor funded building blocks of the initial pop-up stage of the campus. A Jordan-focused impact investment vehicle showed a high level of interest to support the Youth Business Campus to grow *after* the pop-up stage. Although active engagement with these stakeholder remains important during the next stage of the project, GFC expects that it has generated and mobilized the right levels of support and interest from Jordanian stakeholders to succeed in the realization of the objectives.
- In this stage of the project, the focus for the stakeholder analysis was on the Jordan stakeholder landscape because the YBC will be built in Jordan. But Dutch and EU stakeholders are also important because of the migration crisis that has taken place in and between member states and at the outside borders of the EU. Managing migration and refugees reception and (lack of) integration is already for decades on the political agenda of Western and Southern European member states in particular. Since the crisis in Syria, it is a key subject in all member states and in the EU, even dominating elections. Most important stakeholders at this stage are public sector (also as potential funder for the development and building of the campus) and Dutch organizations that will benefit from the YBC. Notably, these are private sector parties and knowledge institutions that can increase their turnover by exporting products and services. The majority of Dutch stakeholders involved, support the concept of the YBC strongly to very strongly. The level of interest at stake for most of the stakeholders is high but not all stakeholders are aware of the GFC project. As said, this is partly caused by the limited amount of time GFC has spent interacting with Dutch and EU Stakeholders. Naturally, this will improve

⁷⁴ Although GFC is founded to help reduce the migration crisis, during the feasibility study the importance of putting the host country first was underlined many times by key Jordanian stakeholders.



during the development, building and engineering stage. More time has been spent in Jordan because the YBC has to be built there. After all, the need and necessity of and priority for alignment of interests through Jordanian stakeholder interaction is key for the success of the project and ultimately its feasibility. The level of influence on the project, in particular of many private businesses, is overall still fairly low. GFC will seek forms to bundle their power, and seek contact with their representing bodies. By contrast, public sector stakeholders such as MinBuZa and MPs in the Dutch government coalition show very high levels of interests in the project and clearly understand the high value at stake.

- The Midterm workshop held in Amman in November 2018 aimed at presenting midterm results, engaging with participants (stakeholders), collecting feedback and exploring ways forward during intensive breakout sessions. Speakers as well as participants pledged their support to the concept and the design of the YBC. The step-by-step approach, the unconventional method to assess the feasibility, the multi-sector approach and the perspective something tangible will be built in Jordan/Mafraq within the near future were greatly appreciated. The Jordan Advisory Board, with its prominent members of Jordan society presented itself during the workshop and took a leading role during the breakouts and after these sessions. Invaluable suggestions for the road ahead were made during the workshop, while tangible support in the shape of Lols and jointly drafting of concept-notes started to materialize from that moment on. The workshop proved to be very successful and has proven to be a pivotal moment in the feasibility study and for GFC as organization: GFC was taken more seriously and talks and meetings were taken to another level.
- The location for the first YBC in Northern Jordan, close to the Syrian border was selected together with the Dutch Ministry of Defense. This study confirmed that the chosen location combines the needs and opportunities, acceptable risk levels and potential to test regional replication after initial success. The location is logistically strong at the Amman-Damascus-Baghdad highway junction. The Amman and Damascus markets are within 90 minutes by car. Finally, the initiation of rebuilding Iraq and Syria also makes the YBC a strong launching spot for regional business activities.
- Competitive advantages of the YBC in the Free zone in Mafraq include:
 - Low land prices;
 - High quality Infra for a low fee;
 - One-stop-shop permits;
 - High quality labor for an attractive price;
 - Excellent education & training (on the job).
- The Jordan and Mafraq economy are fragile. Labor productivity is too low and import dependency for key resources makes Jordan vulnerable to economic shocks. Reforms are needed and increasing labor productivity should provide the fiscal space to do so. The study revealed realistic economic opportunities in six economic sectors in Mafraq. Moreover, GFC can build on existing talent, a fairly productive private sector, existing high quality education providers and political stability to demonstrate at a small YBC scale that labor productivity increase will attract investment, accelerate economic growth, job creation at mid-income levels and women labor participation. The study resulted in selecting 6 key focus sectors for the YBC by researching a combination of local needs, local strengths, financial attractiveness (Return on Investment), job creation potential and expected time to success. These focus sectors for the YBC (in order of financial attractiveness) are Hospitality, ICT, Energy, Construction, Agri-Food, and Water. The order in terms of existential needs for Mafraq would almost be the exact opposite, underlining the need for financially stronger sectors to support the financially weaker ones. Because all sectors are under the umbrella of GFC operational and facility management,



cross financing is possible. All but the water sector will become attractive for impact investors in 3-4 years. Other cross sector benefits of a multi sector approach are complementarity in time to success and complementary necessary skill sets. The cross sector approach will also create a more diverse, resilient economic landscape with jobs at many levels for both genders.

- The gap between graduate skills and market demanded skills differs per sector, but young people in Mafraq often miss specific private sector skills, including professional, English language and job specific technical and/or practical skills. Education providers in Mafraq do not teach students these skills and the lack of private sector activity in Mafraq also does not provide learning-on-the-job (internship) opportunities to obtain these skills. The lack of private sector skills is a main reason why the private sector does not perceive Mafraq as an interesting business destination. This creates a vicious circle consisting of a lack of private sector skills due to a lack of private sector presence and a lack of private sector activity due to a lack of private sector skills. GFC frequently heard that private sector companies and high-quality education providers would not come to Mafraq, but the feasibility study shows that many *education for employment* providers and private sector entities are interested to become part of the Youth Business Campus (see LoIs). The Youth Business Campus can break the vicious circle by attracting Education Partners and some private sector to create a pool of skilled human resources, a prerequisite for private sector development. This makes it highly likely that the concept will work, also in Mafraq.
- The YBC is a combination of high quality assets (buildings, energy, water, IT, green public space etc.), complementing education and business services and the long term commitment by GFC to keeping this combination strong over time. This concept was put together in a sketch design for the YBC with excellent environmental, gender and business support properties at cost levels that the current Mafraq economy can bear. The concept was discussed with many stakeholders and there is a widespread belief that the transition from donor seed funding towards private sector impact funding can actually be made, referring to the 50 support statements and strong local embedding. In 3-4 years, the YBC does not need public donor money anymore and can run completely as an integrated part of the Jordanian economy, setting benchmarks in various sectors of Jordanian society.
- The making of the urban planning for the site and the sketch design of the Youth Business Campus has been a journey in its own right. Right from the start, potential users (Jordanian student groups from two major Jordan Universities and GFC's Syrian team members) have been actively and intensely involved in the planning and design. The Jordan student groups had Urban planning, Engineering and Architectural design as their main study topics. Many of them had challenging assignments, some were participating in a design competition for the campus. The regional data, information and, above all, inspiring ideas proved to be a goldmine for GFC's architect (born in Iraq, majored at the TUD). Biggest challenges: combine all the selected six sectors and the multi-functionality (living, learning, working and relaxing) into a place with character and coolness. A place that inspires and has sustainability inbuilt. The result is a sophisticated urban plan for the site in which the step-wise development will take place along functional axes. The 3D design looks compact, yet spacious. Powerful, yet inviting. Small-scale, tailored to human size, yet 'grande'. Open, with enclosures. In short: a great place to live, learn, and work!
- GFC will use the SDG framework to measure impact of the project. The SDG framework is especially valuable when SDG impact can be measured quantitatively and in time. GFC selected 8 of the SDGs to measure YBC impact. The feasibility study resulted in impressive potential impact levels: three thousand new jobs, 50% women participation and more than 80% GHG reductions compared to business as usual are expected SDG-driven results. The high



impact levels are directly linked to the cross sector approach discussed in the previous bullet. The YBC will deliver what the SDGs were intended for: tangible, lasting and comprehensive impact.

- Local regulatory alignment is good. There will be no spatial planning objections, because the YBC project fits the spatial frameworks of the KHBTDA, Mafraq City and Mafraq Governorate. Due to compliance to existing policies and regulations for the pop-up stage, GFC also does not expect legal- and environmental barriers. A point of attention could be the inclusion of Syrian refugees. GFC should actively engage with JIC and relevant public stakeholders, especially in the water- and energy sectors, to ensure smooth permitting processes. An issue could be a lengthy permitting procedure for the construction of the Youth Business Campus, but good relationships with MDC, JIC and MOPIC, GFC's team and the set-up of a technical committee aim to facilitate this process. The benefits of the planned innovations in the growth stages of the YBC should be shown and discussed to smoothen the permitting process for the Touch-base and fully developed stages.
- The 8 selected SDGs for the YBC project are all relevant for the context of Mafraq Governorate. In terms of socio-economic impact, the impact of SDG4 fits the priority of Jordan to create a young skilled workforce, while SDG8 will impact the local economy of Mafraq, also with support of very talented young women (SDG5). In terms of climate related impact, the YBC will save water- and energy (SDG6 and SDG7), while having significant climate impact through GHG reductions and climate adaptation interventions (SDG13). In terms of impact on local governance, the YBC project will strengthen the decentralization efforts in Jordan (SDG16) and showcase how collaboration and complementarity by several stakeholders will effectively generate more results in Mafraq Governorate compared to business as usual (SDG17). Many Jordanian stakeholders perceive GFC as a local opportunity that benefits Jordan regardless the Syrian crisis. The study has indicated that the YBC concept quickly wins local buy-in and can be adapted to a fluid contextual situation. This is turning out to be a strength of the YBC approach. With the acquired experience, GFC could get to a contextual fit in Dara'a Governorate in Syria for a returnee solution for example.
- The concept of the YBC aims at helping to curb forced migration by creating sustainable reception in the region of origin. Clearly, this has a positive impact on the Netherlands and the European Union in two ways:
 - Preventing of societal tensions caused by the migration crisis fueled by root causes including climate change. Some experts claim this crisis to be a key threat to EU and national security, while societal tensions (if not addressed) may be existential for the EU as an institution.
 - Avoiding high reception and integration costs of migrants and investing in regions of origin (related to SDG8). Both enhance stability in NL /EU and in the region of origin and help in that way preventing societal tensions as well by the way. Reception and integration costs of non-western refugees over a 5 year period add up to an amounts between € 150.000 and € 170.000 per person. On the other hand, the public part of the costs for building a YBC are much lower. For the proposed pilot project, approximately € 10 million has to come from public sources, only once during its life time. Per migrant, refugee or host community member on campus this costs between 3 and 5 k€. The business case for investing public money in the YBC is rock solid from a Dutch or EU perspective.Impact is indirectly monitored through SDG16 (YBC will host more than 1000 Syrian people).
- A mechanism could be devised for EU donor-countries investing in YBCs. These could be allowed to diminish their quota for receiving asylum seekers at home. After all, these countries made sustainable reception in the region financially possible.



- The direct trade relationship between the Netherlands and Jordan is solid but small in terms of economic value, but in a 1.500 km radius around Amman, the trade and business interests have value that is similar to that between the Netherlands and the US. Jordan can be an ideal stepping stone to the larger Arabic markets. The YBC's continued and highly valued presence, business development experience and business services can help Dutch and EU companies to make a successful market entry. GFC intends to demonstrate this with export oriented activities involving Dutch companies such as Priva, Nijhuis Industries, Semilla, VANAD Group, CD20, Lagerwey / Enercon and Uniqa. The financial stakes in terms of additional turnover related to the realization of YBC itself range per company from hundreds of thousands of Euros to tens of millions of Euros (Lagerwey / Enercon for instance).
- GFC can help strengthen local political leadership, public sector performance and ongoing decentralization efforts. Political sensitivities of the project may lie in the share of Syrian refugees, private sector development in a public sector dominated Governorate and the limited trust of the mostly Amman-based political elite in Mafraq's development potential. GFC will have to negotiate with Jordanian authorities to include a significant share of Syrians in the YBC. This can only be done with support of the donor countries (member states of the EU, US) or the EU itself. GFC's Advisory Board and other advocates of the YBC project will help GFC as well to navigate the complex Jordanian political system and sensitivities.
- It is overwhelmingly clear the GFC mission to receive refugees and reduce push factors in the region of origin fits the view of all parties in the Dutch Parliament. The views of parties towards GreenfieldCities mission in general is important of course, but more important is their take on the pilot project in Mafraq (the YBC) as developed, analyzed, and studied in this report. Parties currently part of the government coalition like and support the approach of GreenfieldCities. They appreciate how GFC translated the policy of reception refugees in the region into a tangible concept and design of a Youth Business Campus in Mafraq. The GreenfieldCities concept fits the policy as outlined in the 2017–2021 Coalition Agreement hand in glove. GFC's mission and actions are aligned with key elements of Minister Kaag's policy.
- The GreenfieldCities approach includes employing Syrian refugees currently residing in the Netherlands, giving them a meaningful job while bringing in the local perspective for the design and development of the YBC inherently. This part of the approach also has wide support, both from Dutch national politicians as well as local governors.
- As a social enterprise, GFC can develop, build and manage YBCs, however the organization cannot pursue a political agenda or uphold EU values. This is the prerogative of public authorities. Therefore, GFC invites the Dutch government to jointly explore the possibility to set up a PPP or (multinational) entrepreneurial organization with key ministries in the board (MinBuza, MinDef, MinEZK, MinSZW, MinV&J) to develop GFC Campuses while pursuing the political agenda on reception of migrants and refugees in their home region and upholding EU values as much as possible.
- Apart from a looming - possibly dramatic - military confrontation in Idlib, the war in Syria seems to be winding down. With Russian and Iranian support, president Assad has reclaimed direct or indirect control over most of the country. Rebel forces and ISIS have been largely defeated or given passage to the Idlib area which is a last stronghold of various militias and groups. After infighting among these groups, it seems that an Al Qaeda offshoot, Hayat Tahrir al-Sham, has imposed its control over all aspects of life in the province, and now rules over some three million people. A ceasefire, brokered in September 2018 by Turkey and Russia has so far held off a full blown regime attack, but "Idlib" could still trigger dramatic military and humanitarian events. Some suggest Syrian refugees could be sent back to Syria. GFC sees very few people return from Mafraq to Syria up until now. In addition to the Idlib situation, the vast majority of



people does not trust Assad. If or when conditions change for the better, the Syrian villages and cities destroyed during the civil war could be revitalized with the GFC campus concept. It is then paramount that protection and safety has to be guaranteed by the UN, the EU or NATO. The feasibility of this option could and should be explored in the near future as this option will be tabled at various forums with increasing frequency. GFC could undertake this feasibility study very well with its Syrian staff and through its office in Mafraq.

- Successful campus development in Mafraq is not dependent on the situation in Syria as the solution is designed to benefit the Mafraq host community as well as the refugees.
- Naturally, there are risks associated with this project, but all the risks with a high likelihood of occurring can be well mitigated. The conclusion is that the YBC is a no-regret project with a large innovative upside.
- There are more than 50 public and private partners and supporters that buy into the concept and are willing to confirm this in writing. With partners such as WUR, GIZ, Luminus Education, Orange, Uniqa, MEI and Semilla concrete project activities are being discussed. Several impact investors show interest in investing in due time. With GIZ, JREEEF and Green Climate Fund, concrete funding efforts are ongoing.
- The key to success lies in six implementation principles that have all been validated with stakeholders:
 1. GFC will take small steps starting with a small pop-up stage. Each step must show revenue generation potential;
 2. GFC must secure multiyear base seed funding from EU (country) donors of € 3 million for the next 4 years; most obvious and natural donor country for this funding is the Netherlands (MinBuza/DHS).
 3. GFC presents the project as a whole and pursue ways to sell the project per sector and/or activity to specific stakeholders and partners (the so-called building blocks); GFC considers organizing a donor conference for funders and key partners where the jigsaw-puzzle of the entire Youth Business Campus could be laid.
 4. GFC seeks private sector leadership and tags along the Jordanian public sector;
 5. GFC has a strong focus on community engagement, keeping added value locally;
 6. GFC creates opportunities for specific (private & education) partners like Luminus and Orange;
 7. GFC is clear about the role division. GFC helps partners to increase their success.
- When seed funding is secured quickly, the first visible YBC activities can be operational by early 2020.
- Focus is on delivering a working, revenue generating proof of concept YBC. GFC does this in small steps. Once the transition from donor funding to impact investment financing is beginning, there are no limits towards scaling and repeating. When other countries and development organizations copy the concept there could be YBCs in any critical part of the world within 10-15 years.



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Annex A Slides Workshop Midterm Results Feasibility Study GreenfieldCities Youth Business Campus Mafrq

See [downloadable pdf file](#)



Annex B Attendance list Workshop Midterm Results Feasibility Study GreenfieldCities Youth Business Campus Mafraq

Representatives of the following organizations participated (in alphabetic order):

- AAUC
- AFD
- Al Al-Bayt University
- BORDA
- Chamber of Industry
- Del Monte
- EcoConsult
- EU Delegation
- FAO
- GIZ
- Global Green Growth Initiative
- Governor of Mafraq (Deputy)
- ICARDA
- Int@j
- International Labor Organization
- IPARK
- JEPA
- Jordan Environment Fund
- Jordan Green Building Council
- Jordan Renewable Energy and Energy Efficiency Fund
- Landmark Hotels
- Luminus Education
- Mafraq Development Corporation
- Mafraq Good Land Charity
- Mafraq Governorate
- MercyCorps
- Millennium Energy Industries
- Ministry of Energy & Mineral Resources
- Ministry of Environment
- Ministry of ICT
- Ministry of Interior
- Ministry of Planning & International Cooperation
- Ministry of Public Sector Development
- Ministry of Tourism & Antiquities
- Ministry of Water & Irrigation
- MonstarLab
- NARC
- Dutch embassy
- ORANGE
- OTrain
- ReBootKamp
- Royal Scientific Society
- SafePorts
- Shamal Start



- SPARK
- Swiss Agency for Development and Cooperation (SDC)
- UNDP
- UNHCR
- University of Jordan
- USAID
- WUR / Wageningen Environmental Research.



Annex C Workshop Break Out Sessions: Participant Feedback

Input from the participants of the 18 November 2018 workshop was collected during 5 break-out sessions. These sessions were facilitated by a member of the Advisory Board and a GFC staff member. Break-out sessions were held for:

1. Agri-Food;
2. Water;
3. Energy and Construction;
4. ICT and Hospitality;
5. Road to value.

GFC made an upfront division of the participants over the different break out groups based on participant's expertise and position. For example, participants with an agricultural focus discussed the Agri-Food business case. Participants discussed and prioritized:

- Three challenges and three opportunities for each business case from a list of challenges and opportunities that GFC presented. The analyses, elaborations and proposed follow up activities related to these priorities were added to this report by GFC after the workshop;
- Strategies for the way forward;
- Potential partners;
- Funding opportunities.



Figure31 Break out groups in action during the GFC workshop in Amman on November 18th 2018.

C1. Agri-Food Break Out

Facilitators: Prof. Mahmud Ayed Al-Duwayri (GFC Advisory Board) and Ala'a Al-Shorman (GFC)

Participants in group: Wageningen Environment Research (WUR), JEPa, EcoConsult, Global Green Growth Initiative, Jordan Ministry of Agriculture, University of Jordan (Agriculture department), DelMonte, NARC, International Labor Organization, ICARDA and Mafrq Directorate of Agriculture



Top 3 prioritized challenges:

1. *Decreasing availability of water in Mafraq.* This urgent problem was mentioned by all group members as the main problem in the short – and long – term. In case water is not available on the campus site in the short-term, the water price would become so high that it would make the Agri-Food sector on the campus infeasible. In the long run, the lack of water would make farming totally impossible in Mafraq. This point asks for rapid action.
2. *The market does not offer enough incentives for farmers to invest or change production practices.* The uncertainty and low wholesale prices of the market hamper investment and innovation in the sector. Currently, only large farmers have the means to invest or innovate, increasing the gap between 'large' and 'small- and medium size' farmers. Investments in hydroponics and other technologies in Mafraq came from donor grant funding, but a combination of increasing income for farmers and downscaling the technologies is needed to help other than the 'rich' farmers make the transition towards more sustainable farming practices. Alternatives for farmers could be 'fish farming', because there is demand for fresh fish in Jordan's hospitality industry.
3. *It would be difficult to attract talented youth to work in agriculture on the campus due to the unpopular perception of the sector among young people.* Mafraq has no formal university education in agriculture and labor in the sector is mainly foreign. A combination of role models, decent wages, proper labor conditions and technology/innovation is needed to attract talented Jordanian and Syrian youth to work in this sector. GFC should make working in this sector as attractive as possible.

Top 3 prioritized opportunities:

1. *Through the integration of ICT, the Youth Business Campus could change the perspective of talented youth to choose a career in the agriculture sector.* The ICT activities on the campus can deliver the technology and innovation push needed to create high-value jobs, related to Agri-Food, that can attract talented Jordanian and Syrian youth to the sector.
2. *The post-harvesting facility would make post-harvesting accessible for small- and medium size farmers that cannot afford to purchase the equipment for such a facility.* Centrally organizing such services has proven success in other projects, because the investment does not have to be made by farmers that do not have the financial means. This includes support in logistics, which is always a main hurdle for small- and medium size farmers.
3. *GFC could establish a new reliable and trusted brand, thereby giving a boost to the image of Jordanian products.* Due to the use of cheap pesticides and other cost reduction measures since the closure of the borders with Syria and Iraq, the status of Jordanian products in international markets has decreased. The good reputation of Dutch products and the Dutch agriculture sector in general can be an opportunity for GFC to establish a new brand with a good reputation and increased value for branded products in available markets.

Main discussion points by group members:

- The Agri-Food business case has several challenges that will need perseverance and time to break through, but group members were positive that GFC offers the framework needed to create a sort of "Center of Excellence" in agriculture.
- The Agri-Food value chain needs a centrally monitored organization to set quality standards, standards for consumption of resources, working ethics standards and modernization that can be showcased at the campus, and reach small- and medium size farmers. This group has not received enough attention from the international aid community and research efforts have not reached them either.



- Although Jordan has not a successful track record in cooperatives. GFC has visited a few in Mafraq including the dormant Anakeed cooperative that failed due to a lack of shared commitment, quality decrease and a lack of marketing skills. However, the cooperative of the campus should become an example for future cooperatives.
- Long-term handholding and interventions in post-harvest processing, marketing and logistics is needed. GFC should complement existing initiatives such as the CBI-JEPA HEAD project that is currently underway, in addition to existing cooperatives that could be involved in the Agri-Food business case.

Suggestions for GFC partners and projects:

| Name project | Partners | Suggestion |
|---|--|--|
| HAED-Jo | EcoConsult, WUR, Bureau Leeters, HollandDoor | Build upon project: <i>HEAD-Jo</i> |
| Fresh Fruits and Vegetables Jordan | CBI, JEPA, MoA, NL Embassy, EcoConsult, GIZ, ILO | Build upon project: <i>Fresh Fruits and Vegetables Jordan</i> |
| Jordan Horticulture Knowledge and Innovation Platform | HollandDoor (part of HAED-Jo) | Establish a <i>Horticulture Knowledge and Innovation Platform</i> and build upon Training of Trainers (ToT) efforts |
| Agro Summer School in Mafraq | SPARK, AABU | Continue agriculture summer school curriculum (summer 2019) for AABU students on campus |
| | Shamal Start | Integrate the agri-business start-ups from Shams AI Start on the campus |
| | FAO | Submit a concept note for the Green Climate Fund |
| | WUR | Build upon existing and future projects in Jordan |
| | JUST University | Collaborate with the Agriculture department of JUST (GFC already collaborates with the agriculture department of the University of Jordan) |
| | Priva and other Agro input vendors | Ask to donate equipment as in-kind support to the project |

Funding Suggestions: Dutch Ministry of Foreign Affairs, NL Embassy, Green Climate Fund, USAID/MercyCorps and in kind donations by Agro input vendors

C2. Water Break Out

Facilitators: Dr. Abdelnabi Karim Fardous (GFC Advisory Board) and Hedzer Roodenburg Vermaat (GFC)

Participants in group: Wageningen Environment Research (WUR), BORDA, USAID/Mercy Corps, Water & Environment Research Center (Al al-Bayt University), Jordan Ministry of Environment, Swiss Agency for Development and Cooperation, Jordan Ministry of Water & Irrigation

Top 3 prioritized challenges:

1. *Water and treated wastewater are priced so low that the water business case is not attractive for private investment.* Due to the low 'standardized' sales prices for water in Jordan, *Return on*



Investment of water projects is not interesting for investors. This implies that water projects in Jordan can only be operational with public or grant funding. If this does not happen or does not suffice as in the situation of Yarmouk Water Co. (private sector), it will generate a large debt (due to high energy- and operational costs and very low prices for water). The low prices for water are maintained due to political pressure, but this is an unsustainable practice. The perceived value of water needs to increase so that water prices can increase as well and the sector can become interesting for private sector investment.

2. *The culture of Mafrq does not support the proposed water management system on the Business campus, especially when it comes to water re-use.* Although the community of Mafrq is conservative when it comes to water-reuse, GFC believes that Mafrq will not have a choice in the future. Currently, treatment of black and grey water back to drinking water is a 'no-go', but rainwater for drinking purposes is fine. Past experiences with drinking water treatment showed that bad management during treatment, storage and pumping caused water to deteriorate from drinking water quality to water that was only suitable for agriculture. Trust in the water management system is therefore crucial to make transitions in water re-use and water-saving. GFC offers (with the campus) a controlled and monitored environment where such innovations can be tested.
3. *Current regulations and policies do not facilitate the proposed water management system on the business campus.* Water regulations are strict and only allow treated grey water to be used for irrigation of certain crops. However, watering the greenery on the campus and the irrigation of certain crops can take place with treated wastewater. More research has to be done on which kind of irrigation techniques would be the best fit for the campus site. The water management system on the campus will at least separate grey and black water from the source so that innovations with both streams can be tested. However, the water management system in relation to human consumption will fully comply with the regulations.

Top 3 prioritized opportunities:

1. *The water management system anticipates the water situation of Jordan in 2030 and therefore prepares citizens of Mafrq on how to deal with water in the long-term.* This would be a tool for awareness raising, for training / capacity building of youth on components of the system as in 2030 and for start-ups to adapt their innovations in water to the local conditions of Mafrq, make them customer oriented and financially viable.
2. *The water management system on the business campus offers a diverse platform for private sector to promote and market their water-saving solutions.* Jordan's private sector in water is lacking enablers. Water institutions are not aware that water is a potential profitable business and that the clean-tech industry needs to develop in order to enable businesses to make profit in the water sector. The campus offers private sector entities directly a market to test out their solutions, especially related to water saving.
3. *Demonstrate cost-reductions in the water management system on the business campus.* This is important to make business in the water sector economically viable. GFC can demonstrate on paper (business-case) and in reality (integrated within the campus' water management system) how cost-reducing interventions work.

Main discussion points by group members:

- Water is a necessity for the campus and it should be clear how much water can be taken from a well on the campus site. This should be matched with the demand for water on the campus so that the water management system can be designed in more detail.
- Group members stated that Jordan has the potential to collect and store rain and surface water, but the lack of proper water management measures prevent this from happening, even



causing floods downstream. The campus can be a site for water catchment and landscape restoration. The Ministry of Agriculture (MoA), Ministry of Environment (MoE) and Ministry of Water & Irrigation (MoW&I) should work together to make this possible.

- The innovations in water on the campus will slow down permitting processes, because water is a sensitive commodity with cultural barriers for re-use. There is no national action framework with a vision for Northern Jordan that would support innovations regarding re-use of water.
- People in Mafrqa are in general aware of the water scarcity, because they only receive little water for their households. However, they are not aware of water-saving and water-reusing methods, devices and technologies. This is something that GFC can work on with pilot-projects on the campus.

Suggestions for GFC partners and projects:

| Name project | Partners | Suggestion |
|-------------------------------------|---|--|
| Water Innovation Technologies (WIT) | USAID, MercyCorps | USAID/MercyCorps run a 5-year project (WIT, 2017-2022) that announces RfPs for which GFC can submit proposals. The campus can become one of the water-saving demonstration platform for farmers. |
| Blue Deal | World Water Net (WWN), Yarmouk Water Company, Water Authority Jordan and Mafrqa | Blue Deals are sustainable projects to structurally help resolving Jordan's water issues. These projects can sustain and expand by themselves after an initial investment by the Dutch Government. |
| Bill Gates Foundation" project | BORDA | The Bill Gates Foundation funds innovative sanitation projects. This can be established in collaboration with BORDA. |
| Blue Peace Strategy | SDC | The Blue Peace Strategy is the guiding framework for SDC's water interventions that GFC could potentially build upon. |
| | Semilla/ Nijhuis Industries | SEMILLA Sanitation Hubs are closed loop wastewater treatment units and convert on-site and off-grid human wastewater into clean water, compost and nutrients for food production for humanitarian aid & sustainable smart cities. This system can be tested on the campus. |
| | Shamal Start | Integrate the water start-ups from Shams AI Start on the campus |
| | FAO | Submit a concept note for the Green Climate Fund |
| | Water input vendors | Ask to donate equipment as in-kind support to the project |

Funding Suggestions:

BMU, Blue Deals, Green Climate Fund, USAID/Mercy Corps, Swiss Agency for Development and Cooperation, Agency, Bill Gates Foundation, Water&Food4Energy Fund and in-kind donations by water input vendors.



C3. Energy & Construction Break Out

Facilitators: Prof. Ahmed Al-Salaymeh (GFC Advisory Board) and Arie van Beek (GFC)

Participants in group: GIZ, Global Green Growth Initiative, Jordan Green Building Council, University of Jordan, Al al-Bayt University, Millennium Energy Industries, Farmer's Union.

Top 3 prioritized challenges:

1. *The prices of energy efficient building are higher than traditional construction methodologies.* This is a major obstacle for people to invest. A lack of awareness about the advantages of energy efficient buildings for the higher costs and the non-enforcement of the energy efficiency building codes hamper the development of the sustainable construction industry. Currently, there are only a few examples of energy efficient buildings in Jordan such as the Dutch Embassy in Amman. However, this is not a showcase for Jordanians, as they have no access to the building to sense the comfort and learn about the advantages of this way of building. Accessible energy efficient construction examples that the public can use and information about its costs versus advantages are key in order to make Jordan's building stock more energy efficient. In some sectors, there is a lack of incentive as well due to subsidized, hence low energy prices.
2. *Government regulations and laws do not facilitate private investment in the energy sector.* The regulations of the government do not allow for unlimited investments in renewable energy projects, although targets are ambitious. According to the Energy and Minerals Regulatory Commission (EMRC) it is expected that in 2019 around 1800 MW of renewable energy projects will be developed under monitored schemes. In 2025, the government aims to achieve a renewable energy share of 20% of the total energy production in the Kingdom. Any renewable energy project above 5 MW requires an Environmental Impact Assessment (EIA) and several approvals.
3. *The current grid in Mafraq has no capacity to absorb more renewable energy.* There are several renewable energy projects established in Mafraq (around 200 MW) that insert energy into the grid. The grid is saturated at the moment and the Ministry of Energy & Mineral Resources (MoMR) would potentially not give an approval to insert energy from the campus into the grid. This means that, in case the grid would not be enforced, the campus requires a smart grid and storage capacity to manage the demand and supply sides of the network.

Top 3 prioritized opportunities:

1. *Demonstrate cost-reductions in the energy system and energy efficient buildings on the business campus.* By developing a well performing building and an energy system on the campus for reasonable costs, GFC aims to show the benefits of these solutions on paper (business-case) and in reality (on the campus).
2. *Growing the market of energy efficient construction in Jordan, with the campus as a successful example.* By demonstrating the advantages of energy efficient solutions and setting up an Energy Development and Services Company, GFC aims to create demand for such solutions as an accelerator for the creation of employment opportunities for youth.
3. *Attract more private sector investment in the energy sector to Northern Jordan.* A combination of the right infrastructure, trained human resources and the Energy Development and Services Company will help to attract more private sector investment in renewable energy.

Main discussion points by group members:

- The Jordan Green Building council (JGBC) said, based on their experiences with a pilot project ("Green affordable homes"), that the mentality to stick to traditional building methods can be



changed. A strong awareness campaign is needed with the campus as a tangible showcase. Key is to include professional role models from the local community (for example a respected contractor from Mafrag) to convince local construction stakeholders and inhabitants to make the transition towards energy efficient construction. This is a way to create local capacity among contractors on how to build energy efficiently as cost-effective as possible.

- GIZ added that job perspectives offered by international construction companies are usually short term (building as cheap as possible without capacity development for the O&M phase).
- GFC needs to develop ways to create more sustainable jobs. Both sectors can involve Syrians (no restrictions, except for engineers), because some of them have a lot of expertise and are readily available.
- Furthermore, GIZ stated that there is a lack of *Green Banking Services* to finance green building projects.
- Finally, the Farmers Union suggested GFC should look at the renewable energy potential and energy consumption of farmers, which strongly relates to the water consumption.

Suggestions for GFC partners and projects:

| Name project | Partners | Suggestion |
|---|--------------------------------|--|
| Climate Adaptation Fund | UN-HABITAT | MOPIC and UN-HABITAT develop a concept note for the Climate Adaptation Fund. GFC can explore collaboration with UN-HABITAT in this respect. |
| Green Affordable Housing project | JGBC | JGBC has executed a pilot project around Green Affordable Housing (funded by DFID) that can be expanded on the campus. |
| Center of Excellence | GIZ, IDECO and private sector | GIZ has established the German Jordanian Center of Excellence in Renewable Energy in the Mafrag Special Economic Zone. GFC actively looks for collaboration with this Center of Excellence and partners such as IDECO. |
| Sustainable Urbanization and Resource Efficiency (SURE) project | UNDP, JREEEF | The project goal is to promote energy efficient building and the building codes in Amman governorate, and it can be explored whether an expansion to Northern Jordan can be made. |
| | UNDP-17 Jordan | Join forces with the 17 Jordan forum which has explored ways to mobilize private capital towards the achievement of all 17 Sustainable Development Goals (SDGs) in Jordan. |
| | AABU | GFC already contributes with the AABU for the design of the energy component of the campus and aims to strengthen the collaboration in the future. |
| | Farmer's union | Through the Farmer's Union, GFC can reach farmers to assess, advice, design, install and evaluate renewable energy projects, together with other partners. |
| | EDAMA | This NGO can help with advocacy of the GFC approach. |
| | Royal Scientific Society (RSS) | RSS has developed the guidelines for the building codes. Together GFC and RSS can explore how to get them implemented. |



Funding Suggestions:

Jordan Renewable Energy and Energy Efficiency Fund (JREEEF), Jordan Environment Fund (JEF), FMO, EBRD, PROPARCO, RVO, AFD, Catalyst Group, Green Climate Fund, private investors, International Impact investors, CSR budgets of large corporations and National Impact investors (such as Jordanian Pension Fund)

C4. ICT & Hospitality Break Out

Facilitators: Dr. Laila Abuhassan (GFC Advisory Board) and Haneen Al-Shdifat (GFC)

Participants in group: Luminus Education, Jordan Ministry of Tourism & Antiquities, MonstarLab (Japanese IT company), Int@j, Landmark Hotels, Al al-Bayt University (IT department), RBK and Shamal Start

Top 3 prioritized challenges:

1. *The image of Mafrq is, even if campus will be built, too negative to attract any ICT company.* The campus has to do a very professional job to attract paying clients. It is a chicken and egg problem: without skilled labor private sector would not come to Mafrq, and without private sector, skilled labor would neither come nor develop. To break through this vicious circle, the first step is to increase the technical and professional skills of graduates that currently do not match competitiveness standards. The second step would be to attract IT companies to settle in Mafrq with incentives such as a reduction in operational costs. Companies with an interest in Syrian refugees and interest in CSR would be the first ones to attract.
2. *ICT companies would only come to Mafrq for the low salaries, despite the quality of the people.* Although this might be true, the increase in labor productivity on the campus will be unique for Mafrq governorate and will gradually attract ICT companies that have to pay more for their salaries, but at the same time reduce costs for the office space.
3. *It would be difficult to attract talented youth to work in hospitality on the campus due to the unpopular perception of the sector among young people.* This results in a lack of qualified staff that further affects the reputation of the sector.

Top 3 prioritized opportunities:

1. *ICT is needed in all the other sectors on the campus and therefore an interesting starting point for the campus as a whole.* Technical skill gaps can be bridged quickly by connecting to successful post-graduate training programs. This can also attract initial donor funding. When the pool of skilled youth is established, ICT demand in all the campus activities and its sectors can be fulfilled by this very youth. The focus will be on the cost levels of Mafrq to be able to develop IT solutions that can have local impact. This also provides many IT internship opportunities where students can acquire the professional- and language skills next to the technical skills.
2. *Hospitality is a quick win in terms of revenues from rent for GFC.* There is demand for hospitality services and this is a clear product-market combination. This means that paying clients can be attracted. A suggestion was to rent out a part of the accommodation capacity upfront to NGOs and aid workers. Another suggestion was to ask Lols from potential clients, such as internationally operating companies in the Free Zone.
3. *The proposed hospitality services will bring the needed liveliness on the campus for the youth.* It will attract youth, but also other groups of people that can all safely use the hospitality services, also after sunset.

Main discussion points by group members:

- Starting new hospitality services in Mafrq would need to be adapted to the demand groups. Locals and visitors of Arabic origin prefer to eat at "Western-style": places with international



cuisine, whereas Western tourists prefer to eat local food in an “Arabic-style” environment. As GFC first develops hospitality services for Jordanians and Syrians, but later aims to cater as well for Western tourists, the style of the hospitality services should be a mix between Western and Oriental.

- The challenge would be to keep cost at levels that local markets can bear so that youth, with a general low purchasing power, would be able to make use of the hospitality services. Service providers would generate income and GFC would generate revenues from the rents of the spaces from where these services are provided.
- Group members were enthusiast about using the hotel as a career building opportunity, because one needs to break through the various cultural barriers that prevent youth from thriving in the hospitality sector. The Landmark Hotel has internalized this in their business by for example providing childcare for their female staff members.
- It will take time to bridge the professional- and language skills gap of IT graduates. ICT companies would never invest in the ICT sector of the campus if there is nothing on the ground yet. They need to see infrastructure (at least) and preferably skilled human resources as well. GFC should take away all the hurdles for ICT companies such as the labor regulations (legal affairs), administration and HR (including the selection of Syrian refugees).
- MonstarLab is open to do business from Mafraq, partially funded by JICA to include Syrian refugees. Since IT is a closed sector for Syrian Refugees, negotiations with the Ministry of Labor about possible exemptions need to take place. A huge opportunity for the campus is to function as a regional ICT hub for the regional reconstruction works.

Suggestions for GFC partners and projects:

| Name project | Partners | Suggestion |
|---|----------------|--|
| Logistics Hub in Mafraq | SafePorts Inc. | SafePorts develops a logistics hub in the Mafraq Special Economic Zone that creates demand for certain hospitality and ICT services. GFC can deliver those services on the campus. |
| Center of Excellence in Information- and Communication Technology | GIZ | GIZ is planning to develop a Center of Excellence in ICT. GFC can look for collaboration in this regard. |
| | ACCOR | IBIS falls under ACCOR. The advantage of their concept is the flexibility to transform from 3-star to 4-star relatively quick, so that the hotel can adapt to alternating demands in Mafraq. |
| | AAUC | The chairman of AAUC expressed that they have a plan to establish a Center of Excellence in Hospitality in Amman with branches in the governorates. |
| | Thaki.org | This company refurbishes old laptops. They might be interested to do that from the campus. |

Funding Suggestions:

AFD, USAID training contracts, GIZ, private investors, International Impact investors and CSR budgets of large hotel chains.



C4 Road to Realization Break Out

[Joris to check whether no crucial bits are missing in 3.4 Highlights and Outcomes Workshop Midterm Results]

Facilitators: Ruba Al Zu'bi (GFC Advisory Board) and Joris Benninga (GFC)

Participants in group: Luminus Education, USAID, SafePorts, Mafraq Development Corporation, SPARK Jordan, Al al-Bayt University, Ministry of Planning & International Cooperation and UNDP

Top 3 prioritized challenges:

1. *Problems around permits and approvals would hamper the business campus from being implemented due to the innovative elements of the concept.* Due to the combination of several innovative concepts, it is expected that the permitting process by the government will be slow. The location of the campus in the Free Zone would partially alleviate this, but the experience of group members tells that innovation is in general perceived as a risk factor by the government, which would at least delay the permitting process. The hardest part in Jordan is getting started. That is why it is even more important to get institutionalized as a priority by the government and leave out any potential sensitive elements for the first part of the campus.
2. *The Mafraq Development Corporation (MDC) expressed support in terms of willingness to fund and build basic infrastructure (roads, pipelines, street lightning etcetera), but was worried about the time-line of the campus.* The site of the campus in the KHBTDA currently lacks all infrastructure, which means that the site has to be developed from scratch for which proper coordination between GFC, MDC and JIC is necessary to not get too much of the expected legal and administrative hurdles for the project. Nayef Bakheet (CEO) expects a time lag of 6-15 months between the detailed specifications and the start of the construction phase. The development phase would probably take 1-1.5 years. MDC also mentioned that GFC needs to secure clarity on ownership of the different assets and processes and responsibilities of partners.
3. The group suggested that it was important to secure that *what the campus offers, really covers local demand.* The group members appreciate the GFC to research these demands, but stress that too much innovation too quickly could be (culturally) problematic. Community based ownership is important and that is why GFC will further step up efforts in this field in 2019. The group further mentioned that the quality of existing Mafraq infrastructure and knowledge and capacities may slow down campus development. GreenfieldCities also has to secure that knowledge and responsibilities are gradually transferred to local partners.

Top 3 prioritized opportunities:

1. *Become a national priority.* Jordan has many national plans for increasing prosperity and sustainability in the country. Group members advised GFC to become even better embedded in these various national plans and go beyond checking and securing that GFC contributes to these plans. Becoming part of the national priorities is a big opportunity for GFC according to the group members. GFC has to find its champions in the Jordanian ministries to formally embed GFC and make it a national priority. After the workshop, GFC executed follow up activities together with the Advisory Board: this resulted in a detailed process with MOPIC to get the campus institutionalized within the national priorities and the outspoken support by (Mafraq) MP Dr. Reem Abu Dalbough, chair of the women committee of the Jordanian parliament. Further meetings with line ministries are planned as well as a process to bid for grant funding from the Green Climate Fund through the (to be formally announced) Jordanian National Designated Authority (NDA) at the Ministry of Environment.



2. *Team up with existing projects.* The group members suggested to team up with existing donor funded activities. This could be beneficial as this would offer continuity to such projects. For GFC it could result in short term revenue streams. The first result after the workshop in this respect is a joint effort by GIZ and GFC to develop a proposal around the Center of Excellence in the Mafrq Special Economic Zone GFC's long-term focus is attractive for many stakeholders, including investors and the private sector.
3. *Team up with Universities.* Group members stated as opportunities that GFC should link to university research (universities can apply for funding when the applicability of research is clear), to concessional funders like FMO and to other existing donor funded activities to make these activities sustainable and generate revenue streams. The inclusion of strong private sector partners during the pop-up phase and donors would be beneficial to de-risk the pop-up phase.

Main discussion points by group members:

- *The negative perception about the development potential of Mafrq* among decision makers in Amman could hamper GFC from finding funding or investment in this region, even if the first phase of the business campus has been built. Many Jordanians in Amman have a negative perception of Mafrq, although they have never visited the governorate. GFC came across many prejudices, but did not get them confirmed while working and living in Mafrq. GFC works with many trusted locals in Mafrq who support the project. However, the prejudices might have affected decision makers. That is why GFC expects the 'hurdles' to be in Amman, not in Mafrq. The campus will have a BOOT model (Build, Own, Operate and Transfer), but the transfer to the MDC would take place after 30 years, depending on the deals with impact investors and donors.
- *How to cope with traditional donor thinking and systems.* The innovative approach of GFC combines many aspects at the same time, while donor programs including their Requests for Proposals (RfPs) often have a single sector or one-dimensional focus. If the concept of GFC does not fit within this focus, it makes collaboration difficult. At the same time, impact investors want to see 'proof of concept' before investing. The hardest part is getting started with grant funding, then prove the concept and grow based on impact investment. GFC should get institutionalized within the national priorities of Jordan and adjust the concept (or parts of the concept) to the preferences of donors if needed.
- *The campus would attract more investment to the Mafrq Economic Free Zone, and could be replicated in the other Economic Free Zones in Jordan.* Special Economic Zones in Jordan are facing difficulty to attract investment. The masterplan of the Mafrq Economic Free Zone also has many vacant spaces for investments, but the Zone needs more marketing and services. The campus could provide those. MDC is ready to install the first infrastructure on the campus site once GFC delivers a finalized masterplan and proof of pledged funding. Additionally, the replicability potential is strong and once the concept has proven its success in Mafrq, other governorates would probably 'fight' for the concept to be materialized in their governorate.
- *Involving the Royal Family* was suggested by some group members, even offering concrete openings to do so. After consulting with the GFC Advisory Board, GFC decided not to pursue this, other than involving the King himself or the Crown Prince should the opportunity present itself.
- The group also discussed how GFC could involve private sector partners directly in the pop-up phase. Some suggested aiming for CSR budgets from big companies to kick start activities. GFC has already consulted the big ICT companies in Jordan for such budgets. Others pointed out



that helping improve existing businesses in Mafraq (like in agriculture for example) could be a good idea, including fixing weak spots in relevant value chains.

- GFC should continue preparing strong financial models with a high level of confidence and stress the innovation and replicability potential. This is important because it brings talks with impact investors closer to actual funding. Such documents are also important for talks with concessional lenders and thematic funds such as the Green Climate Fund.

Suggestions for GFC partners and projects:

| Name project | Partners | Suggestion |
|--------------|------------------|--|
| | MOPIC, MoE, GGGI | Become a “green” priority in governmental plans on SDGs, NDCs and NGGAP. The campus can be an example of localization of SDGs for Mafraq governorate. GFC already works together with GGGI and the Ministry of Environment on the institutionalization. In addition, GFC could be focal point, technical reviewer or implementing partner of such plans. |
| | JIC | The Jordan Investment Commission should become the main client of GFC as GFC aims to attract direct foreign investment to the campus. The JIC is the ‘municipality’ of the Free Zone, so close collaboration is needed in any case. |
| | 17 Jordan, UNDP | 17 Asset Management and UNDP partner up to land private investment in Jordan to contribute to the achievement of the SDGs. GFC can become a pathfinder project for this initiative and help in making the bridge between the worlds of private investment and aid. |
| | UNDP | UNDP has a strong emphasis on SDGs and undertakes many initiatives that GFC could contribute to. |
| | Sevens World | Sevens World is linked to impact investors. |

Funding Suggestions: Dutch Ministry of Foreign Affairs, EU, USAID, AFD, GIZ, 17 Asset Management, 17 Jordan, FMO, Green Climate Fund and private (impact) investors

USAID, SPARK and the SDC strongly supported the basic GFC goals: increase (green) labor productivity and transition away from donor funding. The support has already led to follow-up meetings (see Section **Error! Reference source not found.**).

C5. Follow up Input and Feedback Workshop

[Joris to check whether no crucial bits are missing in 3.4 Highlights and Outcomes Workshop Midterm Results]

After the workshop, some follow up meetings have taken place with (not including all):

- Charlee Doom of USAID Jordan for introductions to USAID in Washington DC and concrete tips for future collaboration;
- Ralph Bland, Swiss Agency for Development and Cooperation aiming for a meeting in Bern with their strategic planners ;



- g. Erica Bijl, SPARK, to prepare a partnership contribution to the SPARK Business Impact event in Amman in February 2019. SPARK also made introductions to MEDA and other investors and mentioned the importance of strong financial models with a high level of confidence.
- h. John Morris, 17 Asset Management to prepare partnership for a pathway finder project under their new brand "17 Jordan" in which they aim to direct private capital to projects that contribute to the SDGs and Michaela Prokop, UNDP to explore partnership opportunities;
- i. Fareedon Hortoqa, JIC to give an update about the project, meet technical team members and discuss the division of roles in the project;
- j. MDC, JIC, MOPIC, Ministry of Environment, Ministry of ICT, Office of the Prime Minister, Mafrq Governorate, Mafrq Decentralized Council, Mafrq MP's and the GFC Advisory Board to get embedded in Jordan's national and local plans and priorities.



منطقة الملك الحسين بن طلال التنموية
KING HUSSEIN BIN TALAL DEVELOPMENT AREA

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دولة رئيس الوزراء الأكرم

تحية طيبة وبعد،،

الإشارة : كتاب رئاسة الوزراء رقم ٢٤٧٦٩/٢/١٦/٣١ تاريخ ٢٠١٨/١٠/٩،
ولاحقاً لكتابنا رقم ٢٠١٨/١/٢/٨٢٥ تاريخ ٢٠١٨/١٠/٤ (مرفق طياً).

أرجو أن أعلم دولتكم أن المطلوب في هذه المرحلة الموافقة المبدئية لشركة تطوير المفرق على استيعاب هذا المشروع الحيوي لمؤسسة (GreenfieldCities) الهولندية داخل منطقة الملك الحسين بن طلال التنموية/المفرق وحسب تفاصيل المشروع مرفق كتابنا أعلاه، وبعد ذلك سيصار إلى توقيع اتفاقية تطوير مع هذه المؤسسة للمباشرة بمشروعهم ضمن نطاق الخدمات داخل المنطقة التنموية وبما يتماشى مع المخطط الشمولي وأحكام المنطقة التنموية وموافقة هيئة الاستثمار.

ان توقيع اتفاقية بين شركة تطوير المفرق والمؤسسة المعنية لا يُرتب على الحكومة أي التزامات مالية حيث أن شركة تطوير المفرق هي شركة مسجلة لدى وزارة الصناعة والتجارة كمطور للمنطقة التنموية والحكومة ليس لها حصة في الشركة حتى يُرتب التزامات على الحكومة والاتفاقية بمجملها ستكون لتأجير مساحة من الأرض في المنطقة التنموية لإنجاز هذا المشروع كما يتم لأي مستثمر آخر في المنطقة التنموية وبموافقة هيئة الاستثمار وحسب قانون الاستثمار رقم ٣٠ لعام ٢٠١٤، والسبب في طلب موافقة الحكومة لشركة تطوير المفرق على استيعاب هذا المشروع داخل المنطقة التنموية هو التأكد من موائمة هذا المشروع لسياسات الحكومة بما يتعلق بقضايا

شركة تطوير المفرق

Annex 2 Support Letter from Mafraq Development Corporation to H.E. Sigrid Kaag,
Minister for Foreign Trade and Development Cooperation of the Kingdom
of the Netherlands and GFC



منطقة الملك الحسين بن طلال التنموية
KING HUSSEIN BIN TALAL DEVELOPMENT AREA

Ref/ 367/2/28/2019

Date/ 3/4/2019

To: H.E. Sigrid Kaag
Minister for Foreign Trade and Development Cooperation of the Kingdom of the Netherlands
Postbus 20061, 2500EB, Den Haag
The Netherlands

Cc: Joris Benninga, Chief Executive Officer
GreenfieldCities
Weg naar Laren 20, 7203HL, Zutphen
The Netherlands

Subject: Letter of Intent

Dear Madam Minister Kaag,

The Mafraq Development Corporation has been working with GreenfieldCities for the past 18 months to study the feasibility of a Youth Business Campus in the King Hussein Bin Talal Development Area (KHBTD) in Mafraq.

As the competent authority of the KHBTD and lead Jordanian governmental partner for GreenfieldCities, we want to inform you that we fully support GreenfieldCities in its endeavor to implement this highly needed initiative for the Mafraq Governorate.

Since we received the endorsement of the Ministry of Planning and International Cooperation, the Ministry of Interior, the Ministry of Investment, the Ministry of Foreign Affairs and the Jordanian Prime Minister for this project (letters are available upon request), we are ready to sign the land lease and development agreement with GreenfieldCities. The Mafraq Development Corporation is able to provide the necessary public infrastructure for the Youth Business Campus.

The Mafraq Development Corporation believes that the Youth Business Campus can function as an example for the region with its expected transition from donor funding to impact investment growth within the period 2019-2024. Therefore, we would highly appreciate it if you would be willing to join other potential sponsors and consider approving the €3M in requested grant support by GreenfieldCities for the development of the Youth Business Campus within the period 2019-2024.

We assure you that the project is in safe hands with the Mafraq Development Corporation and look forward to work together on this innovative project.

Yours sincerely,

Eng. Loay Al Sarayrah
Mafraq Development Corporation



شركة تطوير المفرق

ص.ب ٩٤١٤٣٥ عمان ١١١٩٤ الأردن • هاتف: ٥٥١٠٢٧٤ (+٩٦٢-٦) • فاكس: ٥٥١٠٣٢٩ (+٩٦٢-٦) • البريد الإلكتروني: info@kinghusseinzone.com

Mafraq Development Corporation

P.O.Box : 941435 Amman 11194 Jordan • Tel : (+962-6) 5510274 • Fax:(+962-6) 5510329 • E-mail : info@kinghusseinzone.com

مملكة البحرين



رئاسة الوزراء

٢١ / ٧ / ١٦ / ١٣١٤٩

الرقم ١٣ / رجب / ١٤٤٠

التاريخ ٢٠١٩ / ٠٣ / ٢٢

الموافق

معالي رئيس هيئة مديري منطقة الملك الحسين بن طلال
التنموية/ شركة تطوير المفرق

أشير إلى كتابكم رقم ٢٠١٨/١/٢/٩٣٧ تاريخ ٢٠١٨/١١/١٢، بخصوص مشروع إنشاء نواه لمجمع علمي تقني تجاري لمؤسسة (GreenfieldCities) الهولندية داخل منطقة الملك الحسين بن طلال التنموية.

أرفق طياً صورة عن كتاب معالي وزير الخارجية وشؤون المغتربين رقم ١١٧٢٩/١٣٥/١٨ تاريخ ٢٠١٩/٣/١١ وكتاب معالي وزير الداخلية رقم ١/ت/م/ع/١٠٢٢٨/١٠٤٧/٣١٠٤٧ تاريخ ٢٠١٩/٢/١٣ وكتاب معالي وزير التخطيط والتعاون الدولي رقم ٣٤/٤٢/٢/٥ تاريخ ٢٠١٩/١/٢ المتعلقة بالموضوع ذاته، للتكرم بالعلم.

واقبلوا فائق الاحترام.

أور
أمين عام رئاسة الوزراء
سامي كامل داوود

وارد
التاريخ : ٢٠١٩ / ٣ / ٢٤
الرقم : ٢٠١٩ / ١ / ٤ / ٥٩

نسخة/إلى معالي وزير الخارجية وشؤون المغتربين
نسخة/إلى معالي وزير الداخلية
نسخة/إلى معالي وزير التخطيط والتعاون الدولي
نسخة/إلى مدير مديرية الشؤون القانونية

K.B

تم الاستلام
٢٠١٩ / ٣ / ٢٤



منطقة الملك الحسين بن طلال التنموية
KING HUSSEIN BIN TALAL DEVELOPMENT AREA

نسخة تسليم صادر
الاسم :
التاريخ :
التوقيع :

الرقم/ ٢٠١٨/١/٢/٩٣٧
التاريخ/ ٢٠١٨/١١/١٤

دولة رئيس الوزراء الأكرم

تحية طيبة وبعد،،

الإشارة : كتاب رئاسة الوزراء رقم ٢٤٧٦٩/٢/١٦/٣١ تاريخ ٢٠١٨/١٠/٩ ،
ولاحقاً لكتابنا رقم ٢٠١٨/١/٢/٨٢٥ تاريخ ٢٠١٨/١٠/٤ (مرفق طياً).

أرجو أن أعلم دولتكم أن المطلوب في هذه المرحلة الموافقة المبدئية لشركة تطوير
المفرق على استيعاب هذا المشروع الحيوي لمؤسسة (GreenfieldCities) الهولندية
داخل منطقة الملك الحسين بن طلال التنموية/المفرق وحسب تفاصيل المشروع مرفق
كتابنا أعلاه ، وبعد ذلك مبيصار إلى توقيع اتفاقية تطوير مع هذه المؤسسة للمباشرة
بمشروعهم ضمن نطاق الخدمات داخل المنطقة التنموية وبما يتماشى مع المخطط
الشمولي وأحكام المنطقة التنموية وموافقة هيئة الاستثمار .

ان توقيع اتفاقية بين شركة تطوير المفرق والمؤسسة المعنية لا يُرتب على الحكومة أي
التزامات مالية حيث أن شركة تطوير المفرق هي شركة مسجلة لدى وزارة الصناعة
والتجارة كمطور للمنطقة التنموية والحكومة ليس لها حصة في الشركة حتى يُرتب
التزامات على الحكومة والاتفاقية بمجملها ستكون لتأجير مساحة من الأرض في
المنطقة التنموية لإنجاز هذا المشروع كما يتم لأي مستثمر آخر في المنطقة التنموية
وبموافقة هيئة الاستثمار وحسب قانون الاستثمار رقم ٣٠ لعام ٢٠١٤ ، والسبب في
طلب موافقة الحكومة لشركة تطوير المفرق على استيعاب هذا المشروع داخل المنطقة
التنموية هو التأكد من موائمة هذا المشروع لسياسات الحكومة بما يتعلق بقضايا

شركة تطوير المفرق



وزارة التخطيط والتعاون الدولي

٣٤/٤٢/٢/٥

الرقم

التاريخ ٢٠١٩/٠١/٠٣

الموافق

رئاسة الوزراء

2019-01-03

الرقم: ١٢٤٢٢

دولة رئيس الوزراء

تحية طيبة وبعد،

أشير إلى كتاب دولتكم رقم 35118/2/16/31 تاريخ 2018/12/17، ومرفقه كتاب معالي رئيس هيئة مديري منطقة الملك الحسين بن طلال التنمية/شركة تطوير المفرق رقم 2048/1/2/937 تاريخ 2018/11/12 حول إنشاء نواة لمجمع علمي تقني تجاري لمؤسسة (GreenfieldCities) داخل المنطقة التنموية.

أرجو أن أعلم دولتكم بعدم الممانعة ضمن اختصاص وزارة التخطيط والتعاون الدولي تجاه طلب استيعاب مشروع المؤسسة الهولندية داخل منطقة الملك الحسين بن طلال التنمية/المفرق وتوقيع اتفاقية تطوير مع المؤسسة للمباشرة بالمشروع ضمن نطاق الخدمات داخل المنطقة. كما حاول المعنيون في المؤسسة الهولندية المذكورة التقدم بوثيقة مشروع للحصول على تمويل مباشر من الاتحاد الأوروبي من خلال الصندوق الإئتماني للاتحاد الأوروبي (مدد) المخصص لدعم دول الجوار المتأثرة من تبعات الأزمة في سوريا، إلا أنه لم يرد ضمن القائمة التي أوصى الاتحاد الأوروبي بتمريرها في جلسة الصندوق التي عُقدت بتاريخ 2018/12/14.

وتفضلوا، دولتكم، بقبول فائق الاحترام والتقدير،،،

د. طارق قعوار
وزير التخطيط والتعاون الدولي

مؤرخة

تمت



Date: 17/03/2019

Ref.: EDAMA/26/2019

Joris Benninga, CEO

GreenfieldCities.org

Klingelbeekseweg 27-22, 6862VS, Oosterbeek

The Netherlands

Subject: Letter of intent to partner

Dear Joris Benninga,

EDAMA is a business association registered in Jordan. The association advocates and lobbies on behalf of its on policy and regulatory frameworks in the relevant Jordanian ministries. These ministries include the Ministry of Energy & Mineral Resources, the Ministry of Water & Irrigation, the Ministry of Environment and Ministry of Transport. EDAMA also conducts research, develops position papers and executes training and workshops to raise awareness, often through local community-based organizations.

On behalf of EDAMA, I support GreenfieldCities (GFC) in its mission to develop a Youth Business Campus with special attention for capacity and private sector development in the energy and water sectors. We will support GFC to rollout a smart-grid and storage system on the Youth Business Campus. EDAMA perceives such innovations as keys to stimulate the private sector economy, and is willing to lobby for the implementation at the relevant ministries.

Furthermore, EDAMA is interested to participate in the GIZ-GFC project: "The facilitation of the energy transition in Northern Jordan as a replicable and scalable accelerator for sustainable economic development of Mafrag region (TWEED II and TWEED III)". The way and extent of EDAMA's involvement is currently under discussion.

We look forward to collaborating with GreenfieldCities and its partners on this exciting initiative.

Yours sincerely,

Chairman

Dr. Dureid Mahasneh



الشركة الدولية لتصنيع تكنولوجيا الطاقة ذ.م.م

INTERNATIONAL FOR ENERGY TECHNOLOGY INDUSTRIES

04/03/2019

Joris Benninga
GreenfieldCities.org
Kling elbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Joris,

Millennium Energy Industries (MEI) is a successful Jordanian Renewable Energy Development Company. We successfully implemented more than 200 solar thermal- and solar hybrid projects in Jordan and other countries in residential, hospitality, healthcare and industrial applications.

On behalf of MEI, I welcome and support the plans of Green Field Cities (GFC) to develop a Youth Business Campus in Mafrqa. MEI aims to collaborate with GFC to realize PV/Wind and solar thermal solutions for space heating, for domestic- and industrial hot water requirements, and for non-energy areas such as Agri-Food and water treatment. We also aim to jointly apply energy storage in order to develop capacity and knowledge in this area. Our societal goals are to create awareness about Renewable Energy/ Energy Efficiency (RE/EE) and employment opportunities for Syrian and Jordanian youth.

MEI has access to an advanced seasonal storage technology that has not yet been implemented in the MENA region. MEI and GFC will look for funding to apply this innovative technology in the King Abdullah University Hospital (KAUH) to save approximately 90% of its annual energy consumption. This would allow the hospital to direct a significant part of the amount of the budget usually spent on diesel consumption to improvement of medical services for Syrian refugees and Jordanians living in the North of Jordan.

We are looking forward to continue working together and thereby embark on a long-term partnership between MEI and GFC.

Yours sincerely,

Hani A. Rabie
Vice-Chairman, Millennium Energy Industries

A handwritten signature in blue ink, appearing to read 'Hani A. Rabie', written over a blue curved line that extends from the signature area towards the stamp.





Amman, 12 February 2019

To: Board members, Jordan Renewable Energy and Energy Efficiency Fund (JREEEF)
Subject: Involvement of JREEEF in [GIZ-GFC RE-EE Project](#)

Dear Sirs,

A consortium of GIZ and GreenfieldCities (GFC) aims to implement the proposed project: *"The facilitation of the energy transition in Northern Jordan as a replicable and scalable accelerator for sustainable economic development of Mafraq region (TWEED II and TWEED III)"*. The objective is to provide a 30 year support commitment to help Northern Jordan realizing energy transition- and climate change mitigation goals by strengthening the supply and demand side of RE/EE solutions from the [GFC Youth Business Campus \(YBC\)](#) and the German Jordanian Center of Excellence in Renewable Energy (CoE), both located in the King Hussein Bin Talal Development Area of Mafraq. Together, they deliver a RE/EE showcase-, training-, awareness- and promotion platform to attract, train and commit RE/EE stakeholders to replicate the showcased cost-effective RE/EE solutions. This will create a demand for the replication of such solutions, and hence create more private sector driven jobs for local youth. The project includes the expansion of the CoE with an EE wall panel manufacturing facility and the installation of selected RE/EE infrastructure at the YBC. When successful, this project can be replicated in other areas of Jordan.

The project builds on aspirations from JEEAP 2018-2020 and TWEED I & TWEED II efforts to increase skills and knowledge in RE/EE. The main outcomes of this project:

- Increased capacity and 300 private sector driven jobs for local youth in RE/EE;
- Increased awareness and demand for showcased solutions resulting in 10 projects totaling more than 100MW and more than 2000m² "made in Jordan" buildings with EE wall panels;
- Achievement of RE goals in Northern Jordan (Mafraq and Irbid);
- 5-10% increase in energy efficiency building code compliance in Northern Jordan;
- Between 2.5 million and 4.0 million ton of CO₂eq emission reduction in 20 years;

There is strong alignment between the goals of JREEEF and the project. Referring to the meeting with Dr. Rasmi Hamzeh (CEO JREEEF) on 11 February 2019 in Amman, the consortium intends to collaborate with JREEEF in the following areas:

- Financial and technical support from JREEEF for installation RE/EE solutions at YBC and facilitate access of local community and other energy stakeholders to replication of RE/EE solutions with subsidies;
- Technical support from JREEEF through utilization of the training materials and engineers (as trainers) of JREEEF, in coordination with the consortium;
- Financial support from JREEEF for the creation of an awareness campaign, together with university students of the Al al-Bayt University;
- Financial support from JREEEF for RE/EE research, internships and post-graduate trainings of students of the Al al-Bayt University;
- Delivering impact monitoring and reporting and carbon accounting support to JREEEF to support attracting carbon financing and strengthening the climate change mitigation strategy of Jordan.

We are looking forward to collaborate with JREEEF to implement this project.

A handwritten signature in blue ink, appearing to be "Joris Benninga".

Joris Benninga
CEO GreenfieldCities

A handwritten signature in blue ink, appearing to be "Eman Qaraeen".

Eman Qaraeen
National Program Manager – GIZ TWEED II

رقم ١٣
٤٢٨٥ / ٩ / ٢٠١٩



ات م ا ع 31047\10228
الرقم 8 جمادى الثاني 1440
التاريخ 13/02/2019
الموافق

دولة رئيس الوزراء

إشارة لكتاب دولتكم رقم 35118/2/16/31 تاريخ 2018/12/17

والمضمن إنشاء نواه لمجمع علمي تقني لمؤسسة Greenfield Cities .

أرجو أن أبين لدولتكم ما يلي :-

❖ قد يكون هناك شيء من الأثر التنموي الإيجابي على محافظة المفرق جراء تنفيذ المشروع أعلاه .

❖ هناك العديد من المحاور في القطاعات الأخرى قد يستفاد منها تأتي ضمن اختصاصات ومهام الوزارات الأخرى .

أرجو دولتكم التكرم بالإطلاع منسباً مخاطبة معالي وزير التخطيط والتعاون الدولي لعرض الموضوع على اللجنة التنسيقية لشؤون المساعدات الإنسانية ، علماً بأنه لا يوجد أي مانع من الناحية الأمنية حول المشروع .

ولفضلوا بقبول فائق الاحترام ،،،

سمير إبراهيم المبيضين
وزير الداخلية

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



وَنَارَ الْإِسْلَامِ

محافظة المفرق

١٨٥٢

الرقم ١٤٤٠
التاريخ ٢٨ رجب
الموافق ٢٠١٩/٤/٤

السادة شركة GreenfieldCities

أرجو العلم، بأنه وبعد الإطلاع على ملخص مقترح المشروع المرفوع إلينا من قبلكم بخصوص إنشاء مدينة متكاملة مستدامة ونواة مجمع علمي تقني تحت مسمى (حرم الشباب الجامعي للأعمال في المفرق) والذي يهدف إلى خدمة أبناء المجتمع المحلي وتوفير فرص عمل للباحثين عن عمل كما جاء في كتابكم. وعليه فإنه في حال استكمال هذا المشروع للموافقات الرسمية من الجهات ذات العلاقة فإننا سنكون على أتم الاستعداد لتقديم الدعم المعنوي والإداري لتسهيل عملكم وحسب القوانين والانظمة المعمول بها.

وتفضلوا بقبول فائق الاحترام

ياسر عبدالرحمن العدوان

محافظ المفرق

نسخة/ لمعالي وزير الداخلية

نسخه/ للعامه



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



المملكة الأردنية الهاشمية
مجلس محافظة المفرق

الرقم م/س/٢٠١٩/١
التاريخ ٢٧ رجب ١٤٤٠ هـ
الموافق ٢٠١٩/٤/٣

عزيري السيد بنينجا

يدعم مجلس محافظة المفرق _____ رق تطوير حرم الاعمال الشبابي لشركة (GreenfieldCities) في منطقة الحسين بن طلال للتنمية يهدف هذا المشروع الى خلق ظروف جذابه لتنمية الشباب والقطاع الخاص في المفرق لخلق (٣٠٠٠) فرصة عمل. يستفيد منها ابناء محافظة المفرق.

وبصفتنا مجلساً منتخباً لممثلي المجتمع، فإننا ندعم ما يحدث في محافظة المفرق من حيث التنمية والاستثمار وننصح بـ (GreenfieldCiti) لضمان استفاد الشباب بشكل عادل من المشروع من المحافظة باكملها. يتطلع المجلس الى بناء القدرات الادارية من خلال المشاركة الفعالة في ادارة حرم الاعمال للشباب في غضون سنوات قليلة بعد إنشائه.

يمكن لـ (GreenfieldCiti) الاعتماد على دعمنا المستمر ضمن الاطر القانونية المعمول

بها داخل المملكة الاردنية الهاشمية.

واقبلوا الاحترام

محمد خلف أخو رشيد
رئيس مجلس محافظة المفرق

نسخه/للعامة

ع م/ص ع.....



19th Fl. Jeongdong Bldg., 21-15 Jeong-dong, Jung-gu, Seoul 100-784 Korea

TEL: 82 2 2096 9991 FAX: 82 2 2096 9990 E-mail: info@gggi.org

9 April 2019

Joris Benninga, CEO
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of Support for Greenfield Cities' Activities in Jordan

Dear Mr. Benninga,

The objective of the Global Green Growth Institute (GGGI) in Jordan is to support the Jordanian Government with the implementation of the National Green Growth Plan (NGGP). The NGGP provides a comprehensive development approach to green growth planning and implementation, supported by the quantitative analysis of twenty-four projects, and recommendations across six key green growth sectors: energy, water, waste, transport, tourism and agriculture, as well as an analysis for increasing green financing through improving the enabling environment for investment in Jordan.

GGGI-Jordan would like to acknowledge the efforts of GreenfieldCities (GFC) in developing the Youth Business Campus in Mafraq. We believe the youth business campus can and should contribute to implementation of Jordan's green growth objectives, especially in the area of youth empowerment, innovation and climate resilience.

As such, GGGI is submitting the Youth Business Campus project for inclusion in the National Action Plan for Green Growth as a potential measure to support transformational green growth in Jordan. We look forward to working with GFC in the future.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Ahmed Al Amra", is written over a large, faint watermark of the GGGI logo.

Ahmed Al Amra
Country Representative Jordan
Global Green Growth Institute

Global
Green Growth
Institute



وزارة الخارجية وشؤون المغتربين

الرقم ١١٧٢٩/١٣٥/١٨
التاريخ ١٩/٣/١١
الموافق

وزارة الخارجية وشؤون المغتربين
١٢-٥٣-٢٠١١
٧٥٧١-٤٦٦٤

عطوفة مدير مكتب دولة رئيس الوزراء

تحية طيبة وبعد،

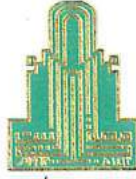
إشارة إلى كتاب دولة رئيس الوزراء رقم 35118/2/16/31 تاريخ 2018/12/17 بخصوص طلب بيان الرأي حول مقترح إنشاء نواه لمجمع علمي تقني لمؤسسة Greenfields Cities الهولندية المختصة في إنشاء مدن تكنولوجية نظيفة، في منطقة الملك الحسين بن طلال التتموية في المفرق. أرجو التكرم بالعلم بأن الموضوع ليس من اختصاص وزارة الخارجية وشؤون المغتربين كون المؤسسة شركة خاصة ولا تتمتع بأي نوع من أنواع الحصانات أو الإمتيازات.

وتفضلوا بقبول فائق الاحترام،

وزير الخارجية وشؤون المغتربين بالوكالة
مدير إدارة الشؤون الاقتصادية
والتعاون
الوزير المفوض محمد التل
محمد محمد شويكة

نسخة: المكتب الخامس.

مؤرخ شف



جامعة آل البيت
AL al BAYT UNIVERSITY

Office of the President

مكتب الرئيس

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands
Subject: Letter of intent to partner

March 18, 2019

No: 7/5/3/96

Dear Joris Benninga

The Water, Environment and Arid Regions Research Center (WEARRC) at Al al-Bayt University has been established in 2009 to serve the local community and various economic activities in Mafraq. The center is considered a national coordinator to conduct and collect research on water resources, environment and the development of arid regions in Jordan.

It is our pleasure as Al al-Bayt university/WEARRC to collaborate with GFC in the water component of the Youth Business Campus. WEARRC can offer specialized laboratory testing services for water quality tests of treated (waste) water as according to the approved price lists for these services as a part of the Campus water management system, WEARRC can also offer training opportunities to youth in the field of water, solid water and organic compounds testing.

In addition, the GFC Youth Business Campus can be used as an attractive learning, working and living environment for students, academic staff and researchers at Al al-Bayt university.

We appreciate any further steps to achieve your proposed project in collaboration with WEARRC.

Yours sincerely,

Professor. Adnan Atoum

President of Al al-Bayt university.



جامعة آل البيت
AL al BAYT UNIVERSITY

Office of the President

مكتب الرئيس

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands
Subject: Letter of intent to partner

March 18, 2019

№- 7/5/3197

Dear Mr. Benninga

Al al-Bayt University is a governmental university in Mafraq, serving over 20.000 students with scientific education, both undergraduate and postgraduate. During the feasibility study for the Greenfield Cities (GFC) Youth Business Campus (5 minutes away from the Al al-Bayt University by car/ bus), Al al-Bayt University has supported GFC with access to faculties, student associations and students for information and data gathering. As a part of the "Sketch Design I" of the feasibility study, GFC and Al al-Bayt University jointly organized a 'multidisciplinary design competition' for students with a major in Architectural Engineering, Renewable Energy, Water & Environment, and IT. The winning students group received a financial reward.

Al al-Bayt University supports the initiative of GFC to develop a Youth Business Campus in Mafraq and aims to continue collaboration with GFC in the future. The main areas of interest for Al al-Bayt University are to:

- Increase the number of internship- and employment opportunities for Al al-Bayt University students and graduates;
- Serve the Mafraq community by supporting GFC with knowledge on the focus sectors of the Youth Business Campus;
- Make use of Al al-Bayt University radio station for communications with students of the university and the community of Mafraq;
- Attract scientific attention and research funds to Mafraq;

Based on the above, Al al-Bayt University is ready to collaborate with GFC and its partners in this relevant and needed initiative for the youth and Mafraq in the broader sense.

Yours sincerely,

Professor. Adnan Atoum

President of Al al-Bayt university



P.O. Box 47 | 6700 AA | The Netherlands

GreenfieldCities.org
Joris Benninga
Klingelbeekseweg 27-22,
6862 VS Oosterbeek
The Netherlands

Dear Joris,

At the Environmental Sciences Group (ESG) we are at the heart of the mission and vision of Wageningen University & Research: *to explore the potential of nature to improve the quality of life*. In Northern Jordan, improving the quality of life in a sustainable way is an existential challenge due to the dire economical, climate and political circumstances. Like GreenfieldCities, we also believe that contributing to resolving these challenges is not only good for Jordan, but also for the wider region and Europe.

That is why ESG is seeking to realize a long-term regional engagement in Jordan. ESG brings to the table a wealth of knowledge and experience to make a difference in Mafrag. We believe this complements well with the local presence and the Public Private Partnership approach of GreenfieldCities. Ultimately, the ESG solutions need to find their way into local practice, policies and private sector investment. That is why we decided to team up with GreenfieldCities for the 2018 "Migration and Development" call for proposals, issued by the Netherland's Ministry of Foreign Affairs.

We hope that that project is a start of a long term, and deep collaboration. We are looking forward to working with you in the years ahead.

Yours sincerely,

A handwritten signature in blue ink that reads "Bram de Vos". The signature is stylized, with a large loop at the bottom and a long horizontal stroke extending to the right.

Bram de Vos
Managing Director Wageningen Environmental Sciences Group

Wageningen
University & Research

Board of Directors
Environmental
Sciences Group

DATE
April 1, 2019

SUBJECT
Support letter

OUR REFERENCE
20190401LH

POSTAL ADDRESS
P.O. Box 47
6700 AA
The Netherlands

VISITORS' ADDRESS
Wageningen Campus
Building 101
Droevendaalsesteeg 3
6708 PB Wageningen

INTERNET
www.wur.nl

COC NUMBER
09098104

HANDLED BY
Dr. J.A. de Vos

TELEPHONE
+31 (0)317 - 481562

EMAIL
Bram.deVos@wur.nl



**Luminus
Education**

Referenc Number : CEO/2/19/157

4th March 2019

Joris Benninga,
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of Intent to Partner

Dear Joris Benninga,

Luminus Education is Jordan's leading TVET institution that is successful in aligning education with labor market demands to guarantee employment of young students upon graduation. Luminus Education has the ambition to expand its high-quality Education for Employment services to the Youth Business Campus in Mafraq to help Syrian and Jordanian youth accessing locally relevant employment opportunities in multiple sectors. In addition, the operations of the Luminus *Shamal Start* incubator in Irbid can expand and align with the activities on the Youth Business Campus to develop start-ups that can help tackling challenges of Mafraq Governorate.

We consider GreenfieldCities to be a main partner in our strategy to deliver Education for Employment services in Northern Jordan. We therefore welcome and support the innovative project for the Youth Business Campus in Mafraq that will create employment opportunities for young people unable to access such opportunities in Amman. Areas of collaboration between Luminus Education and GreenfieldCities include:

- Partnering in the development of locally relevant Education for Employment curricula for youth;
- Delivering Education for Employment services on the Youth Business Campus;
- Delivering incubation services on the Youth Business Campus, powered by Luminus Shamal Start;
- Delivering strong project results in the "Agri-ICT Hub" project as submitted to the "Migration & Development" call;
- Partnering in the development of concept notes and proposals for the development of the Youth Business Campus and rollout of high-quality Education for Employment programs;

We look forward to work towards tangible programs and projects with GreendfieldCities.

Yours sincerely,

Ibrahim Al Safadi
CEO Luminus Education



Airport Road
Marj Al Hamam Bridge
P.O.Box 183334
Amman 11118, Jordan
T +962 6 5799 037
F +962 6 5799 038
info@luminuseducation.com
luminuseducation.com

Annex 18 Letter of Intent by Ammon Applied University College of Hospitality and Tourism Education



14/3/2019

Joris Benninga, CEO
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of Intent to Partner

Dear Mr. Benninga,

Ammon Applied University College of Hospitality and Tourism Education (AAUC) is since 1980 Jordan's premier university level college in Hospitality and Tourism Management education and training.

AAUC has the ambition to turn its education institute in Amman into a Center of Excellence for Hospitality and Tourism education, while establishing branches in the Governorates to be able to attract the most vulnerable students in the Hashemite Kingdom of Jordan to the hospitality and tourism sectors.

The branch in Mafraq could be established in collaboration with GreenfieldCities. We therefore welcome the GreenfieldCities Youth Business Campus project in Mafraq. This project would deliver the needed infrastructure and links to the local community to establish a successful education institute in Mafraq, linked to the proposed Center of Excellence in Amman.

We look forward to develop this further together.

Yours sincerely,

Dr. Muhsen Makhamreh

Dean of Ammon Applied University College of Hospitality and Tourism Education





Date: 13 March 2019
Letter no: 078/EFE-J/2019/O

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga

On behalf of Education for Employment Jordan (EFE-Jordan), I welcome the innovative GreenfieldCities approach to create – the so much needed- jobs in Mafraq via education for employment services on the GFC Youth Business Camps.

Education for Employment –Jordan (EFE-Jordan) is a nonprofit organization established in 2006. It is part of an affiliate network that operates in the following countries: Jordan, Palestine, Tunisia, Morocco, Egypt, Algeria, Saudi Arabia, Yemen with support affiliates in USA, Spain and UAE. EFE Jordan trains youth and place them in jobs in the private sector. It also provides micro-entrepreneurship training encouraging people to start their micro business or work from home. EFE Jordan works with University students and non-University students on a demand driven approach.

We therefore wish to express the intent of EFE-Jordan to collaborate with GFC to implement training programs at the Youth Business Campus in Mafraq within the period of 2019-2024.

I look forward to working together with GreenfieldCities.

Yours sincerely,

Ghadeer Khuffash, CEO
EFE- Jordan

February 26, 2019

Joris Benninga,
GreenfieldCities
Klingelbeekseweg 27-22
6862VS, Oosterbeek
The Netherlands



Subject: Letter of Intention to Partner

Dear Joris,

On behalf of ReBootKamp (RBK), we welcome and support the GreenfieldCities innovative. RBK is prepared to help you generate and build a Youth Business Campus in Mafraq.

Given the high demand for our engineers and tens of thousands of youth in the area who qualify for our training, we are confident we could place 3,000 youth in the next 5 years.

GreenfieldCities is an opportunity to:

- Deploy a branch of our successful career accelerator in the earliest phase of your project to fuel your growth. Given the lower operating costs in the north, we can offer more training seats for the same costs relative to our Amman campus
- Train Syrian refugees which is consistent with the Jordanian national IT strategy (REACH2025)
- Attract industry to North Jordan in the same way we attracted Expedia to Jordan - by offering international companies Silicon Valley engineers at a fraction of the cost.
- Share our powerful education technology with other education actors in Mafraq.
- Significantly increase opportunities for women in Mafraq.

Let's team up in 2019!

Yours sincerely,

A handwritten signature in black ink, appearing to be 'H. Bosely'.

Hugh Bosely
Founder & Executive Director, ReBootKamp





4 / 4 / 2019

Joris Benninga, Chief Executive Officer
GreenfieldCities
Klingelbeekseweg 27-22
6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga,

On behalf of Bayanat, we welcome and support the Youth Business Campus project of GreenfieldCities. The project intends to create sustainable jobs in Mafraq for young women and men in several key sectors, including the IT sector. We believe that the Youth Business Campus has the potential to offer many underprivileged youth in Northern Jordan valuable IT job opportunities close to their communities.

As [name company], we understand by heart how difficult it is for youth in the Northern Governorates to access valuable IT job opportunities. We therefore share GreenfieldCities' objective to give underprivileged, but highly motivated and talented youth a chance to access such job opportunities. We aim to do that by operating a training facility at the Youth Business Campus where we will train youth on specific highly demanded skills for the IT jobs of today and tomorrow, while we help the trainees to work on IT projects that are offered at online freelancing platforms. This will gradually create a large pool of highly skilled IT professionals that can work from the Youth Business Campus or even from home on well-paid freelance IT projects. This especially offers an opportunity for women in rural areas to work on such projects from home. Additionally, we will help trained youth to start their own IT businesses at the Youth Business Campus to work on IT projects. This will furthermore increase the number of job opportunities in Northern Jordan.

We strongly believe in this approach and look forward to work on this together with GreenfieldCities in the upcoming years.

Yours sincerely,

Dr. Mohammad Malkawi, CEO
Counterfeit Combat Technology

malkawi
malkawi

Mohammad Tahboub, President & CEO
Bayanat

البيانات الرقمية
شركة
التكنولوجيا المتكاملة



CD20 Holding B.V.
Velperweg 35
6824 BE Arnhem

T: 026-3894898

www.cd20.nl
info@cd20.nl

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

KvK Arnhem 71164200
BTW no. 8586.05.090.B01
NL48 INGB 0008 5677 48

our ref:
doc/RvdB

date:
07 March 2019

subject:
Letter of intent tp partner

Dear Mr. Benninga,

CD20 is a Dutch construction company with over 40 years of market experience in prefabricated concrete systems for multiple building purposes. These systems are demountable, modular and quickly to assemble with less unskilled people compared to business as usual. Since 2011, CD20 is pioneering in the Middle East and has recently started to develop and build housing in the Kingdom of Saudi-Arabia, thereby responding to the shortage of housing in this country.

CD20 supports GreenfieldCities in its mission to develop a Youth Business Campus in Mafraq. CD20 and Luminus Education can use the Youth Business Campus as a construction hub to respond for needs in regional reconstruction, the energy transition and capacity development in modern construction techniques. Specific areas of interest for CD20 are;

- Advising to establishing, together with a Jordanian project developer and/or contractor, a conditioned environment (factory) for the production of prefab elements in the Mafraq Economic Free Zone;
- Showcasing CD20 building systems on Youth Business Campus;
- Providing, in collaboration with Luminus Education, Building Information Modelling (BIM) trainings for youth from the MENA region at the Youth Business Campus;
- Training youth for the prefab industry and other needed construction techniques in the MENA region.

We are looking forward to work together with GreenfieldCities in Jordan.

Yours sincerely,


ing. Roald van der Blij
Managing Director
CD20 Holding B.V.

Aline Bussman
Regional Programme Manager
cewas Middle-East
Mekka Street 5
Amman, Jordan
aline.bussmann@cewas.org

[17 Dec 2018]

Hedzer Roodenburg Vermaat
Country Director Jordan
GreenfieldCities Foundation
Klingelbeekseweg 27-22
6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

To whom it may concern,

On behalf of **cewas Middle-East**, I welcome and support the innovative GreenfieldCities approach to generate a Youth Business Campus in Mafraq for the creation of 3000 sustainable jobs for local youth in multiple sectors while simultaneously transitioning from donor funding towards impact investment financing within three years.

I wish to express the intent of **cewas Middle-East** to partner with the GreenfieldCities Foundation and GreenfieldCities Jordan to develop and implement projects in the water, sanitation and solid waste sector at the Youth Business Campus in Mafraq within the period of 2019-2024. Specific areas of interest for **cewas Middle-East** are:

:

- GreenfieldCities provides **cewas Middle-East** with a physical platform to research, incubate, promote and pilot start-ups with solutions in water, sanitation and solid waste from where **cewas Middle-East** can provide entrepreneurship support, develop new financing mechanisms and develop capacity and sustainable management in the water, sanitation and solid waste sectors.
- GreenfieldCities and **cewas Middle-East** can partner to develop new programs and projects and/or build upon existing programs, including the development of concept notes and proposals for funding.

I encourage public governments, non-sector specific donors and other financing institutions to provide core support to GreenfieldCities as a basis for sector specific interventions on the GreenfieldCities Youth Business Campus by **cewas Middle-East**.

This letter is not an official offer and all details would need to be negotiated and executed through a formal contract. I look forward to work towards tangible programs and projects with GreenfieldCities.

Yours sincerely,



Aline Bussman
cewas Middle-East



• ignites ambition

14th March 2019

Joris Benninga, CEO
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Support Letter

Dear Joris,

Jordan enjoys a lively MSME ecosystem in which small, medium and micro enterprises employ around 70% of the workforce. This can act as a great potential for sustainable growth in the country. SPARK helps this business base to cope with the shocks of the Syrian crisis and offers support to reduce internal barriers, fostering competitiveness of Jordanian entrepreneurs and SME's. We do that with our successful education and entrepreneurship programs.

We see that a thriving SME segment requires a strong and stable business environment. Especially outside Amman, these conditions are often lacking. At SPARK, we like the idea that GreenfieldCities aims to foster, create and maintain such conditions in Mafraq Governorate.

When GreenfieldCities and partners realize the first steps of the Youth Business Campus in Mafraq, SPARK is certainly interested to explore how the Youth Business Campus project can be integrated into its current and future programs to create a more enabling business environment in Jordan.

All the best from the SPARK team. We are looking forward to work together with GreenfieldCities on your exciting project.

Yours sincerely,



Yannick Du Pont
SPARK



[March 23rd, 2019]

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga,

IMDAD is a Jordan based company offering a variety of solutions related to construction, infrastructure and facilities management. We are specialized in supplying food in large quantities to our customers with the vast experience in supplying food through catering services.

The Youth Business Campus project of GreenfieldCities offers an interesting business opportunity for IMDAD as we can deliver catering services to visitors of the campus and workers of the King Hussein Bin Talal Development Area. This will also create employment opportunities for youth and women in particular.

I support GreenfieldCities in their mission and wish to explore more opportunities for collaboration in the near future.

Yours sincerely,

[Ziad Al-Armouti- CEO]

IMDAD Total Site Services



[31-3-2019]

يوريس بيننجا ، الرئيس التنفيذي
GreenfieldCities.org
Klingelbeekseweg 27-22٦٨٦٢ ،VS ،Oosterbeek
هولندا

الموضوع: خطاب نوايا الشريك

عزيزي السيد جوريس بننجا ،

ذهب وحطب هي شركة ضيافة أردنية من المفرق ، متخصصة في تشغيل المطاعم والمقاهي. لدينا مطعم واحد في المفرق ، حيث نقدم القهوة والطعام والمشروبات مع التركيز على التقاليد الأردنية.

عندما تم اقتراحي من قبل Greenfieldcities اعجبت بمفهوم الشركة ورؤيتها لبناء مدينة مستدامة للشباب ، انا مهتم بالتأكيد بأن اصبح جزء من هذه المبادرة العظيمة وانا على استعداد بالقيام بفتح مطعم في هذه المدينة المستدامة للشباب البدء بأنشاء البنية التحتية.

انا أؤيد تماماً Greenfieldcities في مهمتها المتواضعة وأتطلع الى رؤية الحرم الجامعي لأعمال الشباب.

تفضلوا بقبول فائق الاحترام،

محمد الهبيقال ، الرئيس التنفيذي
ذهب وحطب



محمد الهبيقال
٧٧٩٤٥٠٢٢٢



26-02-2019

GreenfieldCities.org
t.a.v. Joris Benninga
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga,

Just like we stated in our earlier support video message for GreenfieldCities, we also see a major opportunity for energy efficient, durable and affordable construction in Jordan and the wider region. Especially the GreenfieldCities location near the Syrian border and on the road to Iraq is interesting with respect to the formidable task of rebuilding the region. Also, the fact that the Mafraq free Zone is focused on chemical industry and logistics is an interesting factor for us.

When the planned Youth Business Campus could be launching customer for our building solutions, we could contribute to reconstruction of the regional infrastructure with a rolling start. We also see opportunity to explore training local Jordanians and Syrians in the Netherlands to accelerate impact and business development in the MENA region.

We therefore wholeheartedly like to explore together with our partners and GreenfieldCities what options we have to introduce UniQa to the Youth Business Campus in 2019 or 2020.

Best Regards,

A handwritten signature in black ink, appearing to read 'B. Kappers', with a horizontal line drawn through it.

Bouke Kappers

*UniQa Wall Systems NL B.V.
Dreijenlaan 2
6703 HA Wageningen
+31 317 31 12 12*





Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Deerns Groep B.V.
Fleminglaan 10
2289 CP Rijswijk
P.O. Box 1211
2280 CE Rijswijk
The Netherlands
T +31 88 3740 000
www.deerns.com

Date 26 February 2019
Contact J.K. Mak
Subject Letter of intent to partner

Dear Mr. Benninga,

Our firm, Deerns Groep BV consulting engineers, prides itself on bringing sustainable concepts to life. Therefore, we greatly welcome GreenfieldCities' Youth Business Campus initiative in Mafrq. The initiative champions an innovative and integrated approach, contributing to ending forced migration.

We have supported GreenfieldCities in the past, and it is great to see the initiative advance. At Deerns, we are ready to make further contributions and to engage in the development and construction phase of your project in Mafrq providing design solutions to the sustainable mechanical, energy and water engineering challenges ahead.

We wish you all the best with the next steps!

Best regards,
DEERNS GROEP B.V.

A handwritten signature in blue ink, appearing to read "Jan Karel Mak".

Jan Karel Mak
Chief Executive Officer



Irbid - Jordan
+962 79 8626059
greenrooftastic.com

Date: Mar 11th, 2019
Ref: L19.03.11.02

Joris Benninga, Chief Executive Officer

GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter Of Intent To Partner
Youth Business Campus of GFC - Mafrag

Dear Mr. Benninga,

I'm writing this letter to express our interest in being part of your green activities in MENA, with a specific initial focus on your new project in Mafrag, Jordan.

Climate change is a critical global challenge, MENA is not an exception. Actually MENA region has some countries with the highest CO2 emissions per capita. In addition, there are air quality issues, high temperatures, water availability and the loss of local biodiversity.

BLOOMS focus will be on integrating green (vegetation) systems within cities infrastructure, as a key solution to many of its challenges, like urban heat island effect, air quality and stormwater management. Our solutions can be implemented on existing and new buildings, inside and outside. Green roofs and green walls are some of our products range. We have built an international team of engineers and designers that is capable of delivering a high quality final product. Our services includes; design, installation and after sales maintenance of our solutions.

BLOOMS has approached GFC to help in setting up a production facility for our green solutions in Mafrag Economic Free Zone. We aim to implement our solutions on the Youth Business Campus of GFC to showcase and market it from there. This includes the production of vegetation layer and the training of local youth on the installation and maintenance of the solutions. It would be the first time that green roofs are implemented in Jordan.

We appreciate the help of GFC to get incorporated in Mafrag and look forward to do business together.

Sincerely,

Hadeel Hmoud

CEO

BLOOMS - Green Rooftastic!



[3/4/2019]

Joris Benninga, CEO
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga,

Our Electricity From The Sun is a Jordanian renewable energy start-up that provides renewable energy design, engineering and training services. We work with local communities in Mafraq and Irbid and share our passion for solar energy through awareness raising sessions and trainings at schools, community centers and companies. We thereby contribute to the energy transition and climate change mitigation.

We are excited about the GreenfieldCities project of the Youth Business Campus and aim to offer our services from this campus. This includes the provision of trainings and awareness raising sessions on the campus.

Thank you for undertaking this important initiative for Jordan.

Yours sincerely,

Ola Beirat, CEO
Our Electricity From The Sun

A handwritten signature in blue ink, appearing to read 'Ola Beirat', is written over a horizontal line.



Oss, 11-3-2019

GreenfieldCities.org
t.a.v. Joris Benninga
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga,

SEMILLA Sanitation powered by Nijhuis Industries deliver cost effective and state-of-the-art water solutions that can convert on-site and off-grid wastewater into clean water, water for plants and compost and nutrients for food production. Aligned with the long-term commitment of GreenfieldCities, we scale with our client's needs and invest in long-term customer relationships through Operations & Maintenance services after the supply of the technology. We therefore believe that our solutions fit the water management system of the Youth Business Campus in Mafraq.

We support the approach of the Youth Business Campus to help saving water in Northern Jordan and would like to express our intent to become a private sector partner in the project. We are currently exploring together how we can demonstrate our water solutions in the demonstration phase of the Youth Business Campus. Demonstrating an operational plant is the best possible development tool towards scaling both business and impact in Jordan. In addition, the plant offers a tool for the development of start-ups in the water sector.

We are looking forward to collaborate with GreenfieldCities in the water component of the Youth Business Campus in Mafraq.

Best Regards,

A handwritten signature in blue ink, appearing to read "Peter Scheer", is written over a light blue horizontal line.

Peter Scheer
CEO SEMILLA Sanitation



**Anaqeed Alkhair Cooperative (Cluster Villages)
Established in 2002**

Multi-purposes

Monday, 3/11/2019

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga

I am writing you on behalf of Anaqeed Al Khair (Cluster villages) Cooperative, which is located (55 km) NE of Mafraq City and established in 2002. The cooperative was officially opened by Her Majesty Queen Rania Al Abdullah II in 2004. It is my great pleasure to inform you that the cooperative, including 14 villages (200 members; males and females), is welcoming the innovative GreenfieldCities approach to help farmers of Mafraq increasing income and reducing water consumption while creating the so much needed jobs for youth.

Anaqeed Al Khair Cooperative has multiple businesses in the agricultural sector: plastic greenhouses for the production of thyme, cucumber and tomato, bee keeping for honey production, processing tomatoes into dried tomatoes and animal fodder production for sheep. These activities help hundreds of families (directly) through permanent and seasonal jobs (Jordanian and refugees from Syria) and (indirectly) through selling our product as semi-organic products.

GreenfieldCities can help the Cooperative with marketing and management trainings, the installation of solar PV and other activities. I therefore wish to express the intention to initiate a real strategic partnership.

I am looking forward to work together on projects with GreenfieldCities.

Yours sincerely,

Dr. Odeh Al Mes'han,
Cooperative president – Mafraq, Jordan

Annex 33 Support Letter by Jordan Exporters and Producers Association for Fruit and Vegetables (JEPA)



JEPA

الجمعية الأردنية لمصدري ومنتجي الخضار والفواكه
Jordan Exporters and Producers Association For Fruit and Vegetables

13 March 2019

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of Support

Dear Mr. Benninga,

The Jordan Exporters and Producers Association for Fruit and Vegetables (JEPA) is a Jordanian association that represents the Jordanian horticulture sector and promotes the growth and export of products from its members. JEPA provides services to its members such as promotion, information provision, technical assistance, trainings and advocacy on behalf of the members.

In order to improve the competitiveness of the Jordanian horticulture sector, JEPA welcomes the private sector driven and value adding approach of the GreenfieldCities (GFC) Youth Business Campus for Jordanian farmers. GFC aims to increase income of farmers through the delivery of centrally organized post-harvesting, marketing and quality assurance services.

JEPA has helped GFC during the feasibility study for the Youth Business Campus in Mafraq with the provision of information. After this phase, JEPA aims to help GFC and partners with the implementation of the facilities, selection of products, markets and production standards for the involved farmers, while building its own capacities.

We look forward to work together with GreenfieldCities on this exciting initiative.

Yours sincerely,

Eng. Abd Al-Rahman Ghaith
Secretary General
JEPA



Wageningen, 5 Maart 2019

GreenfieldCities.org
t.a.v. Joris Benninga
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Mr. Benninga,

As HollandDoor, we like the GreenfieldCities community-based approach to bring Agri-Food innovations to small- and medium sized farmers. Based on constructive discussions between HollandDoor, GFC, Wageningen Research, Semilla and Priva in November and December of last year, we are looking forward to develop a joint project on the Youth Business Campus in Mafraq. This project is inspired on the successful Priva model in Mexico where farmers are centrally supported with knowledge, quality- and climate control to produce cash crops in green houses.

HollandDoor has extensive experience in Jordan and the wider MENA region and would like to apply this within the project as being developed by the potential Netherlands based consortium. This consortium could develop a concrete project proposal and secure strong alignment and complementarity with the policy goals of the Netherlands government and other Agri-Food initiatives in Jordan.

We propose to discuss further collaboration with the potential consortium partners to work on next steps.

Best Regards,

Engelle Beenen

HollandDoor
Agro Business Park 22
6708 PW Wageningen

10-03-2019

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Joris,

17Asset Management (17AM) aims to increase the size of the SDG driven investment- and asset pool globally with two orders of magnitude within 5 years. For our mission to succeed, we need SDG-driven initiatives that deliver scalable impact and reliable financial returns. We differentiate ourselves by being a leader in blended finance and employing the Sustainable Development Goals (SDGs) as an integral lens to our investment theory. We are launching our inaugural investment as a firm in Jordan, with a USD 100 million fund focusing on growth and impact in Jordan - the SDG Jordan Growth Fund.

At 17AM, we welcome and support the innovative and SDG-driven initiative of GreenfieldCities to develop a Youth Business Campus in Mafrq, including the transition from donor funding to impact financing. The GreenfieldCities project is aligned with 17AM's focus on women, youth and refugees, SDG5 and SDG8, among other SDGs, and nicely integrates economic and environmental SDGs within the project approach. Also the fact that the GFC projects includes the long-term management of high quality 'green' infrastructure assets like green buildings, smart energy and water infrastructure and ICT is attractive from our point of view. The GreenfieldCities project offers several investment opportunities aligned with the focus industries of 17AM and Jordan.

We are exploring how we can position GFC within our partner base as a (research and demonstration) template for developing, rolling out and managing SDG enhancing assets. Let's secure together that GFC succeeds in Jordan and beyond.

Yours sincerely,

Mary Nazzal-Batayneh,
Partner at 17AM and Country Head for Jordan



United Nations Development Programme
برنامج الأمم المتحدة الإنمائي



*Empowered lives.
Resilient nations.*

14 February 2019

Joris Benninga
Chief Executive Officer
GreenfieldCities Foundation
Klingelbeekseweg 27-22,
6862VS Oosterbeek
The Netherlands

RE: Cooperation between Greenfield Cities and UNDP, Jordan

Dear Mr. Benninga,

We greatly welcome Greenfield Cities' Youth Business Campus initiative in Mafraq. The initiative champions an innovative and integrated approach contributing to progress across a range of SDGs. By looking at private sector partnerships and investments it also presents a sustainable model that can inform other initiatives.

We are currently exploring options of collaboration including:

- piloting UNDP's new SDG Impact initiative which includes impact intelligence and management with programs and projects on the Youth Business Campus and elsewhere;
- facilitating and connecting Greenfield Cities to impact oriented investors through *17 Jordan – A Platform for Investing in Sustainable Development*. One of 17 Jordan's partners, 17 Asset Management is currently developing a SDG Jordan Growth Fund, which may present an opportunity for tapping into investments for the Youth Business Campus;
- collaborating on UNDP's Heart of Amman initiative which could benefit from the integrated approach pioneered by the Youth Business Campus;
- exploring how the Sustainable Urbanization and Renewable Energy project could be rolled out to Northern Jordan with the Youth Business Campus as a showcase; and
- exploring opportunities for developing a joint proposal for the Green Climate Fund.

We look forward to a fruitful collaboration with this exciting initiative.

Sincerely,

Michaela Prokop, Senior Economic Advisor, UNDP Country Office, Jordan



Information and Communications
Technology Association - Jordan

Nidal Bitar, CEO
int@j
Park Plaza, Salah Al Shaimat St 20, Amman
nidal.bitar@intaj.net

Hedzer Roodenburg Vermaat, Country Director Jordan
GreenfieldCities Foundation
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Date: 3 March, 2019
Subject: Letter of intent to partner

To whom it may concern,

On behalf of int@j, I welcome and support the innovative GreenfieldCities approach to generate a Youth Business Campus in Mafrqa for the creation of 3000 sustainable jobs for local youth in multiple sectors while simultaneously transitioning from donor funding towards impact investment financing within three years.

I wish to express the intent of int@j to partner with the GreenfieldCities Foundation and GreenfieldCities Jordan to develop and implement projects in the ICT sector at the Youth Business Campus in Mafrqa within the period of 2019-2025. Specific areas of interest for int@j are:

- the achievement of the objectives of His Majesty King Abdullah II REACH2025 through the GreenfieldCities enabling training, entrepreneurship and job creation activities at the Youth Business Campus;
- the creation of jobs for ICT graduates in the Kingdom of Jordan through the development of excellent human resources at the Youth Business Campus in Mafrqa;
- the opportunity of the ICT sector to connect to other sectors at the Youth Business Campus and thereby showcase cross-sectorial value between ICT and other sectors;
- to offer ICT companies in the Kingdom of Jordan or ICT companies with an interest to operate in Jordan an excellent opportunity to do business while having societal impact from the Youth Business Campus;
- To develop new projects and/or build upon existing projects with GreenfieldCities, including the development of concept notes and proposals for funding, for the benefit of the ICT sector and ICT stakeholders.

I look forward to work towards tangible projects with GreenfieldCities.

Yours sincerely,

Nidal Bitar,
CEO


int@j Information and Communications
Technology Association - Jordan

[April/3rd/2019]

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Joris Benninga,

On behalf of the Danish Refugee Council (DRC), I support GreenfieldCities (GFC) in the mission to develop a Youth Business Campus in Mafraq Governorate for young Jordanian and Syrian women and men. Part of the Youth Business Campus will be a center dedicated to the empowerment of young women.

DRC empowers and protects Syrian refugees, youth and women in Jordan. The Danish Refugee Council (DRC) has been working in Mafraq, Jordan since January 2017, offering programming in two sectors: protection that has just started in 2019 and will be focusing on activities that is designed to enhance individuals' and communities' self-protective capacities and wellbeing, and strengthen the protection environment. And also livelihoods, offering activities that focus on building people's self-reliance and resilience through developing and strengthening their livelihoods capabilities and assets, and reducing their vulnerability and long-term reliance on humanitarian assistance.

Preliminary discussions between GFC and DRC have yielded interest from DRC to jointly develop and implement the women center (*women oasis*) on the Youth Business Campus. The goal of this collaboration is to help young women accessing quality education and employment opportunities in Mafraq.

I look forward to work together on the establishment of this initiative.

Yours sincerely,

Rasha Al Husban, Mafraq CC Base Manager
Danish Refugee Council





United Nations Human Settlements Programme
2 Al-Shakereen St., Deir Ghbar, Amman, Jordan
Tel: +962-6-5924889, Fax: +962-6-5931448

18 March 2019

Joris Benninga, Chief Executive Officer
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent for partnership between UN-Habitat and Greenfield Cities (GFC).

Dear Mr. Benninga,

On behalf of UN-Habitat, I welcome and support the approach of GreenfieldCities (GFC) to develop a sustainable Youth Business Campus in Mafraq. As such, UN-Habitat and GFC are exploring collaboration in the following areas:

- **Climate change adaptation:** implement a sustainable water management system on the Youth Business Campus that reduces water losses, increases water use efficiency, supports water harvesting and promotes the use of non-conventional sustainable water resources, as an exercise to build local capacity in the sector and benefit both displaced persons and host communities, especially women and youth. This system could include a flood water harvesting system, permaculture and greywater reuse facility for irrigation purposes of the Agri-Food activities at the Youth Business Campus;
- **Green affordable housing:** implement green affordable housing on the Youth Business Campus to test and demonstrate energy efficient construction methods and rooftop rainwater harvesting (and storage) at household level;
- **Training services:** Use implemented solutions at the Youth Business Campus as training- and service provision material for education- and private sector partners;
- **Public space development:** develop community-driven public space in Mafraq and on the Youth Business Campus;

I especially welcome the long-term commitment of GFC, the business model and the collective approach of the Youth Business Campus that can help ensuring local ownership, sustainability of implemented actions and strengthening capacities to operate, sustain and replicate the interventions.

I look forward to continue researching how we can turn our explorations into tangible projects on the Youth Business Campus.

Yours sincerely,

Deema Abuthiab,
National Programme Coordinator
UN-Habitat Jordan Office





Date: 7th Mar. 2019
Ref:

Joris Benninga, CEO
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

Dear Joris Benninga,

The Jordan Green Building Council (Jordan GBC) is a non-profit organization, part of a global network of Green Building Councils, with the goal to spread awareness about the green built environment. We develop programs and projects that help to achieve this goal. One successful project is the “Green Affordable Homes Project”, in which we offered families technical and financial support for the inclusion of ‘green construction elements’ in their homes, this project has been done in cooperation with donors, partners and stakeholders

The Jordan GBC supports GreenfieldCities in their mission to develop a ‘green’ Youth Business Campus in the Mafrq Economic Free Zone. The Campus will include ‘green’ buildings, compliant to the Jordanian building codes. The intended contribution of the Jordan GBC includes, but is not limited to an extension of the “Green Affordable Homes Project” at the Campus and an awareness campaign, in collaboration with different partners and donors. We are exploring more ways of collaboration within the Youth Business Campus project.

We are looking forward to continue working together with GreenfieldCities to develop a green showcase in Jordan.

Yours sincerely,

Ala'a Abdullah, Executive Director
Jordan Green Building Council





Innovation & Planning Agency
Global Networking & Humanitarian Expertise

c/o Impact Hub Vienna, Lindengasse 56, 1070 Vienna, Austria
E-Mail: office@switxboard.net
www.switxboard.net

Vienna, 5 March 2019

GreenfieldCities.org
Att. Joris Benninga
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Support Letter

Dear Mr. Benninga,

At IPA- Switxboard we work every day on the idea that stable, safe areas with robust governance are needed in fragile regions. We also believe that the transfer of knowledge and technology can solve a lot of the issues affecting daily life. When this basic condition is fulfilled, people that live in these areas are mostly capable themselves to develop and live their lives and build successful communities, including migrants, refugees and addressing the challenges of urbanisation and transformation of society.

As such the "GreenfieldCities' Youth Business Campus", is an exciting initiative that fits well in a family of similar projects and the concept of " Sustainable Development Zones" that we have been developing in cooperation between Politas, Refugee Cities, IPA-Switxboard and Dr. Joachim Rücker and which we now begin to implement in Ethiopia and soon a number of other countries.

It is therefore of utmost importance that we develop a close cooperation and seize the opportunity to unite and develop an international platform bringing all actors and stakeholders together, ensuring a coalition of the like-minded and developing these projects further. This common instrument and platform will be based somewhere in Europe and will serve as a think-tank, an advocacy vehicle, and a funding manager for bringing the idea's for long term sustainable development zones (SDZ's) to life.

With Best Regards,

A handwritten signature in blue ink, appearing to read 'Kilian Kleinschmidt', written over a light blue horizontal line.

Kilian Kleinschmidt
CEO

Michael Schuring, Founder
Deserttulip-Jordan
Elia Abu Madi Street, Building #16, Second Floor
Shumaisani, Amman-Jordan
mschuring@deserttulip-groasis.com
00962 772461636

19.12.2018

Hedzer Roodenburg Vermaat, Country Director Jordan
GreenfieldCities Foundation
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Letter of intent to partner

To whom it may concern,

On behalf of **Deserttulip-Jordan**, I welcome and support the innovative GreenfieldCities approach to generate a green Youth Business Campus in Mafraq for the creation of 3000 sustainable jobs for local youth in multiple sectors while simultaneously transitioning from donor funding towards impact investment financing within three years.

As a private sector entity, I wish to express the intent of **Deserttulip-Jordan** to partner with the GreenfieldCities Foundation and GreenfieldCities Jordan to develop and implement the Groasis technology at the Youth Business Campus in Mafraq from 2019 onwards. Specific areas of interest for **Deserttulip-Jordan** are:

:

- GreenfieldCities provides **Deserttulip-Jordan** with a physical platform to showcase, promote and educate youth from Mafraq about the Groasis technology and thereby green the Youth Business Campus with a water-saving and environmentally friendly greening technology.
- The Agri-Food sector of the youth Business Campus can use **Deserttulip-Jordan** products to grow cash-crops for small- and medium size farmers and can therefore be part of the value chain that GreenfieldCities aims to establish.
- The Groasis technology from **Deserttulip-Jordan** can offer a solid basis for landscape restoration at the Youth Business Campus and the Mafraq Economic Free Zone as a whole.
- The Mafraq Economic Free Zone needs more greenery to be attractive for investment; the Youth Business Campus will provide **Deserttulip-Jordan** with office and training space to work on the greening of the Mafraq Economic Free Zone.
- GreenfieldCities and **Deserttulip-Jordan** can partner to develop new project, including the development of concept notes and proposals for funding.

I encourage public governments, non-sector specific donors and other financing institutions to provide structural financial support to GreenfieldCities as a basis for sector specific interventions on the GreenfieldCities Youth Business Campus by **Deserttulip-Jordan**.

This letter is not an official offer and all details would need to be negotiated and executed through a formal contract. I look forward to work towards tangible programs and projects with GreenfieldCities.

Yours sincerely,

Michael Schuring

Founder of **Deserttulip-Jordan**





الاتحاد النسائي الأردني العام

[3-4-2019]

General Federation of Jordanian Women

يوريس بينينجا ، الرئيس التنفيذي

GreenfieldCities.org

Klingelbeekseweg 27-226862 ،VS .Oosterbeek

هولندا

الموضوع: خطاب نويا الشريك

عزيزي السيد جوريس بينينجا ،

الاتحاد النسائي لمحافظة المفرق ، هو منظمة أردنية غير حكومية ملتزمة بتحسين وضع المرأة. إنها واحدة من أبرز المنظمات النسائية وأكثرها تأثيراً في العالم العربي ، وقد قامت بإنشاء شبكات قوية مع الحركات النسائية ، على الصعيدين الوطني والدولي.

يعد الحرم الجامعي لأعمال الشباب مبادرة ترمس الحاجة إليها لدعم الشابات من المفرق. ولذلك ، يدعم الاتحاد النسائي لمحافظة المفرق، نهج الحرم الجامعي لأعمال الشباب لتهيئة ظروف جيدة لمساعدة الشابات على النمو كشخص وإيجاد وظائف لائقة بالقرب من أسرهن. لقد عملنا سوياً خلال مرحلة دراسة الجدوى للمشروع ونهدف إلى مواصلة التعاون من أجل مصلحة الشابات في المفرق.

تفضلوا بقبول فائق الاحترام،



[ميسون تليلان السليم]

رئيسة الاتحاد النسائي الأردني العام

رئيسة الاتحاد النسائي لمحافظة المفرق

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2019-4-1

يوريس بيننجا ، الرئيس التنفيذي

GreenfieldCities.org

Oosterbeek ·VS6862 ·Klingelbeekseweg 27-22

هولندا

الموضوع: خطاب نوايا الشريك

عزيزي السيد جوريس بيننجا ،

مركز افاق الاردن للتنمية والتدريب مؤسسة اردنية غير ربحية غير حكومية ومقرها الرئيسي في مدينة المفرق وتعمل في كافة محافظات المملكة من خلال منسقين وضباط ارتباط و يهدف المركز الى تمكين المجتمعات المحلية وتنميتها وتحسين مهارات الحياة عن طريق تقديم الدورات التدريبية و مشاريع التنمية المجتمعية وبخاصة تمكين الشباب و المرأة وقد عملت المؤسسة على تنفيذ العديد من المشاريع والبرامج الهادفة الى تمكين قطاعي الشباب و المرأة وبناء قدراتهم من اجل تحسين حياتهم للأفضل .

عندما تم اقتراح افاق الاردن للتنمية والتدريب من قبل Greenfieldcities اعجبت بمفهوم الشركة ورؤيتها لبناء مدينة مستدامة للشباب , انا مهتم بأن اصبح جزء من هذه المبادرة العظيمة و انا على استعداد بتزويدكم بالمتطوعين و قوائم الشباب للتدريب والقاعات اللازمة للبدأ بالعمل واي موارد واعمال يمكن ان نقدمها ونشارك بها .

انا اؤيد تمامًا Greenfieldcities في مهمتها المناوضة وأتطلع الى رؤية المنطقة التنموية المستدامة الحاضنة لأعمال الشباب.

تفضلوا بقبول فائق الاحترام،

، الرئيس التنفيذي
أفاق الأردن للتنمية و التدريب





[2019-4-1]

يوريس بينينجا ، الرئيس التنفيذي

GreenfieldCities.org

Klingelbeekseweg 27-22٦٨٦٢ ،VS ،Oosterbeek

هولندا

الموضوع: خطاب نوايا الشريك

عزيزي السيد جوريس بننجا ،

مركز شباب فينا الخير هو مركز يهدف الى غرس روح العمل الاجتماعي و مساعدة الاخرين، عبر السنوات الماضية كان للمركز دور فعال في ايجاد فرص تدريبية للشباب و تأهيلهم لسوق العمل للحصول على فرص عادلة في التوظيف.

عندما تم اقتراح مركز شباب فينا الخير من قبل Greenfieldcities اعجبت بمفهوم الشركة و رؤيتها لبناء مدينة مستدامة للشباب، انا مهتم بأن اصبح جزء من هذه المبادرة العظيمة و انا على استعداد بتزويدكم بالمتطوعين و قوائم الشباب للتدريب والقاعات اللازمة للبدأ بالعمل.

انا اؤيد تماما Greenfieldcities في مهمتها المتواضعة و أتطلع الى رؤية الحرم الجامعي لأعمال الشباب.

تفضلوا بقبول فائق الاحترام،

حمزة الحسينان، الرئيس التنفيذي

مركز شباب فينا الخير





GreenfieldCities Foundation
t.a.v. Joris Benninga
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Office address
Utrechtseweg 68
6812 AH Arnhem

Postal address
Locatiecode 2NA3100
Postbus 50
NL 6920 AB Duiven
Netherlands
Telephone +3126 844 7111
www.alliander.com

Date
19-03-2019

Subject: Support Letter GreenfieldCities

Dear Mr. Benninga,

We are happy that Qirion and Alliander could support the innovative concept of the Youth Business Campus in Mafraq in the past year. Qirion and Alliander have gladly contributed their Smart Grid knowledge and knowledge from the Sustainable Area Development business unit to the urban planning and design of the campus. We hope that our visit to the local utility IDECO discussing their smart meter program in Northern Jordan has been helpful as well.

Like we discussed over the past year, we are willing to discuss options to support GreenfieldCities in setting up a smart grid including an energy LiveLab environment on the campus. We know that monitoring and reporting of energy systems is an important part of transitioning to sustainability. Alliander benefits from our own LiveLab environment every single day.

Therefore, please keep on sharing your ideas and designs with us as this will help us to identify and develop a fitting approach to keep on supporting GreenfieldCities.

Yours sincerely,



Frans Campfens
Senior Consultant Qirion Energy Consulting

The logo for Qirion, featuring the word "Qirion" in a bold, red, sans-serif font.

Qirion is a subsidiary of Alliander

5 March 2019,

GreenfieldCities.org
Att. Joris Benninga
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Subject: Support Letter

Dear Mr. Benninga,

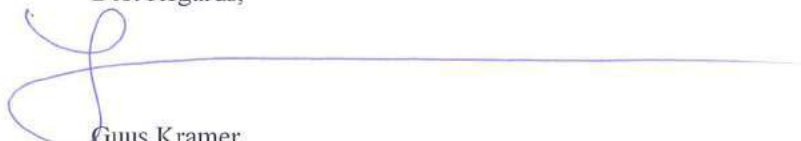
At the Major Alliance (Maatschappelijke Alliantie) we believe that challenges that stand in the way of developing or maintaining safe and pleasant societies are best overcome together. That is why we strive to enable collaboration between funders, entrepreneurs and policy administrators to increase impact for the common good.

We think that GreenfieldCities is a great example of an innovative effort to tackle forced migration along lines of community building, governance strengthening, education and business incubation, both internationally as well as in the Netherlands.

We therefore wholeheartedly support GreenfieldCities. In the past two years, we made several introductions within our network, and we are glad to see that they were meaningful and that new and concrete partnerships are developing.

We propose to continue to work together over the next years. We wish GreenfieldCities all the best with the exciting next steps that will involve development and realization of CBO based infrastructure and services in Jordan and the Netherlands.

Best Regards,



Guus Kramer,
Director

FUTURABILITY

April 5, 2019

Hedzer Roodenburg Vermaat, Country Director Jordan
GreenfieldCities.org

Subject: Letter of intent to partner

Dear Mr. Hedzer Roodenburg Vermaat,

FUTURABILITY believes in the power of creativity to discover new approaches to tackle social issues. That is why FUTURABILITY analyses and tackles social issues with help of art and culture.

One of the projects that we are currently working on has its origins in Zatopia, established by Femke Halsema and Denise Harleman. Zatopia aimed to create free development zones for refugees to improve quality of life of refugee communities. Since Femke Halsema was elected as the mayor of Amsterdam in 2018, FUTURABILITY continues parts of the plans of Zatopia.

On behalf of FUTURABILITY, I hereby express my support for the mission of GreenfieldCities to develop a Youth Business Campus where a community of Syrian and Jordanian youth will live, learn and work together to give a sustainable economic boost to Mafraq Governorate.

In order to facilitate the necessary collaboration between Syrians and Jordanians at the Youth Business Campus, FUTURABILITY and GreenfieldCities explored how this could be facilitated. That is why we decided to join forces: we aim to jointly implement the project "Mafraq Youth Museum", funded by DOEN Foundation, with the objective to help Syrian and Jordanian youth living peacefully together in Mafraq. Together with local artists from Mafraq, "making art" will be the tool to generate social skills and awareness about similarities, shared identity and opportunities for collaboration between the involved Syrians and Jordanians. This will result in a piece of art that symbolizes their shared vision for Mafraq, which will be exposed, next to other pieces of art from local artists, in a newly built "Mafraq Youth Museum" on the site of the Youth Business Campus.

I am looking forward to start implementing this project together.

Yours Sincerely,

Denise Harleman, CEO
FUTURABILITY

Zijlweg 3 | 2678 LC De Lier
P.O. Box 18 | 2678 ZG De Lier
The Netherlands

T +31 174 522 674
E jan.westra@priva.nl
www.priva.com



GreenfieldCities.org
T.a.v. Joris Benninga
Klingelbeekseweg 27, Unit 22
6862 VS Oosterbeek
The Netherlands

Date: April 18, 2019

Reference: JW/WS

Subject: **Support Letter**

Dear Mr. Benninga,

At Priva, our drive is to create a climate for growth, similar to what GreenfieldCities is doing. As such, we greatly welcome GreenfieldCities' Youth Business Campus initiative in Mafraq as a sustainable built environment, and with sustainable agriculture as one of its focus sectors.

Jordan is a small market for Priva, but we are happy that we could inspire you with the tomato cooperative project in Mexico that Priva supported in recent years. That combination of high quality assets, knowledge transfer and handholding has proven to be sustainable over time.

When GFC initiates a similar approach in Mafraq, Priva is willing to consider an in-kind contribution to help demonstrate the potential for growth and quality improvement in Mafraq agriculture.

Please keep us informed about your next steps.

All the best and kind regards,

Priva Holding B.V.

Meiny M.C. Prins, ceo



غرفة صناعة عمان
Amman Chamber Of Industry

Amman, 02nd April 2019

Mr. Joris Benninga, CEO
GreenfieldCities.org
Klingelbeekseweg 27-22, 6862VS, Oosterbeek
The Netherlands

Dear Mr. Benninga,

It was with a pleasure for Amman Chamber of Industry (ACI) to support your GreenfieldCities workshop event for your project-intention "Youth Business Campus" by providing our auditorium-facilities for your event on 18th November 2018 at our premises in Jabal-Amman.

According to your feedback and report, and with reference to the number of participants, the event can be considered as success and the outcome of the event and further discussions seem very promising for you to be able to realize the project.

We as ACI and as the largest regional Chamber in Jordan, are always dedicated to actively contributing to the development of the industrial sector in Jordan and the development of Jordanian industrial products.

For your further steps in your planning and, potentially, in the realization of your "Youth Business Campus" project, we wish you lots of success. In addition to our already existing cooperation in the past, we are looking forward to discussing any further cooperation.

Yours sincerely,


Dr. Nael Al-Husami
CEO of the Amman Chamber of Industry (ACI)