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# Regional Baseline Assessment

Region II: Lebanon, Jordan, Palestine,  
Egypt and Libya

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Mediterranean  
Action Plan  
Barcelona  
Convention



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This report includes a baseline assessment of enabling conditions for green and circular businesses environment in the region that includes Lebanon, Jordan, Palestine, Egypt and Libya. It contains a brief overview of the policy and regulatory framework, market demand, and socio and cultural factors.

As presented below, these countries differ largely in size, population size, and GDP per capita. Nevertheless, many of these countries face similar issues when it comes to enabling green and circular business environment next to differences.

The concept of the circular economy (CE) is still relatively new to the countries in this region and incentives for companies to transition to green and circular practices are limited. Due to the political, economic and social instability in this region, people and businesses' priorities are focused on their short-term physical and economic security, and customers are price-oriented. Nevertheless, some policies exist in this region to support green businesses even if laws are not always enforced. And awareness about circular economy is rising among youth, who represent a large portion of the population in this region.

#### Group III countries characteristics

Country	Size	Population	Population	GDP per capita
Lebanon	10,452 km <sup>2</sup>	6.1 Millions <sup>1</sup>	\$ 53 Bn <sup>2</sup>	\$ 7,784 <sup>3</sup>
Jordan	89,342 km <sup>2</sup>	10.3 Millions	\$ 44 Bn	\$ 4,278
Palestine	6,020 <sup>4</sup> km <sup>2</sup>	5.1 Millions <sup>5</sup>	\$ 15 Bn	\$ 3,199
Egypt	1,010,408 km <sup>2</sup>	97 Millions	\$ 303 Bn	\$ 2,573
Libya	1,759,541 km <sup>2</sup>	6.8 Millions	\$ 52 Bn	\$ 7,684

<sup>1</sup> Including refugees

<sup>2</sup> Based on The World Bank's 2019 data. GDP is rapidly changing due to economic crisis, currency devaluation, liquidity crush and COVID-19 epidemic.

<sup>3</sup> Based on The World Bank's 2019 data. GDP per capita is rapidly changing due to economic crisis, currency devaluation, liquidity crush and COVID-19 epidemic.

<sup>4</sup> United Nations data. <https://unstats.un.org/unsd/demographic/products/dyb/dyb2012/Table03.pdf>

<sup>5</sup> Worldometers data. <https://www.worldometers.info/world-population/state-of-palestine-population>

Note: This report is based on individual country profiles developed for the purpose of this exercise. For more details about any of these countries, please refer to the country profiles available at the [SwitchMed Consultation website](#).



## General overview

Circular economy policies and regulatory frameworks differ from a country to the other in this region. But as a general rule, all of these countries don't have a proper circular economy framework in their regulations.

Nevertheless, they all have policies for environmental protection, even if they are outdated and/or don't cover all environmental issues. They also have policies to:

- Reduce green products production taxation
- Reduce or exempt green products from import taxation
- Provide incentives for (green) businesses and startups to register their business

However, people and businesses lack awareness about these policies, and policies (in general) need more enforcement in this region. Some of the reasons preventing is enforcement include: cultural factors, lack of sub-legal frameworks, lack of proper monitoring, low number of inspectors, political, economic and security instability, corruption and insufficient (financial) capacity.



## National Strategies and Action Plans for Circular Economy

The definition, implementation, and integration of the concept of CE and its principles in strategies and action plans are still in early stages in this region.

Jordan is the only country who recently developed green growth national action plans (GG-NAP) in six sectors: Energy, Waste, Water, Transport, Agriculture and Tourism. These 6 action plans were developed to support environmentally sustainable and socially inclusive economic growth. Each of these 6 action plans includes a Green Growth Framework for the sector, an assessment of the current situation, sectorial priorities, objectives, actions and implementation arrangements.

In Jordan, Palestine and Egypt most developments have been taking place in the area of clean energy production, and were driven by economic interests: households and businesses try to reduce their energy bill through solar panels or solar heating systems installation. Feed-in tariff policies, subsidized bank loans and reduced importing taxation on clean energy equipment stimulated investments in this sector. While Libya and Lebanon suffer from frequent power cuts, clean energy still represents a very small share of the energy mix. This may be due to the cheap oil price in Libya, the lack of feed-in policies, the small size and high real estate prices in Lebanon.

Waste Management sector is a major pain-point for all the countries in this region. While the reasons behind bad waste management differ from a country to the other (corruption, lack of policies and/or action plans, cultural barriers, financial capabilities...), the result remains the same: most of the countries end up dumping their waste in landfills.

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Organic and modern agriculture (hydroponics, vertical farming...) is slowly growing in this region, mainly driven by the scarcity of water and the growing demand for healthy food. Nevertheless, Jordan and Egypt are the only countries to have action plans and/or significant programmes to support this sector.



### **Fiscal and Financial Instruments**

As mentioned earlier, countries in this region have policies to reduce green products production taxation and reduce or exempt green products from import taxation. Nevertheless, awareness about these policies needs to be enforced as very few businesses are able to benefit from them.

Green businesses and startups can also benefit from existing policies to support ICT and/or “classic” businesses. Incentives to support (green) businesses and startups registration usually take the form of tax reduction or exemption. But just like green products production or import policies, awareness is needed to increase the number of businesses benefiting from these incentives.

Finally, while formal public procurement policies exist (to a certain extent) in these countries, their selection criteria don’t include environmental impact. Eco-labelling schemes to promote green and circular economy products and services don’t exist and/or are not effective either. Moreover, corruption, patronage and unfair competition, the lack of transparency and the lack of awareness about public tenders reduce businesses interest in them.

### Consumer Awareness

Consumer awareness around circular economy in the region is low, but is rapidly growing driven by an eco-conscious young generation and (social) media.

Demand for green products and services may still be low and may represent less than 5% of the total market share, but youth are more and more attracted to these products and services and some promising initiatives flourished in the past decade, mainly in Lebanon, Jordan and Egypt.

### Local workforce

Literacy rate is high in the region, peaking at 97.9% in Jordan<sup>6</sup> and 95.7% in Lebanon<sup>7</sup>.

While the quality of education is relatively good (in 2018, Lebanon ranks 4th in the world in terms of quality of math and science education<sup>8</sup>), it principally turns towards science (Jordan is in the world's top 10% countries in terms of "availability of scientists and engineers"<sup>9</sup>). Therefore, general technical expertise exists in this region's labour market, but this expertise is not focused on the circular economy sector. The educational system may not be raising systematic awareness on environmental matters and almost none about the circular economy.

Egypt, Jordan and Libya have a long history of lifetime employment in the public sector. However, with the recent economic crisis in Egypt and Libya employment opportunities in the public sector became scarce, which created an appetite for entrepreneurship and/or the private sector. In Jordan, start-ups success stories mediatisation also helped in creating this appetite.

### Funding Mechanisms

Funding opportunities for green and circular businesses tend to be limited across the region, due to different factors, including the lack of economic and political stability in Lebanon, Palestine, Egypt and Libya and the lack of awareness around circular economy in the region.

Entrepreneurs seem to be limited to limited sources of funding such as bank loans, international aid or their own network. Investors are more short-term oriented, and most environmental projects require longer periods for a return on investment.

### Levels of Innovation

One of the major pain-points in this region is the lack of creative and novel ideas: most entrepreneurs are "recycle" ideas that were implemented in other part of the country or in other countries and try to adapt them to their context / region.

Research and development budgets are low in the region, and very few innovative circular economy ideas originated in this part of the world.

<sup>6</sup> Human development data. UNDP. <http://hdr.undp.org/en/data>

<sup>7</sup> Trading Economics data. [https://tradingeconomics.com/lebanon/literacy-rate-adult-total-percent-of-people-ages-15-and-above-wb-data.html#:~:text=15%20And%20Above\)-,Literacy%20rate%2C%20adult%20total%20\(%25%20of%20people%20ages%2015%20and,compiled%20from%20officially%20recognized%20sources](https://tradingeconomics.com/lebanon/literacy-rate-adult-total-percent-of-people-ages-15-and-above-wb-data.html#:~:text=15%20And%20Above)-,Literacy%20rate%2C%20adult%20total%20(%25%20of%20people%20ages%2015%20and,compiled%20from%20officially%20recognized%20sources)

<sup>8</sup> The Global Competitiveness Index 2017-2018 edition. The World Economic Forum. [http://www3.weforum.org/docs/GCR2017-2018/03CountryProfiles/Standalone2-pagerprofiles/WEF\\_GCI\\_2017\\_2018\\_Profile\\_Lebanon.pdf](http://www3.weforum.org/docs/GCR2017-2018/03CountryProfiles/Standalone2-pagerprofiles/WEF_GCI_2017_2018_Profile_Lebanon.pdf)

<sup>9</sup> TCData360. The World Bank. 2017. [https://tcdata360.worldbank.org/indicators/hd0e189de?country=JOR&indicator=607&viz=bar\\_chart&years=2017&indicators=944](https://tcdata360.worldbank.org/indicators/hd0e189de?country=JOR&indicator=607&viz=bar_chart&years=2017&indicators=944)

## Incubators, Accelerators, and Training Programs

The entrepreneurship scene is vibrant in Lebanon, Jordan and Egypt. In 2015 for instance, Lebanon had the highest rate of new firm entrepreneurship in the world, and ranked 4th in terms of total early-stage entrepreneurial activity, an indicator measuring the percentage of people in the process of starting a business<sup>10</sup>. In 2019, Egypt was the most active venture capital market in MENA with 25% of all transactions in the region<sup>11</sup>. In Jordan, start-ups such as Souq.com, Maktoob and others were able to secure millions in seed money from venture capitalists.

While incubators, accelerators and training programmes and companies are well-established, most of them focus only on ICT. As for VCs and angel investors they are still lacking though.

In Libya and Palestine, the ecosystem is less vibrant than the other three countries. Nevertheless, some universities took the lead in building entrepreneurship skills and networks for early-stage entrepreneurs, but their support is usually limited to training, coaching and mentoring. International organisations occasionally launch programmes to support entrepreneurs, but the level of support needed is way greater than the offer.

Finally, coordination between stakeholders and players in the circular economy sectors is almost inexistent on the national and regional levels.

## Competitiveness

The level of competitiveness of the economies in this region varies. While Jordan, Lebanon and Egypt are respectively ranked 70, 88 and 93 in terms of competitiveness according to the 2019's edition of the Global Competitiveness Report.

Global Competitiveness Index (2019 Rankings)<sup>12</sup>

Country	Score	Rank/141
Jordan	60.9	70
Lebanon	56.3	88
Egypt	54.5	93
Libya	Not analysed in 2019's edition of the Global Competitiveness Report	
Palestine	Not analysed in 2019's edition of the Global Competitiveness Report	

<sup>10</sup> Global Entrepreneurship Monitor. <https://www.gemconsortium.org/economy-profiles/lebanon>

<sup>11</sup> Global Entrepreneurship Monitor. <https://www.gemconsortium.org/economy-profiles/lebanon>

<sup>12</sup> World Economic Forum, The Global Competitiveness Report 2019, 2019.

## Research and Development

As shown below, investment in Research and Development data is not available for Lebanon, Libya and Palestine. Jordan and Egypt only rank 53 and 79 in terms of R&D expenditures (% GDP):

<sup>13</sup> World Economic Forum, The Global Competitiveness Report 2019, 2019.

### R&D expenditures % GDP (2019 figures)<sup>13</sup>

Country	Score	Rank/141
Egypt	0.6	53
Jordan	0.3	78
Lebanon	N/A	N/A
Libya	Not analysed in 2019's edition of the Global Competitiveness Report	
Palestine	Not analysed in 2019's edition of the Global Competitiveness Report	



The region lacks awareness about the circular economy and often limit it to clean energy production, organic fruits and vegetables production and waste management. As mentioned previously, literacy rate is relatively high and general technical expertise exists in the labour market, but this expertise is not focused on the circular economy sector. The educational systems may not be raising systematic awareness on environmental matters and almost none about the circular economy.

As for entrepreneurship, society's perception of it is particularly high in this region, and entrepreneurship is seen as a good career choice.

One important social aspect to mention in this region is citizens' lack of trust towards their governments. Except Jordan, all of the other countries have been suffering from political and economic instability for more than ten years. Accessing data is particularly difficult in this region and patronage networks or clientelism, undermines the regions' governance systems. Citizens also lack data and fact checking culture. Therefore, perceptions result in loss of opportunities, poor outcome, stigmatization...

<sup>14</sup> Transparency International, Corruption Perceptions Index, 2019. [https://images.transparencycdn.org/im-ages/2019\\_CPI\\_Report\\_EN\\_200331\\_141425.pdf](https://images.transparencycdn.org/im-ages/2019_CPI_Report_EN_200331_141425.pdf)

<sup>15</sup> The Global Competitiveness Report 2019. World Economic Forum. [http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)

<sup>16</sup> Labour Force and Household Living Conditions Survey 2018-2019. ILO. <https://data2.unhcr.org/en/documents/download/73718>

<sup>17</sup> World bank data. <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?locations=PS>

Perceived levels of public sector corruption by country (2019 figures)<sup>14</sup>

Country	Rank / 180
Jordan	60
Egypt	106
Lebanon	137
Libya	168
Palestine	N/A

Unemployment rates in the region are also particularly high, and are far above the European average (6.3 % as of 2019). These high unemployment rates are also pushing youth towards “necessity entrepreneurship”: some are focusing on the green sector because it could represent a niche market opportunity for their products or services.

Unemployment Rate\* (2019 figures)<sup>15</sup>

Country	Rank / 180
Jordan	18.6%
Egypt	11.4%
Lebanon <sup>16</sup>	11.4%**
Libya	16.9%
Palestine <sup>17</sup>	25.3%

\* Data could vary strongly from 2019 figures due to the impacts of the current global pandemic.

\*\* Unemployment rate is 23% among youth and 35.7% among university graduates. 2020 figure may strongly vary from 2019's one due to Lebanon's economic crisis, currency devaluation, liquidity crush and COVID-19 epidemic.

For the purpose of creating a synthesis for the region, a SWOT analyses has been conducted to explicate Strengths, Weaknesses, Opportunities, and Threats.

Strengths are defined as factors currently enabling green and circular businesses to develop. Weaknesses are defined as factors currently preventing the development of green and circular economy businesses. Opportunities are defined as future developments that could enable green and circular economy businesses to flourish. Threats are defined as potential future developments that could threaten green and circular economy business development.

## Strengths

- Education and technical skills are present in the market
- Environmental policies linked to economic benefits have high chances of being adopted by businesses (access to new markets, taxes reduction, job opportunities creation...)
- Some environmental policies exist but lack enforcement
- A start-up ecosystem in this region is dynamic: incubators, accelerators, VCs, training and coaching companies are already implemented and have their network and expertise (especially in Egypt, Jordan and Lebanon)
- Cultural and social norms provide a relatively strong support for entrepreneurs and entrepreneurship status
- Youth are aware of environmental challenges and green initiatives started emerging

## Weaknesses

- Environmental policies are not enforced and environmental challenges are seen by government as nonpriority
- Administrative procedures and bureaucracy can slow down any policy, collaboration and initiatives involving the public sector
- Countries in this region lack a clear legal framework and incentives scheme to support or promote green and circular economy business
- Stakeholders and players in the circular economy sector do not coordinate at a national level
- Citizen lack awareness and knowledge about policies and circular economy and usually reduce it to waste management and clear energy production
- No data and fact checking culture: perception may result in loss of opportunities, poor outcome, stigmatization...
- Clientelism and patronage culture is strongly present in the society
- Spoken dialects are different from the written Arabic, making policies and regulations harder to read and understand for many entrepreneurs
- Lack of creative / novel ideas among entrepreneurs

## Opportunities

- Focusing on specific sectors may result in quick-wins (especially in Jordan and Egypt)
- Energy is relatively expensive: clean energies can present great environmental and economic alternatives for households and businesses
- Circular economy sector still untapped and large corporations are still not trying to gain market share in this sector
- Social media highly influences consumers behavior in this region

## Threats

- Many services are fully managed by governments and are not open for privatization (e.g. waste management). Therefore, green entrepreneurs and SMEs have major barriers of entry
- Most government services are centralized, reducing their flexibility and reactivity. However, waste management is usually decentralized and managed by municipalities or regions
- Technical skills are almost exclusively concentrated in the capitals (Cairo, Amman...) and are very scarce in other cities and rural areas
- Instability in the region decreases investment opportunities in general and in the circular economy in particular

- United Nations data. <https://unstats.un.org/unsd/demographic/products/dyb/dyb2012/Table03.pdf>
- Worldometers data. <https://www.worldometers.info/world-population/state-of-palestine-population>
- Human development data. UNDP. <http://hdr.undp.org/en/data>
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- Global Entrepreneurship Monitor. <https://www.gemconsortium.org/economy-profiles/lebanon>
- MENA startups break records in 2019, Egypt top country by number of agreements. Enterprise, the state of the nation. <https://enterprise.press/stories/2020/01/13/mena-startups-break-records-in-2019-egypt-top-country-by-number-of-agreements-9742/>
- Transparency International, Corruption Perceptions Index, 2019. [https://images.transparencycdn.org/im-ages/2019\\_CPI\\_Report\\_EN\\_200331\\_141425.pdf](https://images.transparencycdn.org/im-ages/2019_CPI_Report_EN_200331_141425.pdf)
- The Global Competitiveness Report 2019. World Economic Forum. [http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)
- Labour Force and Household Living Conditions Survey 2018-2019. ILO. <https://data2.unhcr.org/en/documents/download/73718>
- World bank data. <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS?locations=PS>

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