

## United Nations Development Programme

### TERMS OF REFERENCE

#### Local (Azerbaijani) Consultant on Sustainable Road Transport

<b>Project:</b>	<b>“Nationally Appropriate Mitigation Actions (NAMAs) for low-carbon end-use sectors in Azerbaijan”</b>
Position:	Sustainable Road Transport Consultant
Application Deadline:	31 <sup>st</sup> October 2018 COB
Type of Contract:	Individual Contract
Duty Station:	Baku
Expected Starting Date:	09 <sup>th</sup> November 2018
Period of Contract:	50 (fifty) consultancy days (November 2018 to November 2019)
Expected duration:	12 months

#### **Background**

The “Nationally Appropriate Mitigation Actions (NAMAs) for low-carbon end-use sectors in Azerbaijan” Project’s objective is to reduce the annual growth rate of GHG emissions from the energy end-use sectors. The project, which began in March 2015, targets 3 (three) energy end-use sectors, namely Buildings, Transport and Associated Gas Capture. The specific objective of project is to support State Oil Company of Azerbaijan Republic (SOCAR) in the implementation of its Climate Change Mitigation Strategy by promoting and upscaling green-house-gases (GHG) mitigation measures through a programmatic NAMA approach in the low carbon end-use sectors. SOCAR, being in the core business of oil & gas production, processing and distribution, is a major energy user and GHG emitter, and is the main stakeholder of project and implementing partner. The project also aims to improve the country’s institutional & policy framework, address appropriate mechanisms and result in activities to realise significant GHG emission reduction achievements in the long term. The other key institutional stakeholders for this project are as listed below:

- Ministry of Ecology and Natural Resources (MENR);
- National Climate Change Centre (NCCC);
- Ministry of Energy of the Republic of Azerbaijan.

The “Energy Efficient Buildings” component of the project is improving the energy utilization efficiency in buildings by promoting the energy conserving design of new buildings and enhancing the efficiency in the operation of existing buildings. The realization of this objective is facilitated through the demonstration of building energy efficiency technologies, systems, and practices. The “Sustainable Transport” addresses fuel economy in SOCAR’s vehicles fleet by introducing alternative energy sources resulting in a lower energy intensity of the transportation sector. Technological and market opportunities for improving the current fuel mix that is 98% dependent on gasoline and diesel engines will help in reducing the energy intensity of transport sector. The aim of “Associated Gas Capture” component is to recover low-pressure associated gas from the oil wells in Siyazanneft Oil and Gas Production Unit and to collect, compress and transport it to a gas processing plant. The processed and clean gas will be provided to the gas grid and utilized to nearby villages and communities to supply family houses as well as production facilities (e.g. chicken farms) with fuel. Significant physical progress has already been made on the buildings and transport components. The gas-capture component was recently launched and various options to be pursued are being studied in detail by SOCAR with the participation of an individual international expert.

## **Energy Efficiency in Road Transport Fleet of SOCAR**

SOCAR has been among a few institutions in Azerbaijan who are at the forefront of national climate change mitigation actions. Apart from adopting bold targets and implementing GHG emission reduction measures internally, the company is implementing several initiatives to promote more efficient and cleaner oil & gas end-use technologies and practices among its customers and employees. SOCAR has implemented an ambitious voluntary commitment to reduce its own emissions by 40% or an equivalent of aggregate 20 mln tCO<sub>2</sub> by the year 2020. This commitment and the actions to achieve them are spelled out in the SOCAR's Climate Change Strategy adopted by the Company's Board in December 2010. There are about 4,000 vehicles in operation in the SOCAR's fleet, of which more than 80% are using gasoline and the annual consumption is approximately 17 thousand tons.

The Project will address fuel economy in the SOCAR's vehicle fleet by introducing electric/hybrid technologies resulting in a lower energy intensity of the transportation sector. The gradual replacement of vehicles with more energy-efficient ones will be supplemented by training of drivers in eco-driving practices and introduction of environmental criteria within fleet management practice. For this purpose, in addition to installing fuel consumption monitoring devices in the vehicles, a driving simulator is also to be procured to impart training. Through organized training, it is targeted that this measure alone will reduce vehicle emissions by at least 10% among trained vehicle drivers.

The issues and approaches to be followed on this component were addressed in detail by the international consultant who completed his annual progress report at the end of his 1-year contract in April 2017. A new contract was subsequently launched in April 2018, focusing on (1) monitoring and support of eco-driving training activities conducted by SOCAR, (2) monitoring of pilot demonstration of hybrid vehicles, (3) deployment of advanced tracking devices in a sample of vehicles and implementation of environmental indicators within SOCAR's fleet management software, (4) scaling-up and replication of activities and proposal of changes in Azerbaijan's vehicle legislation to promote the deployment and taking up of clean technologies. The local consultant to be hired will further build on these recommendations so that sustainable practices are fully adopted by the vehicle fleet staff and managers and that proposals are submitted to the government for the uptake of clean vehicles in the country.

### **Duties and Responsibilities**

The Local Consultant (hereafter referred to as LC) shall lead the design and implementation of all activities under the direct supervision of the Project Manager. He/she shall review and act on the recommendations made by the international sustainable transport consultant in his annual (2016-17) progress report and in his 2018 deliverables on fleet management, awareness-raising campaign, scaling-up of project activities and data collection and analysis required by the information to the international GHG and Climate Change Expert. Specifically, the LC shall be responsible for the following tasks:

#### **Eco-driving Simulator**

- To monitor and report the training activities conducted by SOCAR with the simulator, including identification of participating drivers, results achieved during the training and actual fuel consumption on the road before and after the training.
- To identify other entities in Azerbaijan that can benefit from training on Eco-driving simulator and take steps to invite them to participate in these training programs.

#### **Data Collection**

- For the hybrid-electric vehicles which have been already purchased under the project, to monitor their performance and estimate the GHG reductions as compared to the types of vehicles that were replaced by them.
- To identify and select the vehicles to be equipped with data recording devices, to supervise the installation of the devices and integration in the fleet management system, and to measure the improvements achieved in emissions and driver practice.

- To update data about SOCAR's vehicle fleet including number and types of vehicles, age, fuel type, fuel efficiency and annual mileage, as well as their usage patterns (viz. typical route lengths, typical load types, typical load weights, use of air conditioning and lights, etc.).
- To identify existing legislation in Azerbaijan on vehicle emissions (homologation and certification, taxation, technical inspection...) and government's policies on this topic.

### Reporting of Results

- To work closely with the MRV Expert to develop a measurement, reporting and verification (MRV) system based on SMART (Specific, Measurable, Achievable, Relevant and Timely) indicators, as applicable to the transportation component of the project.
- To provide updates on alternative vehicles available in the market, which could fit SOCAR's transport needs at the same time lowering the total GHG emissions.
- To provide advice in the development of fleet procurement plans for the next years, with consideration of efficiency criteria in the selection process and inclusion of a minimum percentage of hybrid vehicles, based on the pilot results.
- To provide recommendations to the government of Azerbaijan for the uptake of clean vehicle technologies in the country.

### Deliverables

- Eco-driving: Report including monitoring and assessment of the eco-driving training activities conducted by SOCAR on the road and with the support of the simulator, as well as the replication plan to reach out to other companies in the country, and to include eco-driving tips within the materials used for the examinations for driving licenses.
- Fleet management. Report including monitoring and assessment of the environmental indicators provided by SOCAR's fleet management system for the vehicles equipped with advanced tracking devices, and a deployment plan to include the whole fleet within the system.
- Recommendations to the government. Report addressed to the relevant stakeholders within the national government highlighting the main achievements of the project and providing recommendations on legislative changes to accelerate the uptake of ecodriving, environmentally-friendly fleet management and clean vehicles in Azerbaijan.
- Submitting a detailed annual progress report of the project including documenting all the GHG reduction measures that were successfully completed along with the results that were achieved. (30%)

### Timeframe of the assignment

The LC will be engaged under an Individual Contract, immediately after the completion of the selection process. The initial contract will be for a period of twelve months and is expected to start on 09<sup>th</sup> November 2018. Any further contract extensions will be subject to the overall performance as evaluated jointly by the Project Manager and Lead Advisor, based on (a) results and impacts of the activities s/he implemented/facilitated, supported and/or conducted; (b) quality of reports, documents and presentations made, and (c) the relationship s/he developed with the Project Team and the beneficiaries of Project.

### Required Skills and Experience

#### Education:

- University degree or experience in a related engineering discipline.
- Course work or degree in environmental management.

#### Experience:

- At least 7 years of experience in technical and commercial aspects of the transport sector, particularly those related to environmental management.

- Significant and relevant experience in project planning, preparation and monitoring and experience in Project Document preparations
- Experience of EE best practices applied to the road transport sector.
- Experience in drawing up materials and implementing workshops, awareness training and seminars.
- Experience in consultancy services.

Competencies:

Functional Competencies:

- Knowledge of energy conservation and energy efficient technologies;
- Strong knowledge in energy and GHG standards;
- Demonstrates strong analytical skills and consistently approaches work with energy and a positive, constructive attitude;
- Ability to work independently towards the achievement of broad objectives of the project with minimum guidance.
- Proficiency in English.

Development and Operational Effectiveness:

- Ability to apply peer reviewer guideline production procedures;
- Ability to analyze technical requirements in energy efficiency and energy management applications;
- Strong analytical skills.

**Submission of applications**

Interested individuals are requested to submit their applications by 31<sup>st</sup> October 2018, along with the names and contact information of at least 2 references who are familiar with their recent work as applicable to requirements of the position. The application should contain:

- A duly completed CV or Personal History Form (P11 Form)
- Offeror's letter/filled-in template to UNDP confirming interest and Breakdown of Costs Supporting the Final All-Inclusive Price as per Template
- Description of Approach to Work (Methodology)

UNDP is committed to achieving workforce diversity in terms of gender, nationality and culture. Individuals from minority groups, indigenous groups and persons with disabilities are equally encouraged to apply. All applications will be treated with the strictest confidence.