



**United Nations**

Economic and Social Commission for Western Asia

## Strengthening National Capacities in the ESCWA Region on Developing Green Production Sectors

### *Mapping of Green Policies and Initiatives in Lebanon and Oman*

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## Introduction

### Aims of the mapping exercises:

- Identify green or “close to green” policies and regulations
- Highlight successful green initiatives
- Identify the needs and opportunities to develop a green productivity sector
- This presentation highlights major findings of the mapping in Oman and Lebanon. The findings will help establish green helpdesks and draw an outline of countries’ needs to develop green policies & programmes.

### Compiled from:

- One-on-one interviews with key stakeholders.
- Published data.

### Main limitations of the mapping exercises:

- Short time frame (Lebanon and Oman)
- Understanding/perception of the concept of “green economy” (Oman)



## Structure of the mapping reports

### **I. SNAPSHOT OF THE COUNTRY**

- II.1 Geographical and demographic information
- II.2 Economic information (Workforce, Gross Domestic Product, Economic Sectors, Infrastructure, Electricity, Water, Solid waste etc.)
- II.3 Environmental Information (Environmental Situation, Ministry of Environment, Environmental Projects and Initiatives, and Environmental Education and Research)
- II.4 International, regional and bilateral cooperation

### **II. POLICIES AND INSTITUTIONAL FRAMEWORKS**

- III.1 Past, present and future economic visions
- III.2 Laws/decrees ensuring an environmentally-conscious development

### **III. PRODUCTION SECTOR**

- IV.1 The SME sector
- IV.2 Associations assisting the SME sector
- IV.3 Examples of Potential Green Projects and Businesses

### **IV. SUCCESS STORIES**

(Highlight of major existing green initiatives/businesses)



## PART 1

# Mapping of Green Policies and Initiatives in Oman



## 1.1 Facts and Figures

Total population- 2010 (million)	2.773
Average Annual Population Growth- 2005-2010 (%)	2.7
Total Omanis working in the government sector (out of the total number of workers in the government sector)- 2010 (%)	86
Total Omanis working in the private sector (out of the total number of workers in the private sector, as registered with PASI)- 2010 (%)	16
Drop in the Omanis working in the private sector- 2010-2011 (%)	0.3
Unemployment rate- 2008 (%)	5
Contribution of industrial sector to the GDP- 2000 (%)	9.3
Contribution of industrial sector to the GDP- 2010 (%)	17.9

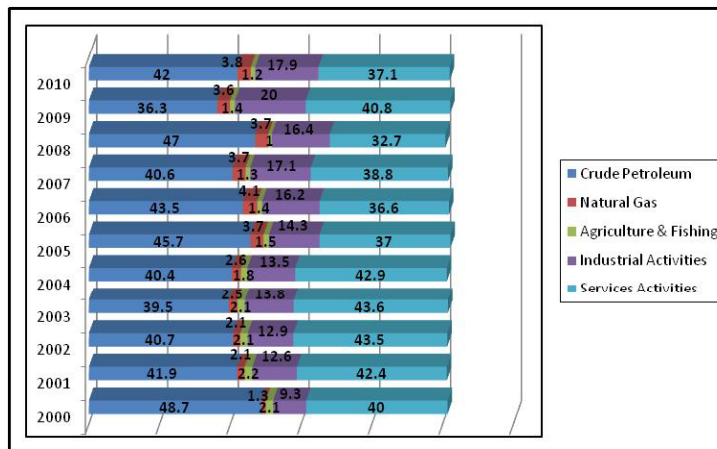
Sources: MONE, 2011a/ MONE, 2011b



## 1.2 Economic Highlights <sup>(1)</sup>

### Gross Domestic Product (GDP)

In the first half of 2011, GDP achieved a growth rate of 20.7% compared to the same period in 2010 (from around 10,770 million RO to 13,001 million RO)



*GDP structure of the Sultanate of Oman (in %) 2000-2010*

Source: Calculated from MONE, 2011a, Page 14-3.



## 1.2 Economic Highlights <sup>(2)</sup>

- The Sultanate has the “State General Reserve Fund”, considered a safety valve: surplus revenue generated from rise in oil prices is transferred to the Fund to ensure sustainability of financial resources.
- The authorities are considering policies to incentivise consumers to be energy efficient and programmes are being developed to rationalise energy consumption in the industrial sector.
- Sites identified for a solar power plant (200 MW) and 6 renewable energy pilot projects (2 wind-4 solar) are in place (RAECO, 2010).
- Government of the Sultanate of Oman (GOSO) has several programmes aimed at combating poverty and providing decent and healthy living standards to the citizens (MECA, 2012): Social Security, (monthly subsistence of RO 80/capita & RO 264/family to people in need), Housing Programme (providing housing units to people with limited income), etc.



## 1.3 Environmental Highlights

- Ministry of Environment and Climate Affairs (MECA) is the focal authority in charge of devising and ensuring implementation of environmental laws.

Samples of Royal Decrees and Ministerial Decisions related to the protection of the environment:

- Law on Conservation of the Environment and Prevention of Pollution issued by Royal Decree No. 114/2001.
- Royal Decree No. 29/2000 on Issuing the Law of the Protection of Water Wealth.
- Royal Decree No. (6/2003) on Issuing The Law On Nature Reserves And Wildlife Conservation.
- Ministerial Decision No. 187/2001 on Issuing the Regulations for Organising the Issuance of Environmental Approvals and the Final Environmental Permit
- MECA is conducting a national survey of greenhouse gas emissions to create a database and prepare the first national notification report to the UNFCCC.



## 1.4 Policies and Institutional Framework <sup>(3)</sup>

**“Vision Conference: Oman 2020”** (June 1995): series of five-year development plans to achieve a sustainable economic growth by 2020.

- **Successive five-year plans have adopted the same dimensions:**
  - Target balanced regional distribution of investments and provision of social services
  - Maintain a sustainable economic growth (Annual GDP growth rate of at least 3%)
  - Expand basic services such as education, health and infrastructure;
  - Enhance standard of living of Omanis and provide them with job opportunities;
  - Encourage private investments (new Privatization Law in 2004)
- **5<sup>th</sup> plan onwards focus on reducing dependence on oil and diversifying the economy.**
- **7<sup>th</sup> five-year plan focused on enhancing women’s participation in development, conserving natural heritage and encouraging establishment of SMEs.**
- **8<sup>th</sup> five-year plan added the stimulation of domestic demand, increase in exports and investment, encouragement of youths to pursue higher education and incentives to job seekers to start their own businesses (MONE, 2008).**



## 1.4 Policies and Institutional Framework <sup>(3)</sup>

GOSO established a “one-stop-shop” to simplify procedures for investors.

In 2008, “Omani” logo was launched to boost the status of Omani products and raise their profile on the markets.

GOSO established the following government companies:

- **Oman Environmental Services Holding Company SAOC (Be’ah)** to rectify the current solid waste management system and give it a sustainable structure then hand it over to the private sector.
- **Omran** to offer unique experiences to Oman’s visitors, create local job opportunities, highlight the local heritage, generate national income and protect the natural resources.
- **Oman Wastewater Treatment Company (Haya)** to treat and reuse wastewater. Treated water is used for irrigation thus reducing dependence on ground / desalinated water. The project creates job opportunities (Haya and ad-hoc companies). Haya turns sludge into compost used for agriculture/landscaping and is developing a Wetland from excess treated water.



## 1.5 Production Sectors: Highlights

- Industrial development strategy: to establish mega projects in collaboration with foreign capital to produce goods for export.
- 8<sup>th</sup> five-year development plan (2011-2015) focuses on SME's development to increase their contribution to the national economy.
- Funding sources available for SMEs through (WB and IMF, 2011):
  - Commercial banks: as of August 2010, the loans to SMEs in commercial banks amounted to RO 376,809 million.
  - Finance companies: in December 2009, finance companies had RO 535.2 million of their outstanding credits directed to SMEs.
  - Oman Development Bank (ODB) -a state-owned bank.
  - Funds which provide start-up financing such as: Sharakah (provides debt financing of ~ RO 25,000); Intilaqah (provides debt financing and advises on business services, market analysis, etc.) and Sanad (grants job seekers a maximum loan of RO 50,000 for a single project for individual or collective projects).



## 1.5 Production Sectors: Highlights

Oman has a favourable environment for the development of SMEs:

- Stable economic and political environment
- Attractive investment framework
- Strategic geographical location and well developed infrastructure
- Very good institutions and educated population.

Barriers to the development of SME's:

- The Omani population is spread out over a very large surface area which demands costly infrastructure investments
- Omanis prefer to work in the public sector: a large percentage prefers the safety net provided by a government job which ensures public pension, has shorter working hours and better work conditions.

However:

- GOSO lately introduced measures to assist SMEs and incentivise Omanis.



## 1.6 Success stories (1)

As of yet there are no green productive sector enterprises in Oman. However there are establishments with Corporate Social Responsibility or which have introduced environmentally-friendly measures into their practices.

- **Oman Sail**

To “Reignite Oman’s Maritime Heritage”. This initiative is in line with the GOSO’s plans to develop new sectors to reduce the reliance on oil. Oman Sail promotes Oman as a tourist destination and an investment hub; encourages infrastructure development and creates job opportunities (sailing, marketing, boat building, maintenance, repair..)

- **Oman Botanic Garden (OBG)**

Showcases the Sultanate’s flora and hosts a heritage village. The project aims for international recognition through LEED certification. OBG preserves the natural heritage, raises environmental awareness and creates jobs (construction, auditing, catering, signposting...)



## 1.6 Success stories (2)

- **Eco-house initiative by the Research Council, Muscat Municipality, Academic institutions and SMEs:**

Each team had to have students, a professor, construction consultancy and contracting offices, a municipality representative and an SME. Each team was ready to construct the designed eco-house on campus. The main objective was to promote the culture of research in terms of combining eco-friendly materials/ specifications with low cost in the design and building of houses.

**Benefits of this initiative:**

- Provide more jobs for partnering SMEs and construction companies;
- Show architecture students that it is possible to construct a green building with more or less the same cost of an inefficient building;
- Give professors/researchers a successful story to showcase;
- Prove to decision-makers that such projects are the way forward and give them enough basis to devise guidelines for green building.



## 1.7 Potential Green Businesses

With the existing policies and programmes, there is a big future potential:

- Multiplier effect of the integrated solid waste management strategy once implemented: activation of existing SMEs and creation of new ones in construction, material segregation, recycling, hauling, etc.
- Potential SMEs emerging from the agriculture sector: production of camel dairy products, medicinal and food oils, marketing of the products locally and abroad, and auditing of the establishments to make sure they abide by standards, etc.
- In terms of sustainable tourism: car rental companies with hybrid cars, tour operators, restaurants and handcrafts shops in close proximity to nature reserves.
- In renewable energy : companies that import and assemble devices or manufacture them locally, energy auditing companies, research and development (R&D) in the field, etc.
- Once the buildings of the Eco-house Initiative are in place: R&D in green architecture/ engineering, auditing companies and companies selling green construction materials, etc.



## 1.8 Concluding remarks

- Oman is a young nation but has managed to lay the foundations for a powerful economy. It established a reliable and strong regulatory framework, developed its institutions and empowered its human capital.
- The next step is to have more robust policies to go in line with the more elaborate industries encouraged to invest. The policies need to be more structured and straightforward to encourage but control heavy industries beyond voluntary measures to reduce negative impacts on the natural environment, build the capacity of local human resources and link up with academic and research institutions to encourage knowledge sharing.
- Once such a framework is in place, success stories in green economy will be looked at a few years down the line so the country is allowed time to implement the new policies and empower its institutions accordingly.
- Given the time Oman has the potential to head towards a greener economy. The main driver is the strong political will and genuine political commitment starting from the head of state.





## PART 2

# Mapping of Green Policies and Initiatives in Lebanon



## 2.1 Facts and Figures

Population- 2007 (million)	3.759
Living on less than \$ 2.4/person/day- 2004-2005 (%)	8
Inflation- 2008-2011 (%)	17
Public debt- 2009 (billion \$) – excluding arrears and BDL debt	51.2
Population working or available for work- 2009 (%)	48
Gross Domestic Product (GDP)- 2009 (billion \$)	34.7
Gross Domestic Product (GDP)- 2011 (billion \$)	39.5
Largest contributors to the GDP	Construction, services and industry
Energy purchase- 2008 (million KWh)	867
Forecasted demand for electricity- 2015 (MW)	4,000
Ecological footprint- 2007 (hectares/capita)	2.9
Environmental cost of air pollution (million \$/year)	170
Carbon dioxide emissions- 2008 (Tonnes/capita)	4.1

**Sources:** CAS, 2008/ MOE, 2012/ MOET, 2012/ MOSA, 2011/ / SWEEP-Net, 2010/ UNDP, 2011/ World Bank, 2008/ World Bank, 2011.



## 2.2 Economic Highlights

- Lebanon's economic situation remains vulnerable: on-going regional turmoil, worsening outlook for the global economy (impact on remittances inflows and foreign investments), lack of proper structural reforms, and relatively weak infrastructure (electricity, water, solid waste management & transport).
  - Despite 100% electrification rate, Lebanon suffers from frequent power blackouts. Lebanese people spend extra money (25% on top of EDL bill per month) on back-up generators to complement electricity provided by the grid (WB, 2008). Large industries also generate their own electricity.



## 2.3 Environmental Highlights <sup>(9)</sup>

- Environmental activism in Lebanon started at the grassroots level, when the state was absent.
- Environmental programs and degrees were introduced in several universities and environmental topics have long been debated in Lebanese newspapers/magazines.
- Several projects and initiatives have been implemented by or in collaboration with the Ministry of Environment (MOE): strengthening the permitting and auditing system for industries, strengthening the environmental legislation development and application system, alleviating barriers for quarries rehabilitation, promoting and monitoring synergy between trade and environment, etc.



## 2.3 Environmental Highlights <sup>(a)</sup>

### Laws & Decisions ensuring an environmentally-conscious development

- Environmental Law No. 444/2002 defines eleven environmental principles. It called for establishment of the National Environmental Council and setting up of a National Environmental Fund.
- Law 690 (2005) sets environmental conditions to license the establishment or investment in all classified establishments of all categories and protect the coastline/rivers/springs etc.
- Decree 8735 (1974) forces industrial establishments to treat wastewater before discharge into waterways and beaches.
- Decree 2275 (2009) sets environmental conditions in license applications and identifies classified establishments that require an environmental permit to discharge effluents before implementation.



## 2.4 Policies and institutional framework

- Sectoral and development strategies by different ministries and organisations (National Social Development Strategy -participatory approach) BUT no National Sustainable Development Strategy
- Paris II and Paris III meetings to offer financial support to Lebanon. Paris III pledges were conditional on Lebanon implementing economic and social reform.
- In 2005/2006 government prepared a reform programme aiming at stimulating growth, improving living standards, maintaining stability, reducing public debt and enhancing business environment (special focus on SMEs) but 2006 Israeli attack put programme on hold.
- In March 2012, the Presidency of the Council of Ministers (COM) produced an action plan of seven points for social and economic reform.
- COM approved the National Energy Efficiency Action Plan (NEEAP) to invest in energy efficiency, renewable energy, and green building projects, and the Integrated Solid Waste Management Law, including waste-to-energy technologies (early 2012).



## 2.5 Production sectors

- SME Support Unit at Ministry of Economy and Trade implemented an EU-funded programme to help establish an enabling business environment for SMEs and promote the capacity of the private sector. The programme proposed amendments to existing law and highlighted areas of regulatory framework for intervention.
- There are over 70 decreed industrial zones in Lebanon, but the majority of enterprises located outside the zones and mixed with residential areas.
- National Land Use Master Plan endorsed by COM (2009) is meant to be a reference document for all decisions related to urban development or provision of public services. It recognizes nine planning zones including one for industries.
- Associations assisting SME sector: Association of Lebanese Industrialists, Industrial Research Institute, Investment Development Authority of Lebanon, LIBNOR, Kafalat, etc.



## 2.6 Success stories

### Souk El Tayyeb (SET):

- First organic farmers' market in Lebanon in 2004 (70 farmers in 2010)
- Platform for people from several regions in Lebanon to promote organic farming, and raise awareness of the importance of organic produce.
- Tatweer: education programme to build the capacity of small organic farmers in food processing techniques and business development.
- "Tawlet kitchen" to allow SET's producers to share their recipes and local traditions with customers.

### Cosmaline and Pharmaline:

- Sister companies, Cosmaline manufactures personal care products and Pharmaline is a pharmaceutical company.
- ISO-14001 certified (2/6 ISO-14001 certified companies in Lebanon)
- Quality control lab to test raw materials and manufactured products.
- Centralised environmental department to convey legal requirements and train workers in environmental performance procedures.
- Strong links with universities (thesis supervision, internships, lectures)
- Organized the hours of heating, ventilation and air conditioning and improved the lighting system: minimized around 5-6% in energy consumption in the past 5 years
- Segregate their waste, recycle plastics on-site
- Treat wastewater onsite and reuse treated water in the process system: saved around 12-15% in water consumption in the past 5 years.



## 2.7 Potential Green Businesses

- 4,000 jobs in green energy by 2020 in construction, installation, operation, maintenance and energy audits.
- 900 green jobs in construction per year between 2011 and 2016 (ARZ Building Rating System)
- 1,900-2,500 new green jobs in waste management by 2020 (EU-funded programme Assistance to the Rehabilitation of the Lebanese Administration)
- 900 new green jobs in organic farming and integrated pest management and 15,000 new green jobs in forestry by 2020.

(ILO & UNDP, 2011)



## 2.8 Concluding remarks

- Though not full-fledged green projects in terms of simultaneously taking into consideration enhancement of human capital, social equity, environmental sustainability and economic development, the success stories may be signs of more solid initiatives yet to come to move the country towards a greener economy.
- Despite the consecutive wars in and on Lebanon, political instability, and accumulated debt, Lebanon has exerted efforts to strengthen its institutional and legal infrastructure with assistance of the international community.
- If Action Plan of government (approved in March 2012) is implemented and infiltrated into institutions, Lebanon will be moving towards a more consistent development of its policy framework, establishment of strong institutions, creation of green jobs and enhancement of human capital.
- The most important factor to achieve all that is a *strong political will*.



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# THANK YOU