



## Terms of Reference (ToR) for an EXCOL contract:

## Assessment of the Renewable Energy Sector in Lebanon

#### 1 BACKGROUND AND INTRODUCTION

In November 2018, phase I of the Advancing the Decent Work Agenda in North Africa (ADWA') project began. Funded by the Swedish International Development Agency (Sida) for a period of 5 years (2018-2023), the ADWA' project supports evidence-based decisions on key dimensions of the Decent Work Agenda at the policy-making level in Egypt, Morocco and Tunisia. In late 2021, the ILO and Sida have signed an agreement for a phase II of ADWA' which, additional to existing North African target countries, will add the Levant area with ADWA' project implementation to take place also in Jordan and, Lebanon.

Recognizing a series of inter-related and longer-term development problems the whole region faces, notably climate change and gender inequalities and their resulting impact in the world of work and Decent Work deficits at the enterprise level, phase II seeks to address these concerns with targeted interventions that aim to promote greener development and women's empowerment. Hence, the development objective of ADWA' phase II will be to 'support the creation of decent and green jobs to foster a just transition towards an environmentally sustainable economy via macroeconomic policy reforms whilst also contributing to gender equality in the MENA region'.

ADWA' II foresees a 6-month inception phase, starting in January 2022, that can be used to conduct assessments, forge partnerships and define the details of interventions so as to develop a solid and evidence-based intervention strategy and Theory of Change for the two new target countries. In Lebanon, the inception phase will be used to conduct an in-depth assessment of the renewable energy sector that shall inform ILO's intervention strategy under ADWA II in Lebanon under Outcome 3.

## 2 OVERALL OBJECTIVE AND SCOPE OF WORK

Lebanon's electricity sector is facing severe threats, and is at risk of complete collapse. Since the start of the financial crisis, and the country's default over its debt, the sector was among the first services to reflect the collapse of the economy. At the centre of this collapse lies Lebanon's public utility, Électricité du Liban (EDL). The latter has been suffering from political, financial, and administrative burdens over decades, which made it a lossmaking public utility and the second most costly public utility in the MENA region, with operational costs way above the regional median<sup>1</sup>. Effective generation Capacities of EDL (over 80% in 2018) are mostly derived by combined cycle power plant and thermal power plants alimented with Heavy Fuel Oil or Diesel<sup>2</sup>. Effective capacity of Hydro Power plants is extremely limited due to lack of investment and maintenance. The gap between electricity supply and demand is covered by expensive, polluting, and noisy diesel generators that are dispersed

<sup>&</sup>lt;sup>1</sup> IFI (2017). Electricité Du Liban (EDL) in Numbers.

<sup>&</sup>lt;sup>2</sup> AUB (2021), Unbundling Lebanon's Electricity Sector





almost everywhere in the country. Over the years, these created a complex informal economy that has been resistant to regulations and government oversight, but have also been a conventional offgrid power solution, because of their relatively low upfront capital costs.

In this context, an urgent need exists to develop the renewable energy sector. With sunshine being abundant in Lebanon (around 300 sunny days in a year with over 8-9 hours of daily sunshine), solar power systems can be a viable alternative, particularly for individual households as well as enterprises including farms to decrease dependence on increasingly unreliable public and private electricity provision through generators.

Consequently, demand for solar panels and power systems has been soaring, with local providers noting that sales of the technologies jumped 200 percent this year.<sup>3</sup> Yet, local providers rely exclusively on imported material and face a multitude of challenges including lack of access to credits, unreliable import and transport systems, unfavourable business environment and erratic red tape measures. Furthermore, a need exists to support and develop enterprises offering affordable and reliable complementary services such as installation and maintenance.

Additional to bottlenecks on the supply side, the demand for solar energy and renewable energy systems is hampered by declining purchasing power and a lack of access to credits needed to invest in renewable energy systems. Both households and enterprises have been hard-hit by the ongoing crises in Lebanon and will find it difficult to obtain the hard currency needed to invest in renewable energy systems. The ongoing financial crisis and breakdown of the banking system in Lebanon means that no credit is available to facilitate investments into renewable energy systems for either households or enterprises.

This assignment shall focus on conducting a comprehensive assessment of the renewable energy sector, and specifically bottlenecks on the supply and the demand side, that would enable the ILO to develop a holistic intervention strategy to develop the sector. Part of the strategy will be implemented by the ADWA' phase II project, in particular interventions relevant to Outcome 3 "The private sector invests in green businesses/jobs and promotes women's entrepreneurship in partner countries". The assessment shall take into consideration already existing secondary literature and research but focus on conducting interviews and surveys with private sector entities along the supply chain as well as other relevant actors. Specifically, the assessment shall collect information on:

## 1. The supply side:

This part of the assessment shall focus on conducting interviews and surveys with private sector entities operating along the supply chain to collect information on:

- Private sector entities currently operating in the renewable energy sector (input suppliers, manufacturers, importers, service providers, etc.)
- The specific offer of these entities for households and enterprises
- Challenges faced by the different private sector entities along the supply chain (including supply chain bottlenecks, skills shortages, regulatory environment, financing issues, greening the sector etc.)

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 $<sup>^3\</sup> www. dailystar. com. Ib/Business/Local/2021/Aug-11/522520-electricity-outages-trigger-unprecedented-demand-for-solar-power-systems-in-lebanon. as hx$ 





- Issues with firm level performance (such as low productivity, deficits in business management and marketing, low quality of products, decent work deficits etc.)
- Occupations and skills in demand in the sector
- Currently existing business develop and support services available

## 2. The demand side:

This part of the assessment shall focus on conducting interviews and surveys with households and enterprises that recently invested in solar energy systems, as well as those that have not been able to do so, to collect information on:

- Main clients of renewable energy systems and their specific needs (households, enterprises, farms, etc.)
- Satisfaction of clients with the offer and services (i.e. is offer adapted to needs? Are there long waiting periods? Are prices acceptable? Are all required complementary services such as installation and maintenance available? Etc.)
- Capacity of clients to invest in renewable energy systems and possibilities to obtain loans or financial support to do so
- For clients that have not invested: factors that currently hinder them from investing in renewable energy systems

## 3. Relevant government and donor-funded interventions

This part of the assessment shall focus on conducting interviews with relevant public sector entities as well as key UN agencies and development organizations to collect information on:

- Existing or planned government initiatives to support the development of renewable energy sector
- Existing and planned donor-funded initiatives and projects to develop the green economy (including but not limited to initiatives of World Bank, IFC, UNDP and GIZ)

### 3 DELIVERABLES

The consultant is expected to deliver the following outputs:

- 1. Workplan for the assessment including a list of private and public organizations to be interviewed to collect the relevant information
- 2. Assessment report that contains a summary and analysis of all collected information as cited above, to the satisfaction of the ILO

### 4 IMPLEMENTATION TIMEFRAME

This assignment would start in mid April and be completed in late June 2022. The total number of working days associated with this assignment is estimated to be 25.





# **5 REQUIRED QUALIFICATIONS**

The consultant shall possess the following qualifications:

- In-depth knowledge of the renewable energy sector in Lebanon
- Experience conducting surveys or similar assessments of renewable energy in Lebanon
- Fluency in English and capacity to draft reports in English
- Previous experience conducting value chain analyses would be an asset

Interested candidates are expected to send their CVs and indication of expected daily rate for this assignment to Nadja Nutz, <a href="mailto:nutz@ilo.org">nutz@ilo.org</a> by 4 April.