National or International consultants: National Consultant

#### Description of the assignment: Sustainable Transport Specialist

**Project Title:** GEF PPG for the Preparation of a Project on "Lebanon Sustainable Low-Emission Transport Systems"

Period of assignment/services: 60 working days between February and August 2020

### 1. Background

The current Lebanese transport sector is not sustainable characterized by the absence of reliable public transport, underdeveloped and uncoordinated public works, prevalence of old and pollutive cars, and very high rate of car ownership. As a result, the transport sector is the second largest contributor of Lebanon's greenhouse gas (GHG) emissions, accounting for 23% of the total emissions and also contributing the emissions of other pollutants such as NOx (60%), CO (99%), SO2(5%) and particulate matter, VOC, copper, zinc and lead. As for the contribution of the different vehicle categories, passenger cars have the highest share of the emissions with 58.38% of the total transport GHG emissions while light-duty vehicles (LDV), heavy-duty vehicles (HDV), and motorcycles account for 17.46%, 23.81%, and 0.35% respectively. It is estimated that air pollution from polluting old cars costs at least \$ 200 million of economic loss per year resulting from morbidity, adult mortality, child mortality and discomfort, which does not include the cost from health care services. A substantial additional impact is that of congestion, leading to an estimated increase of travle time, where one estimate puts the burden of congestion at 8% of GDP per annum

The public institutional structure of the transport sector in Lebanon is subjected to fragmented structure. The planning and regulation of public transport is undertaken by the Ministry of Public Works and Transport (MPWT). This includes the licensing of companies to undertake public transport services, fare setting, and planning. The MPWT oversees the construction and maintenance of the national highways and road networks. The MPWT is also the guardian of the state-owned enterprise, the Railways and Public Transport Authority (RPTA), a public institution with a semi-independent legal identity with financial and administrative autonomy. However, the RPTA has not been able to effectively play its role due to the destruction of railways, tramways, and most of the buses that were once under its management. The Ministry of Interior and Municipalities (MoIM) licenses vehicles and drivers and undertakes the overall management of vehicle inspections, in addition to the responsibility for the enforcement of traffic law, including on public transport, through the Internal Security Forces (ISF). Municipalities are also assigned some public transport competences through the Municipal Law while also being responsible for planning and implementation of urban projects. The Council for Development and Reconstruction (CDR) has competencies in national planning, including transport planning, and the execution of large infrastructure projects such as road and transport through project-specific mandates by the Council of Ministers.

The transport sector lacks technical capacity and remains institutionally weak, particularly in terms of coordinating all the activities related to transport due to the fragmented structure and the absence of leading institution. As a result, the comprehensive approach and systematic integration of sustainability are missing particularly considering the NDC commitments of the government and the potential for the introduction of alternative modes of transport, electric and hybrid vehicles in both the public and private spheres. Due to the lack of the integrated approach to financing, limited state

budget for necessary infrastructure investment and incentives pose a significant challenge toward sustainable mobility transformation. Moreover, the current state revenue structure heavily depends on fuel consumption and vehicle purchase, negatively affecting the transition toward sustainable transport. Thus, the adaptation or proactive shift of the taxation structure will be required. From a technical perspective, although the national market has seen a growing appetite for electric vehicles, little is known about the electricity infrastructure needs, the technical needs for recharging stations, the capacity of the grid, the safety and maintenance needs of these types of vehicles. Weak enforcement of traffic rules results in illegal parking and reckless driving, undermining road safety and exacerbating congestion. In addition to the issues of road safety, lack of supportive infrastructure such as quality pedestrian zones and parking facilities is hindering the promotion of non-motorized transport.

## 2. Scope of work, responsibilities and description of the proposed analytical work

### Scope of GEF Transport Project

UNDP Lebanon in partnership with the Ministry of Environment is preparing a full-project proposal to be submitted to the Global Environmental Facility (GEF) which aims to work towards sustainable low-emission transport system. The project will consist of 3 main components: on one hand to tackle the policy issues and provide technical options for the best way forward to improve the transport sector and to introduce efficient transport technologies to the market. On the other hand, the project will consider piloting a renewable energy pilot application for charging stations or some other modality to determine the applicability of charging electric vehicles. Finally, the project will work with NGOs and universities to promote research on the topic and raise awareness on sustainable transport and modal transport change.

The proposed UNDP-GEF project will be complementary to the baseline initiatives as it addresses barriers that are specifically related to the transformation towards sustainable mobility. The main ongoing/planned initiatives includes Great Beirut Public Transport - Bus Rapid Transit (BRT) project by the World Bank, Bus Transportation Public-Private Project by the local private company (WeGo) and feasibility studies for bus network system and revival of the railway systems by European Investment Bank (EIB).

### **Objective of the Consultancy**

This consultancy is one of a number being set up by UNDP to formulate the project document and related documentation leading to project implementation. The consultant will be reporting to an International Consultant who will be leading the write-up and formulation of the project document in close coordination with the UNDP team. The consultants will report to the Energy and Environment Programme Manager in the UNDP Lebanon Country Office and will be supported by other UNDP experts in the field.

The Objective of this consultancy is to carry out the necessary survey work, assessments, consultations, and other data collection, and contribute the development of the full-sized GEF project document.

### 3. Expected Outputs

The Sustainable Transport Expert will carry out the following tasks and related outputs:

### Baseline studies and analysis for the sustainable transport project

- 1. Starting from the information provided in the PIF, collecting all background information on policies, related regulations, strategies, planning documents on transport in general.
- 2. Collecting all baseline information on the ongoing projects for public transport (without GEF intervention) as well as mobility initiatives by NGOs, Universities and Start-ups.
- 3. Comprehensive baseline analysis including CO2 emission calculations of the scenario without GEF intervention for each of the sustainable transport projects, as well as an analysis of the scenario involving GEF intervention (including CO2 emissions analysis);
- 4. Detailed barrier analysis for each of the sustainable transport investments to be addressed in the project;
- 5. Assessment of various types of low emission vehicles and technologies, considering the national context and international best practices;
- 6. Survey potential stakeholders and beneficiaries (especially community leaders) at the local level and assess their level of interest and willingness to engage with the project;
- 7. Identify pilot sites for project implementation in discussion with the Team Leader and UNDP team.
- 8. Assessment of the options available for the investment component of the project taking into consideration the stakeholders and pilot locations and projects
- 9. Assessment of environment, social, economic and financial benefits and disadvantages of each alternative;
- 10. Quick financial analysis and costing of different investment options (pilot project) and alternatives;
- 11. Recommendations on best business models/legal structure for the implementation of the pilot project (including PPPs)

## Project Design and Preparation of the full-sized project document

- 12. Participate fully in the formulation of the project Objective, Outcomes, Outputs and Activities as well as Baselines, Targets and Indicators; contribute to sustainability and replication plans, stakeholder participation plans, and budgets;
- 13. Detailed incremental cost analysis to justify GEF intervention in the sustainable transport project;
- 14. Costing of expected project outcomes, outputs and activities;
- 15. Identify co-financing potential from the stakeholders interviewed during the preparation of the project document and from a review of the sector in the country.
- 16. Prepate the mandatory Social and Environmental (Safeguards) Screening Procedure in line with UNDP guidance.
- 17. Assist the UNDP team in preparing the quality assurance requirements annex in line with the draft proposal and based on the analysis undertaken during the preparation of the project proposal.
- 18. Presenting the proposed interventions on sustainable transport at the project validation workshop;

- 19. Providing inputs to revise the draft project document to address the comments/suggestions made by UNDP/GEF RTA and HQ, GEF Sec, and other reviewers (related to sustainable transport);
- 20. Provide support and backstopping in the field for the International Consultant (Team Leader) who may not be able to conduct a country visit. This may include various data gathering and analyses according to templates and guidance to be provided by the International Consultant as well as carrying out consultations with prospective partners and stakeholders and providing full and detailed reports.
- 21. Support in obtaining co-financing letters related to the sustainable transport investments;

# 4. Expected Outputs

The key deliverables of the Land-Use Planning and Environmental Management Specialist will be:

Deliverables/ Outputs	Estimated Duration to Complete	Estimated Target Due Dates	Review and Approvals Required	Payment Terms
Deliverable 1: Report on tasks 1 - 4	10 working days	01 March 2020	PPG Team Leader and UNDP Programme Manager	20%
Deliverable 2: Report on tasks 5 - 11	20 working days	01 May 2020	PPG Team Leader and UNDP Programme Manager	20%
Deliverable 3 – A Report on the results from tasks 12 - 15	20 working days	15 July 2020	PPG Team Leader and UNDP Programme Manager	30%
Deliverable 4 – A Report on the results from tasks 16 - 21	10 working days	31 August 2020	PPG Team Leader and UNDP Programme Manager	30%

## 5. Institutional arrangements

The Consultant will be working under the overall guidance of the International Team Leader that is heading the preparation of the project proposal and will report to the UNDP Lebanon Energy and Environment Programme Manager. The Consultant will also coordinate closely with the UNDP team members that are supporting in this assignment.

The approach will be participatory, involving stakeholders to the extent possible. Information and data will be gathered through three main activities, namely:

- Review (desk study) of all relevant documents and websites identified by the Specialist and recommended by the Team Leader and UNDP.

- Field visits to potential project localities as directed by the Team Leader (Byblos and Zahleh are potentials) for the collection of baseline data as needed.
- Consultations with relevant organizations and individuals as identified by the Specialist and as recommended by the Team Leader and UNDP. In particular, this will include national and local decision-makers and other personnel, local government, private companies, relevant NGOs, research institutions and community groups especially those affected by the project, potential beneficiaries and potential partners.

The Consultant will also participate in and contribute to all meetings, discussions, focus groups, and public workshops that may, from time to time, be organized by the Team Leader.

UNDP will ensure transport to and from meetings and logistical support during the visit of the Team Leader (expected at the end of April 2020). All other transportation and logistics need to be arranged and covered by the Consultant. Facilities will not be provided except for meeting to be held within UNDP premises.

## 6. Duration of work

The assignment will be **60 working days** spread out over the period from February to August 2020. Estimated time for receipt of feedback on reports (review time) is 5 working days.

## 7. Duty station

Duty station is in Beirut with field visits field visits to potential project sites (Byblos, Zahleh and others), with timing to be agreed with the Energy and Environment Programme Manager, UNDP-Lebanon (particularly given the current security situation).

## 8. Requirements for experience and qualifications

### **Academic Qualifications**

Graduate degree in transport engineering, civil engineering, electric or energy engineer, environmental engineering or policy or a related field. PhD is an asset.

### **Years of Experience**

At least 7 years of substantive professional experience in development and/or implementation of transport related projects

## **Technical experience**

- Experience in transportation projects, implementation and/or design of transport-related policy projects;
- Experience or knowledge in fuel efficient vehicles and e-mobility is required;
- Familiarity with sustainable transport approaches and linkages to low emission development strategies and climate mitigation policies;
- Knowledge of renewable energy is an asset
- Experience in designing and facilitating capacity building processes in developing countries;
- Experience or strong familiarity with the work of UNDP and/or other multilateral, bilateral and civil society development partners is an asset;

## Competencies

- Proficiency in Arabic and English languages;
- Excellent analytical skills, excellent interpersonal and communication and writing skills as well as ability for coordination;
- Ability to establish and maintain good relationship with stakeholders;
- Ability to meet deadlines and prioritize multiple tasks and work under pressure;
- Demonstrated ability to work in an independent manner and ability to plan, organize, implement, and report on work;

## 9. Criteria for selection of the best offers

Combined Scoring method – where the qualifications and methodology will be weighted a max. of 70% and combined with the price offer which will be weighted a max of 30%; using the following evaluation criteria.

Criteria	Weight	Max. Point
Technical Competence	70%	100
Academic Qualifications		10
Master's Degree: <b>7 points</b>		
Ph.D. Degree: <b>9 points</b>		
Relevant trainings/certificates: additional 1		
point		
Years of Experience		20
7 years: <b>14 points</b>		
7 – 10 years: <b>18 points</b>		
More than 10 years: <b>20 points</b>		
Technical Experience		40
Experience in sustainable transport projects: <b>10</b>		
points		
Knowledge of low emission vehicle technology:		
10 points		
Knowledge of climate policies and sustainable		
transport policies/agendas: 5 points		
Knowledge of renewable energy: <b>5 points</b>		
Experience in designing projects: <b>5 points</b>		
Experience in designing and facilitating capacity		
building processes: <b>5 points</b>		
Interview		30
<u>Financial (</u> Lower Offer/Offer*100)	<u>30%</u>	100
<u>Total Score</u>	Technical Score * 0.7 + Financial Score * 0.3	

# **10.** Any other important information:

Qualified candidates shall be invited for an interview which will constitute a part of the technical evaluation