# JOINT PROGRAMME DOCUMENT

## 1 Cover Page

Country: **Libya**

Programme Title: **Libyan Electricity Sector Stabilization and Transition Support (LESST)**

Joint Programme Outcome(s): **The stabilization, reform, and transition of the national electricity sector in Libya.**

Programme Duration: **18 months**

Anticipated start/end dates: **15 Jan 2021– 14 July 2022**

Fund Management Option(s): **Combined**

Administrative Agent: **MPTFO**

Total estimated budget*: 735,710 USD
Out of which:

1. Funded Budget: 735,710 USD

2. Unfunded budget: 0,00

* Total estimated budget includes both programme costs and indirect support costs

Sources of funded budget:

Government of Libya: In kind

Donors: European Commission USD 655,710
Government of Norway USD 80,000

| **UN organizations** | |
|---|---|
| *Name of Representative* ***Gozde Avci-Legrand*** | *Name of Representative* ***Joyce Msuya*** |
| *Signature* | *Signature* |
| *Name of Organization* ***UNDP*** | *Name of Organization* ***UNEP*** |
| *Date & Seal* 24-Dec-2020 | *Date & Seal* 21 December 2020 |
| | |

# 2 Executive Summary

This planned UNDP and UNEP Joint Programme in Libya builds on an ongoing international and national working partnership focused on both maintaining critical electricity and electrically power water supply services and commencing a national transition to more sustainable forms of electricity generation and consumption.

The JP is a multi-donor funded programme, starting in 2021 with a 24 month work plan and 2 donors financing different outputs. It be implemented by UNEP and UNDP with the support of the UN Support Mission in Libya. It will follow the **combination** fund management modality according to the United Nations Development Group (UNDG) Guidelines on UN Joint Programming. The JP is aligned with both the current UN national strategy and global sustainable development frameworks, contributing to SDGs 6, 7, 8, 13 and 16.

The key national partners and stakeholders in this JP include the Government of Libya Planning Ministry, Finance Ministry, and the State Owned Enterprises for electricity (Gecol), water supply (GMMRA) and oil production (NOC). Key international partners include the World Bank, USAID, and the European Commission.

| **Project Summary Results Framework** |
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| **Outcome. The stabilization, reform, and transition of the national electricity sector in Libya** |
| **Output 1. The operational performance of the national electricity grid is stabilized in 2021 and improved in 2022 (UNEP led)** |
| Activity 1.1. Joint development and costing of an urgent Gecol engineering repairs list and associated workplan, including facilitation of Gecol-GoL negotiations with international vendors to enable them to restart critical works. |
| Activity 1.2. Facilitation of GoL financing of the repair workplan and tracking of fund disbursement and procurement. |
| Activity 1.3. Facilitation of a Gecol-GoL owned national and subnational load shedding schedule with municipalities and other groups |
| Activity 1.4. Facilitation of a MMRA and Gecol project plan for improving MMR electrical self-sustainability and demand reduction |
| Activity 1.5 Joint analysis of interim results of all intervention options and development of a high-level national masterplan for stabilization by end 2021 |
| **Output 2: National policy and governance is advanced in the electricity sector support (transition to sustainability) (UNDP led)** |
| Activity 2.1. Gecol operational management analysis |
| Activity 2.2. A progress review, update and ongoing implementation support for the Electricity Sector Reform roadmap |
| **Output 3: The Tripoli UNH project proposal is initiated, providing a forum for resolution of longstanding national obstacles to energy project financing and approvals (UNEP led)** |
| Activity 3.1. Project feasibility study and consultation |

# 3 Situation Analysis

Libya has a completely state-owned electricity sector, with generation, transmission, and distribution under the auspices of the General Electricity Company of Libya (GECOL). Before the revolution of 2011, Libya had one of the highest electrification rates in Africa, enough for Libya to export electricity to Egypt. During the post revolution period, the energy consumption in Libya has been increasing in a manner that is higher than would be proportionate to its demographic growth.

This is due to increasing inefficiency in production, distribution and use, low tariffs, high commercial losses, and a heavy subsidy burden, as well as significant misappropriation due to fuel smuggling and unauthorized diversion of public services. Moreover, as security weakened after the revolution, the energy infrastructure suffered from damage, vandalism, and theft. The absence of equipment manufacturers and skilled foreign contractors on the ground in Libya also critically affects the repair and maintenance of the affected facilities and completion of existing projects.

The damaged infrastructure is not capable of producing the requested electricity to all the areas, resulting in poor quality of supply and outages of several hours each day. This is having a huge impact on the delivery of basic services, disrupting operation of health, education, and water and sewage treatment facilities, resulting in public discontent, social tensions, and conflict in the major cities.

Urgent steps to strengthen electricity sector performance are needed to improve consumer service delivery, foster economic growth, relieve fiscal pressure of subsidies, and to eventually attract private sector investments for expansion of the sector itself. Importantly, Libya boasts of significant renewable energy potential that remains severely unutilized. Renewable power from wind, solar photo-voltaic, and Concentrated Solar Power projects can be an economically attractive substitute for conventional energy generated by using fossil fuels, which can be instead exported (or their import avoided) to obtain a higher economic return, while contributing to local and global environmental benefits.

The withdrawal of the Libyan Arab Armed Forces (LAAF) which coincided with peak demand for electricity in August 2020, created space for popular demonstrations protesting the lack of electricity. These demonstrations were most intense in north-western Libya, including Tripoli, where blackouts averaged 14 hours but also spread to eastern Libya who temporarily suffered from fuel shortages.

Protests in southern Libya, where blackouts averaged 14 hours as well, were muted due to the community growing accustomed to the situation and the electricity still being adequate to run their water systems. While demonstrations will decrease during winter, they will return if the energy situation continuous declining.

Electricity shortages in Libya are worsening and will continue to worsen unless significant structural reforms are implemented. The lack of electricity has significant detrimental impacts on all sectors of the economy and on basic services including water and health. The inability of the government to provide electricity erodes their legitimacy and is increasingly creating an existential threat. If interventions are not made to improve the situation, it will deteriorate further increasing levels of instability impeding mediation and stabilization efforts.

The lack of electricity creates an additional and possibly more impactful threat as it negatively impacts access to fresh water. In the long term most of the freshwater used in Libya will need to come from desalination. Desalination however is very energy and capital intensive. Current desalination capacity has eroded significantly as has wastewater treatment. Coastal aquifers are already penetrated by seawater due to overuse and sea level rise. This leaves the fossil aquifers of the Man Made River (MMR) as the primary source of fresh water.

However, the MMR does not serve the local communities who live in the area of its well fields and the communities view the MMR as being in competition with their own water and electricity sources. As a result, these communities allow MMR infrastructure to be sabotaged destroying over a quarter of its capacity. Despite repeated negotiations with the communities and the communally constituted armed groups that control the area, damage to the MMR continues.

Community conflicts in Libya are often addressed locally by traditional leaders, building upon customary arbitration practices outside of the formal justice system. These peace efforts are Libyan-owned mechanisms for building stability, ahead of efforts to address the structural causes of conflict. Linking local community efforts with those of central and local authorities on peacebuilding and reconciliation can provide an environment that is more conducive to engaging a wider range of citizens in reconciliation processes, developing local capacity in conflict resolution and the improvement of public service delivery.

Traditionally, Libyan women have played a significant part in conflict resolution, albeit largely limited to private sphere. The absence of women from formal processes of peace/political negotiations continues to result in insufficient attention to, and reflection of women's concerns in the outcomes of peace processes/political dialogue. However, evidence shows that post-2011, women were enabled and allowed to take a more active role in conflict resolution. Many women led CSOs made efforts to empower women to participate at state level.1 Local civil society activism remains indeed the main entry point into local governance for women, much above political processes. Their role in local civic engagement and social work is appreciated and supported by municipalities in general.2

Formal justice actors remain centralized but lack resources and enforcement capacity on a local level. Policing functions are often performed by local militias, which in some cases prove to retain some neutrality.

To prevent and mitigate conflict, communities need to become more resilient in terms of community security. Mediation efforts are being implemented but would need to be further coordinated to achieve more sustainable results. Relevant stakeholders (justice, police, and mediation) need be gathered around the same table to ensure that there is a common buy-in into the community security aspects of the community recovery/development plans, where existing.

[1] UNDP National Reconciliation in Libya: a Baseline Survey, May 2019.
[2] UNDP Rapid Diagnostic on the Situation of Local Governance and Local Development in Libya, 2015.

The issues mentioned above are normally addressed by development actors. However, these actors have not successfully addressed the energy problem because of the vested interests impeding reform. These vested interests are constituted by a confluence of rents, corruption and bureaucratic inertia which are often manipulated through a complex interchange between militias, politicians, and bureaucrats.

To overcome these barriers, those providing technical assistance on policy and structural reform and specific projects and technologies need to be equipped and supported by those with knowledge and access in the complex decision-making processes which include state and non-state actors.

# 4 Strategies, including lessons learned and the proposed joint programme

**Background context**

Due to its conflict status and geopolitical significance, the UN in Libya operates as an integrated mission, led by a Special Representative of the Secretary General. The UN Support Mission in Libya (UNSMIL) has been actively working with an extended UN Country team on peace and stabilization issues since 2011. In 2017 the Libyan Government and the UN jointly released the Libya Country Assessment: "Pathways towards a stable and resilient Libya". This document and updates have informed several rounds of jointly developed and updated UN masterplans. The current masterplan is the UN Strategic Framework for Libya 2019 – 2020 (UNSF).

Overall, the Strategic Framework SF is closely tied to SDG 16 as a general goal to which all Outcome pillars will contribute. While all SDGs and almost all targets are at least to some extent addressed through the SF, the stand-out SDGs in terms of agency support to related SDG targets are SDG 16 (Peace, Justice and Strong Institutions) and SDG 5 (Gender Equality), closely followed by SDGs 4 (Quality Education), 8 (Decent Work and Economic Growth), 1 (No Poverty) and 17 (Global Partnerships). Moreover, SF outcomes contribute to several other SDGs through specific SDG targets, with several SDG targets addressed by multiple agencies across more than one SF Outcome.

UNSF outcomes and related activities are designed to contribute to the overarching goal of building sustainable peace in Libya. The outcomes (Result Group) contributing to this ultimate objective are divided into three interrelated outcome areas including strengthening governance and rule of law, promoting economic recovery and growth, and supporting sustained basic social services. The overriding principles guiding these activities include stabilization through socio-economic resilience, social cohesion, and protection. The common overarching goal is to prevent, mitigate and reverse any (potential) negative effect or impact of the current conflict on the social and economic conditions in Libya, and on the capacity of state institutions while contributing to ongoing peacebuilding efforts.

The UNSF sets out to achieve the general goal of restoring peace and restoring equitable institutional functions. This will be achieved by strengthening governance-related mechanisms, systems, processes and related managerial capacities and technical skills, promoting economic recovery, and fostering institutional ability to provide a level of social services that meets, at least, minimum requirements or standards. The situation in Libya is complex given the multitude of humanitarian, political and development-related challenges. This necessitates a high degree of coordination among UN interventions as the results and impacts of these efforts are closely interlinked and interdependent.

**Lessons learned**

Both the water and electricity sectors in Libya have been operating in a highly inefficient and unsustainable manner for three decades. The lack of sustainability was however hidden by a) the massive scale of the fossil aquifers used to supply water and b) the oil export economy, which financially underwrote all parts of the Libyan economy. The Libyan population became accustomed to free water, very cheap electricity and employment guaranteed by the state.

However, the 2011 revolution, the subsequent instability and conflict and the sustained crash in oil and gas exports and oil prices, have together brought forward and exposed these deep sustainability issues, as well as damaged the ability of the state to deliver critical services.

The links between critical service delivery, political stability and humanitarian needs means that it is untenable to simply rely on a collapse and rebuild approach to moving to water and energy sector sustainability. Instead, Libya needs to both a) maintain its very unsustainable approach in the short term to provide water and electricity services and b) transition to a more sustainable situation as soon as practicable.

The prior focus of the UN in Libya from 2011 to 2016 did not include the electricity sector. Work on helping reform this sector was instead left with the World Bank, which invested heavily in supporting policy reform and capacity building. These efforts however proved relatively unsuccessful and/or slow to deliver results, due to the conflicts, instability, and lack of political leverage. From 2018, the performance of the electricity sector has significantly degraded, to the extent that it is becoming a critical factor in stabilization and the delivery of basic services to the population.

The lesson learned in this case is the need to integrate the electricity sector into UN stabilization plans and efforts from the start and better integrate development and stabilization programming. A similar lesson is drawn from the mains water supply system, including the Man Made River, which only started receiving significant UN attention from 2018.

**The proposed joint programme**

The proposed joint programme aims to integrate and scale up UN efforts on energy sector reform and connect them to ongoing stabilization and rural development programming.

The Libya energy sector is unusual in that the state of Libya still retains the capital reserves to finance the needed infrastructure. What is lacks is the supportive policy and legislative regime, a sustainable economic sector structure and technical and managerial capacity to design and implement the required changes. It also to date has been overly capital city centric and not conflict sensitive in its investments: most investments were directed to the coastal cities, whilst inland communities were marginalized.

In this context, the UN strategy is to provide a combination of technical assistance and both capital and locally based political and social support to underpin a nationally financed transition programme. The strategy divides the support into two main streams:

A. Urgent technical and managerial support to a government owned national grid stabilization programme. The core objective of this programme is to keep the national grid operational, to underpin national stability and avoid forecast massive hardship and humanitarian issues in the case of a very extended blackout and associated loss of water supplies (as the water system is electrically powered).

B. Parallel strategic technical assistance and pioneer project development to help initiate a longer term sector wide energy transition. Efforts in this workstream are further divided into two themes: a) national level policy and planning support and pioneer renewable energy project development. The latter aims to help develop full scale solar and potentially wind projects in priority regions, to promote both renewable sector growth and decentralized investment in rural and unstable areas in severe need of economic development.

The duration of Workstream A is forecast at 24 to 36 months and the scope of work is relatively well defined. Workstream B is forecast at 24 – 60 months and the scope is expected to evolve and expand over time. The forecast development period for each pioneer project is 36 months or more. In this context, the JP strategy is to commence with a 24 month JP and workplan and relatively limited initial scope.

The JP aims to mainstream key stabilization and social issues including conflict reduction, rural development and reconciliation, government legitimization, gender support and youth employment. The pioneer projects in South western Libya will involve up to 20 municipalities and many local and tribal communities. Details of the solar project financing are still under development, however enabling local benefit sharing is one of the core objectives. UNDP is rolling out a local resilience programme in the southwest and aims to integrate its work in this JP to the extent practical.

**Implementation model**

The JP is designed primarily as a technical assistance facility, delivering output oriented packages of technical, managerial, and political support at the national and project level. This support will facilitate policy and planning changes, development of capital projects and build institutional capacity. The planned capital works include overhauls of existing energy infrastructure and construction of new solar PV facilities. The funds for the proposed capital works themselves, will come from the Government of Libya, via both annual budgets and a sovereign wealth fund.

The JP implementation model entails each implementing agency leading on specific outputs, whilst working in a coordinated manner. The emphasis on technical support results in a very light and flexible operational model that can be rapidly mobilized, in part by redirecting existing UN in-house resources and connecting to existing sector working groups.

**Sustainability of results**

The programme design is based on securing impacts that are both sustainable and growing beyond the end of the aid activities. Each workstream plays a different role in the route to sustainability:

- The grid stabilization workstream helps preserve national stability and citizen welfare, critical for underpinning any longer term development oriented reforms.
- The national policy and planning work aims to establish a supportive national framework for a national energy transition, enabled by national institutional capacity
- The pioneer renewable projects will have demonstrated both the process of financing and developing these projects and the visible and practical benefits, to both the national grid and the local populations.

# 5 Results Framework

**Framework context and description**

The JP is designed as a multi-donor programme, that will grow over a 3 year period. To start it is structured around 1 outcome and 3 outputs and an 18 month work plan:

- Output 1: The operational performance of the national electricity grid is stabilized in 2021 and improved in 2022
- Output 2: National policy and governance is advanced in the electricity sector support (transition to sustainability)
- Output 3: The Tripoli UNH project proposal is initiated, providing a forum for resolution of longstanding national obstacles to energy project financing and approvals (UNEP led and co-financed)

More details regarding the intended Outputs and activities are outlined below.

***Output 1. The operational performance of the national electricity grid is stabilized in 2021 and improved in 2022***

The international community has been working with Libyan national actors in the electricity and water sectors since 2012. Multiple and well identified long term deep structural and sustainability problems with the energy, electricity and water sectors have now fully surfaced, with national scale power blackouts, water supply shortages, demonstrations and even the arrest of the electrical utility leadership on corruption charges. As of November 2020, more than half of the national fleet of electricity generation power plants are out of service due to maintenance problems. As Libya is a geopolitically critical country, the prospect of it plunging into permanent blackout and water shortages has mobilized high level political attention from the EC, USA and neighbouring countries.

In this context, the UN, the USAID, and the World Bank have created an ad-hoc working group designed to support the Libyan national government in maintaining grid electricity, and thereby also the potable water supply. The initiative is is focused on urgent and practical actions over the next 6-12 months to revive the power generation fleet to meet demand while simultaneously developing a common load shedding regime to more effectively manage peak demand.

*Activity 1.1. Joint development and costing of an urgent Gecol engineering repairs list and associated workplan, including facilitation of Gecol-GoL negotiations with international vendors to enable them to restart critical works.*

The national grid electrical generation fleet in Libya consists of 27 power stations with a combined theoretical maximum production capacity of 10,000 Megawatts. However as of November 2020, only 4,200 MW is actually operational. This reduced capacity is the primary cause of the increasing blackouts. Preliminary work by Gecol and the joint working group has identified a long list of power plant units in the Gecol fleet that are either out of commission or working below capacity. Gecol has also provided a basic fault diagnostic and status report on most of the fleet. Whilst extensive work has been done at the engineering floor level, there is at present no collated fleet turnaround plan, schedule, budget, or risk analysis. Preliminary information also reports a range of obstacles and constraints that have contributed to the chronically poor state of the fleet and maintenance programme.

*Activity 1.2. Facilitation of GoL financing of the repair workplan and tracking of fund disbursement and procurement.*

The planned Gecol repair and overhaul programme is roughly estimated by UNEP to cost US700 – 1000 million over 2 or more years. Libya does have these funds available: the cost of the repairs will need to be publicly financed and can be included in the national budget. Additional measures, however, are required to ensure that budget allocations reach the service provider conducting the repairs.

First of all, as Gecol recuperates a small fraction of its running cost, its operational losses are high. These losses are covered in part by redirecting its development budget. Where it does have sufficient funding, the process of acquiring foreign exchange is complicated by Gecol reliance on the Ministry of Finance and the Central Bank of Libya to authorize and issue international banking system Letters of Credit for the required spare parts and OEM services. This process is often slow complicating the maintenance and repair work.

The procurement process is further complicated by the fact that Gecol is now deeply mired in serious governance and transparency problems. It no longer retains the trust of the Ministry of Finance and the Central Bank of Libya, who often withhold funds as a result. This trust must be restored in part in some way to enable the turnaround programme.

Finally, the scale and urgency of the required procurement programme, indicates a range of governance risks in the current setting. Additional oversight is warranted to help ensure the funds are well spent and deliver on the programme objectives.

Note that the World Bank assists in facilitating the formulation of the national budget, through the temporary financial measures agreed upon in 2017. The role LESST will be to ensure that funds allocated reach their destination and in so doing identify shortcomings and challenges in the procurement and contracting processes.

*Activity 1.3. Facilitation of a Gecol-GoL owned national and subnational load shedding schedule with municipalities and other groups.*

Load shedding involves the deliberate shut down of part of the power distribution system in order to balance supply and demand and avoid triggering an uncontrolled whole grid blackout. Controlled lad shedding also prevents damage to the grid caused in uncontrolled blackouts.

The Libyan national grid has 88 substations providing junction points for breaking circuits. The automatic communications system for the grid was damaged by conflict, often deliberately by armed groups who did not want their area cut off from electricity. As a result, the substations communicate with the grid management team by mobile phone, including during load shedding.

The political and security implications of load shedding are always significant, and this is particularly the case in Libya, as many competing and autonomous militia groups control small parts of the country. Favoritism between areas is the most common accusation and problem. The dangerous situation that is now arising is that militia are invading the substations and forcing Gecol staff at gunpoint to keep their local circuits online.

In this context, Gecol needs both technical and political support to design and then implement a common load shedding programme.

*Activity 1.4. Facilitation of a MMRA and Gecol project plan for improving MMR electrical self-sustainability and demand reduction*

The Great Man Made River Authority (MMR) energy consuming infrastructure includes the deep groundwater wells and stage pump stations with a reported peak demand of 60MW in each of the eastern and western branches. The MMR owns a 90MW power station at Sarir. The plant is old and now and offline and needs a major overhaul. As a result, MMMRA now buys all of its electricity from Gecol. Overhauling the plant will take over 12 months and is economically questionable.

On the national scale MMR is a large to medium size industrial electricity consumer. However, it also provides a nationally critical service. The national grid blackouts cause both direct cuts in the water supply and generate damage from line emptying and uncontrolled pump and valve shutdowns and restarts. Hence MMRA is very keen to secure some level of electricity autonomy from the grid, which would also reduce the load on the grid. MMRA have expressed interest in conducting a feasibility study for a solar – battery off grid project to support the eastern well field. Although solar is more cost effective in the long run, this project will face similar challenges in project financing. This is critical as MMRA is chronically financially stressed and cannot afford such capital projects (or to date even to pay for the current study).

In this context, one promising option with multiple benefits is to support MMRA in its efforts to secure and finance a solar and/or battery project. If this output delivered early positive results, then it is anticipated to spin-off and grow into a separate energy transition project.

*Activity 1.5. Joint analysis of interim results of all intervention options and development of a high level national masterplan for stabilization by end 2021.*

The emerging strategy for stabilizing the electrical grid is to rapidly mobilize a range of parallel and practically oriented actions with the potential to deliver results in 3 -24 months. Over-analysis and planning at the start is assessed as counterproductive given the levels of uncertainty. So, for Q1 – Q3 2020, the priority is practical action.

By end Q3 2021, the rate of progress, efficiency, and effectiveness of the range of interventions will be clearer and Libya will have experienced its peak annual electricity demand in July-August. A review of the interim results will be warranted at that time, as input to a more informed and medium term planning process. This should be led by the Government of Libya; however, the international community can prompt and support the process.

***Output 2: National policy and governance is advanced in the electricity sector support (transition to sustainability)***

The current grid stability crisis has multiple root causes, apart from the conflict, political instability, and national economic crisis. Two of the most important sector specific causes are a) poor performance by the state owned national electrical utility GECOL and b) the fundamentally unsustainable Gaddafi era energy policies and practices that remain the norm in Libya.

Gecol currently receives extensive subsidies amounting to some $5 billion annually regardless of performance. There is very limited reporting and oversight on how these funds are utilized. As a result, there is extensive space available for corruption and rents.

Beyond Gecol, the electricity sector has a range of political and institutional legacies that undermine its sustainability. These include an over-reliance on overly centralized power generation plants, below cost electricity tariffs, low bill collection rates, low levels of energy efficiency in both the consumer and industrial markets.

Under this output, there will be an improvement of GECOL's operational management, to maximize its efficiency as well as strategic and political support work to enable a gradual transition of the electricity sector from an emergency footing to longer term sustainability.

The proposed implementation approach for the Output 2 is;

- reinforcement of the strategic approach, joint work and coordination between political and energy institutions.
- provision of strategic advice for all Outputs of the project, ensuring coordination between GECOL, related line Ministries and all implementing partners of the project.
- ensuring that all three Outputs of the project are implemented in a coherent way, liased and communicated with all implementing partners, including Donors, and managed according to this DoA as well as according to UNDP rules and regulations of project management.

The approach will be implemented by a Senior Energy Advisor (CTA/ Chief Technical Advisor). The position will be hosted within UNDP project management team, supporting both UNDP in overall project management and implementation as well as other implementing partners in its advisory role. The position will closely liase with and support UNSMIL's Economy track team and the UNEP project team.

The advisor will be responsible for the overall coordination and delivery of the project and support both strategic and high level political and economic strategy planning activities. He/she will also coordinate the efforts of the many multi-lateral and bilateral institutions currently active in Libya in this sector.

*Activity 2.1. Gecol operational management and efficiency analysis*

Background Gecol is currently mired in a range of operational problems. State of Gecol has substantially contributed to its degrading operational performance.

There will be an analysis of the Gecol's operational management, with a particular focus on the ongoing repair programme. Then the recommendations will be presented to the Government of Libya including an action plan. This work will be led by the LEEST Energy Advisor, possibly with a support team.

*Activity 2.2. A progress review, update and ongoing implementation support for the Electricity Sector Reform roadmap*

The World Bank implemented a broad ranging electricity sector policy and capacity building project in Libya after the 2012 revolution. Its last major output was a government owned national masterplan (Libya Electricity Sector Reform Roadmap April 2017). Progress on implementation of the roadmap has however been very slow and disjointed. Nonetheless most of its recommendations remain valid.

The increasing economic problems of Libya, combined with increasing blackouts, have prompted a recognition by the national government that it can no longer afford to subsidize and tolerate the poor performance of the electricity sector. Hence there is currently strong national motivation for reform. The very poor financial state of Gecol actually provides a window of opportunity for reform, as it is no longer in a state to over-ride much needed sector level reforms.

On priority for political reform is generating real incentives for improving performance, starting with both SOEs and consumers paying the real cost of electricity. This will entail working with the Ministry of Finance, that currently oversees the submitted budgets of Gecol and the municipalities and other SOEs.

The Electricity Sector Reform roadmap will be reviewed (progress on implementation and root cause analysis for key progress failures). This will be supported with ongoing technical assistance in implementation of policy and planning components of the updated roadmap.

***Output 3: The Tripoli UNH project proposal is initiated, providing a forum for resolution of longstanding national obstacles to energy project financing and approvals (UNEP led and co-financed)***

The feasibility study for the MMR Community Solar 1 (CS1) project will be completed in Q4 2020. All work and consultation feedback to date indicates that the project will be feasible, albeit after addressing an array of challenges. The study was facilitated by the GoL Ministry of Planning, who agree that the project development process should therefore continue.

A second project opportunity has been identified by the UN, label Tripoli UN House Sustainable Energy, which is suitable to add to the project pipeline started with CS1.

The UN has an internal sustainability policy and action plan, which aims to reduce the climate footprint of its operations by 40% from 2020 to 2030. Track 2 of this plan entails innovative finance and partnering projects to enable UN field operations to switch from on-site diesel generator based electricity to renewable electricity.

The main UN compound in Tripoli currently uses 3MW of diesel generation, operating 24/7/365, even though the Libyan national grid is available on-site. The project concept is for the UN compound to purchase renewable electricity, from the national grid. The renewable energy it will purchase will come from a new private sector or LLIDF owned solar PV facility, which will be grid connected and establish a power purchase agreement with the UN. In this manner, the solar developer has a pre-agreed high quality client for its generated electricity.

Initial calculations indicate that a 10MW PV system would be suitable for the first phase, followed by UN managed battery banks to enable on-site storage and complete shutdown of the diesel generators. The estimated capital cost for all phases is estimated at USD 30 million. If/when the UN leaves the compound, the solar developer will be able to continue to sell electricity through the grid, to Gecol or other buyers.

This project would introduce a range of new instruments and ideas to the Libyan electricity sector, including Power Purchase Agreements, grid transmission service (wheeling) agreements and PPA guarantees.

*Activity 3.1. Project feasibility study*

A project feasibility study would elaborate the existing project ideas and develop and analyze a range of technical and financing alternatives. An economic model and financing framework would be developed. The options would be screened using an existing multi-factor scoring and risk identification system.
The study would deliver a draft report for consultation and incorporate national and international feedback into a final report.

**Linkages to the UN Libya Strategic Framework and the SDGs**

The JP is aligned with both the current national and global sustainable development frameworks.

The high level goal of the 2019-2020 UN Libya Strategic Framework is as follows: *By late 2020, <u>Libyan institutions' capacities at all levels</u> are strengthened thus ensuring accountability, transparency, and provision of equitable and quality social services addressing vulnerability and participation gaps and <u>encouraging economic recovery towards a diversified and inclusive model</u>.*

The JP links into this national framework are underlined in the goal text. The SF is divided into three pillars: Governance, Economic Recovery and Social Services. The JP contributes to all three pillars, with most emphasis on Economic Recovery.

In addition, the JP aims to mitigate a risk that was not picked up in the SF development process, namely that the collapse of the electrical grid and water supplies would abruptly undermine national stability and welfare.

Note also that one of the assumptions in the SF (written in 2018) is no longer valid: 5. *No major shocks are observed in the international market for hydrocarbons.* The COVID 19 pandemic, the associated lockdowns and the ongoing global energy transition has combined to drive down the international oil price. In addition, the oil embargo effectively stopped Libyan exports from several ports for 2 years. The net result is that the Government of Libya faces an economic crisis, and so financial sustainability and recovery are increasingly important.

At the global level, the JP contributes to the following SDGs and targets:

**SDG 6 Water and Sanitation**
6.1 (Maintaining) access to clean water
6.4 Water use efficiency and sustainable withdrawals
**SDG 7 Energy**
7.1 (Maintaining) access to energy services
7.2 Increase the share of renewable energy
7.3 Energy efficiency
**SDG 8 Economic growth and employment**
8.2 Productivity growth through diversification
8.3 Development oriented policies and decent job creation
8.4 Improve resource efficiency to decouple growth from environmental degradation
**SDG 13 Climate change**
13.2 Integrate climate change into national policies, strategies and planning
**SDG 16 Peace, justice, and strong institutions**
16.6 Develop effective, accountable, and transparent institutions at all levels

**Table 1: Results Framework (Summary)**

| | Logic of intervention | Indicators | Baselines/ targets | Sources of verification |
|---|---|---|---|---|
| **Overall objective: impact** | To improve the provision of basic services to the population of Libya | | | |
| **Specific objective: Outcomes** | To support to the stabilization, reform and transition of the national electricity sector in Libya | | | |
| **Outputs** | Output 1: The operational performance of the national electricity grid is stabilized in 2021 and improved in 2022 (UNEP led) | Development of and substantive progress on a Gecol fleet turnaround Work Plan.<br><br>Subnational load shedding schedule (LSS) implemented<br><br>Development of a 2022+ national grid stabilization plan (GSP) | No WP/ Approved WP achieves 50% completion<br><br>No LSS/LSS operational<br><br>No GSP/Approved GSP | WP & Taskforce Meeting minutes<br><br>Gecol monthly Ops reports inc. LSS<br><br>GSP & Meeting minutes |
| | Output 2: National policy and governance is advanced in the electricity sector support (transition to sustainability) (UNDP led) | Electricity Sector Reform roadmap reviewed<br><br>Analysis of the Gecol's operational management plan finalized<br><br>Electricity Sector Reform roadmap's recommendations and action plan finalized and presented to the Government of Libya | Electricity Sector Reform roadmap / Revision of Electricity Sector Reform roadmap<br><br>Absence of Gecol's operational management plan/Development of Gecol's operational management plan<br><br>Absence of current roadmap and action plan / Electricity Sector Reform roadmap's recommendations and action plan finalized and presented to the Government of Libya | Electricity Sector Reform roadmap document<br><br>Gecol's operational management plan document<br><br>Electricity Sector Reform roadmap's recommendations and action plan document |
| | Output 3: The Tripoli UNHSE project proposal is initiated, providing a forum for resolution of longstanding national obstacles to energy project financing and approvals (UNEP led and co-financed) | Project feasibility study | Nil/ Feasibility study | Feasibility study report |

## Table 2 : Risk Management Matrix – sorted from highest to lowest

| | Risk Description/ Analysis | Category | (I) Impact Severity 1-5 | (L) Likely-hood 1-5 | I x L Overall Risk rating | Risk Management Strategy & Actions | By When/ Whom? |
|---|---|---|---|---|---|---|---|
| 1 | The GoL enters a sustained financial crisis, due to reductions in oil export revenue and uncontrolled spending. GoL capital investments of all kinds are constrained | Economic | 4 | 3 | 12 | Support securing and allocating critical funds from national reserves as soon as practical. | UNEP supporting Min Finance Q1-Q4 2021 |
| 2 | The Gecol fleet degrades rapidly and sustained blackouts trigger instability that precludes progress on both grid stabilization and the energy transition | Economic - Political | 4 | 3 | 12 | Work with Gecol to maximize potential of the remaining fleet to manage the summer 2021 peak demand period, whilst fast tracking capacity improvements | UNEP supporting Gecol and Min Finance - continuous |
| 3 | The initiative is perceived as a threat by Gecol and other institutions | Political | 4 | 3 | 12 | Work with Gecol to pre-empt concerns they may have | UNEP and UNDP PM |
| 4 | GoL internal corruption and mismanagement of funds for stabilization damages project impact and potentially UN reputation | Political | 4 | 3 | 12 | Ensure UN and GoL roles and responsibilities are clear. Focus on Gecol procurement risks. External communications explaining roles and responsibilities<br>Draw in support from financially competent partners including the World Bank | UNEP and UNDP PM |
| 5 | General insecurity further constrains UN personnel access to Libya | Security | 3 | 3 | 9 | Continue remote work and GoL partnership approach. Hold selected meetings in Tunis and support travel | UNDP PM - continuous |
| 6 | The COVID pandemic generally curtails progress in all aspects of the project | Organizational | 3 | 3 | 9 | Maintain UN CV19 protocols. Limit activities requiring direct contact until vaccination programmes are advanced (forecast as end Q3 2021) | All – mainly 2021 |
| 7 | Project expert recruitment and mobilization difficulties constrain scale of technical support provided | Organizational | 3 | 3 | 9 | Mobilize the project with existing staff and consultants. Develop expert TORs with seniority, salary and conditions to attract and retain talent. | UNDP and UNEP – focus on Q1 Q2 2021 |
| 8 | Project administrative issues constrain project progress | Organizational | 3 | 2 | 6 | Maximize pre-payment to avoid cashflow constraints. Maintain agency autonomy to minimize administrative dependencies and complexity. Use in-house resources with limited new financial partnerships or procurement | UNDP and UNEP PMs - continuous |

# 6 Management and Coordination Arrangements

The joint project will be implemented by UNDP and UNEP (i.e. “Participating UN Organizations” or PUNOs) and governed in accordance with the UNDG guidance for multi-partner projects utilizing the Multi-Partner Trust Fund Office of UNDP as Administrative Agent (AA). The AA functions are fully described in the Fund Management Arrangement Section below. UNDP will serve as a Convening Agency in the UNJP, responsible for coordination of joint programmatic activities.

The JP will be coordinated at the top level by a JP Steering Committee, comprised of one representative each from UNDP, UNSMIL, UNEP, each donor, and the Government of Libya, represented by the Ministry of Planning. The PSC will initially meet every 3 months. The JP will also contribute to the operation of a national level coordination process for the energy sector, to be led by the Ministry of Planning.

Delivery of the project components will be managed by the respective agencies, supported by a range of non-UN partners. Specialized task teams, including key national stakeholders will be mobilized and then demobilized as needed.

Risk management is integrated into the JP design and management arrangements. UNEP will continue to develop and maintain the risk management matrix (Table 2 above) on behalf of all JP partners and this table will be routinely reviewed as part of the progress reporting and SC meeting cycle.

# 7 Fund Management Arrangements

The JP is a multi-donor funded programme, starting in 2021 with 2 donors financing different outputs. Accordingly, this UN Joint Programme will follow the **combination** fund management modality according to the United Nations Development Group (UNDG) Guidelines on UN Joint Programming.

**Outputs 1 and 2 are funded by the European Commission** and managed in the **pass-through** JP model. As outlined, the UNDP MPTF Office, serving as the Administrative Agent (AA) for the Joint Programme, as set out in the Standard Memorandum of Understanding (MoU) for Joint Projects using pass-through fund management, will perform the following functions:

- Establish a separate ledger account under its financial rules and regulations for the receipt and administration of the funds received from donor(s) pursuant to the Administrative Arrangement. This Joint Programme Account will be administered by the AA in accordance with the applicable rules, regulations directives and procedures, including those relating to interest;
- Make disbursements to Participating UN Organizations from the Joint Programme Account as instructed by the Steering Committee, in line with the budget set forth in the Joint Programme Document.

The Participating UN Organizations will:

- Assume full programmatic and financial responsibility and accountability for the funds disbursed by the AA as detailed in the Management Arrangements and Coordination section;
- Establish a separate ledger account for the receipt and administration of the funds disbursed to it by the AA.

**Output 3 is funded by the Government of Norway** via a global UNEP – GoN and managed and implemented by UNEP in the **parallel** JP model.

Each UN organization is entitled to deduct their indirect costs on contributions received according to their own rules and regulations, considering the size and complexity of the programme. Each UN organization will deduct seven percent as overhead costs of the total allocation received for the agency.

### 7.1 Administrative Agent

According to the pass-through modality, the UNDP Multi-Partner Trust Fund Office (MPTF Office) will serve as the Administrative Agent (AA) of the Joint Programme. The AA will be accountable for effective and impartial fiduciary management and financial reporting. The AA will be responsible for financial/administrative management that includes: i) receiving donor contributions, ii) disbursing funds to Participating UN Organizations based on the Steering Committee instructions, and iii) consolidating periodic financial reports and the final financial report.

**Participating UN Agencies**

Participating UN organizations operate in accordance with their own regulations, rules, directives and procedures. They assume full programmatic and financial accountability for funds disbursed by the Administrative Agent and are responsible for the implementation and delivery of results under each activity result.

PUNOs will have dedicated resources to achieve results, including personnel and consultants (technical assistance) that are directly contributing to Project activities, and allocated budgets for associated costs, such as office structure, and operability of field visits for quality assurance.

## 8 Monitoring, Evaluation and Reporting

**Monitoring**

The JP will be monitored throughout its duration in accordance with the Joint Programme Document. Monitoring will be done against targets and indicators through field visits and studies, and progress will be reported in the narrative report. UNDP and UNEP are responsible for monitoring their contributions, and the UNDP as a Convening Agency oversees and coordinates to ensure all targets are monitored.

**Annual review**

UNDP and UNEP shall collate an annual review report for submission 2 weeks before the Q4 JP Steering Committee meeting. The review report shall detail progress made, analysis of the project context, predicted and observed risks, constraints, and issues. It shall also if needed provide recommendations for changes for the consideration of the SC. Following the meeting the review report will be completed including documenting any agreed changes to the JP.

**Evaluation**

UNEP policy requires an end-of project evaluation for all projects, implemented by the UNEP Evaluation Office and financed by the project. Therefore, evaluation of the Joint Programme will be undertaken by UNEP in accordance with the guidance from the United Nations Evaluation Group (UNEG) (e.g., relevance, efficiency, effectiveness, impact, and sustainability) with an emphasis on results and on the Joint Programme process. UNDP will provide support through its Libya Country Office Monitoring and Evaluation team. The evaluation will be undertaken within 3 months of the end of the JP.

**Reporting and communications**

The project will prepare an Annual Report (technical and financial) after a year of implementation and a Final Report at the end of the project. Both reports will follow the Standard Memorandum of Understanding for Joint Programmes.

Project communications are set out in Annex VI, Project Communications Plan of the EC-MPTFO Agreement. Formal project communications will be coordinated by UNDP in its role as Convening Agent.

The Communications & Visibility Plan included in the Annex VI proposes a set of activities that will contribute to the implementation of the Project, ensuring effective public outreach, strategic communication and visibility of the achievements, impact and milestones of the project:

1. Communicate on the project goals, objectives, outputs and results to the relevant beneficiaries, partners and stakeholders, seeking to facilitate its implementation and encourage synergies.
2. Promote the EU and UN values, such as human rights, and the Sustainable Development Goals (SDGs): Gender equality (SDG5); Clean water and sanitation (SDG6); Affordable and clean energy (SDG7); Industry, Innovation, and infrastructure (SDG9); Reduced inequalities (SDG10); Sustainable cities and communities (SDG11); Peace, Justice and strong institutions (SDG16).
3. Acknowledge the EU role in promoting stabilization and peace in Libya, underlining successful cooperation between the EU and the UN.

All communication and visibility activities will be implemented and coordinated by the Project team and the Communications Units and focal points of UNDP in Libya, UNEP and UNSMIL, in close partnership with the Press and Information Team of the EU Delegation to Libya.
All communication and visibility activities will adhere to the European Union's requirements for communication and visibility on EU funded activities in accordance with Article 11 of the Financial and Administrative Framework Agreement concluded between the European Union and the United Nations, Article 8 of the Annex II to the EU-UNDP Agreement (General Conditions) and the Joint Visibility Guidelines for EC UN Actions in the field.

Communication and visibility activities, undertaken under the project, will be designed for the specific target audiences described above, covering all consecutive stages of the project cycle. In view of the pandemic and post-pandemic realities, digital communication will be given a priority in all respective activities.
Communication and visibility activities will be implemented by the Communication Units of UNDP and UNEP involved with support from and in coordination with the EU.
The following main tools will be applied at different stages of the project cycle:

1. Public events to draw public attention to the project milestones.
2. Social media campaigns to reach out to the beneficiaries directly, raising awareness, encouraging engagement and ensuring public support.
3. Corporate UNDP and UNEP websites and/or social media accounts, to disseminate high-profile information about the project implementation.
4. National and local media and social media to serve as a platform for engaging multipliers.

All communication and visibility activities will be agreed with the EU Delegation to Libya. Coordination with the EU Delegation to Libya will be implemented through regular information-sharing, reporting, consultations and discussions.

# 9 Legal context or Basis of Relationship

| | |
|---|---|
| UNDP | This Joint Programme Document shall be the instrument referred to as the Project Document in Article I of the Standard Basic Assistance Agreement between the Government of Libya and the United Nations Development Programme, signed by the parties on 20 May 1976 .<br><br>Output 2 will be implemented by UNDP Libya in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply. |
| UNEP | UNEP is a Non-Resident Programme in Libya. Its mission presence in-country is hosted by UN Country Team members, in this case UNDP and UNSMIL. Its mandate to deliver outputs and activities are embedded in individually projects and JPs approved by the host government and aligned with the country specific UN Sustainable Development Cooperation Framework or equivalent (2019 – 2020 UN Strategic Framework in the case of Libya – extended until 2021).<br>Output 1 will be implemented by UNEP in accordance with its financial regulations, rules and practices. The requirements detailed in the MOU, MOU Addendum and this JP document will be incorporated into a dedicated UNEP Project Document, designed, approved, and implemented in accordance with the UNEP Programme Manual.<br>At the global level, this project will contribute to the UNEP 2020 – 2021 Programme of Work and 2018 – 2021 Medium Term Strategy, approved by the UN Environment Assembly. It contributes to the sustainable recovery outcome under Subprogramme 2: Disasters and Conflicts Subprogramme. |

| | |
|---|---|
| MoU and Mou Addendum MPTFO | The Joint Programme is governed by the standard Memorandum of Agreement and addendum of the Libyan Electricity Sector Stabilization and Transition Support (LESST) using pass-through fund management.<br><br>With this document, UNDP and UNEP appoint the Multi-Partner Trust Fund Office and the United Nations Development Programme ) to serve as their Administrative Agent and Convening Agent respectively in connection with the Programme, in accordance with the terms and conditions set out in the Memorandum of Understanding and addendum. |