



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



TERMS OF REFERENCE (TOR)

for the provision of services to assess the added value, feasibility and financial sustainability of an ECO Clean Energy Centre (CECECO)

Project Title: Assess the added value, feasibility and financial sustainability of an ECO Clean Energy Centre (CECECO) as a preparatory phase of its establishment.

Statement of Work: The contractor will conduct a consultative baseline and needs assessment, and develop a feasibility study and project document on the potential centre.

1. Country/ Region

ECO Member States, or ECO Region include: Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan, Turkey, Turkmenistan and Uzbekistan.

2. Organizational Background

The United Nations Industrial Development Organisation (UNIDO) is a specialized Agency of the United Nations based in Vienna, Austria. Its mandate is to promote and accelerate sustainable and inclusive industrial development in developing countries and countries in transition. The Climate Policy and Partnerships Division (CPP) of the Department of Energy (ENE) aims to accelerate the uptake of integrated and inclusive markets for sustainable energy and climate technology products and services in LDCs, SIDS and emerging countries through policy support, advocacy, convening, knowledge and information systems and the creation of industry networks, associations, clusters and institutions.

The Economic Cooperation Organization (ECO) is a regional inter-governmental organization encompassing diverse Membership of countries from Europe, Caucasus, Central Asia, Middle East and South Asia with more than 460 million inhabitants and over 8 million square kilometres at the crossroads between the emerging Eurasian and European markets connecting Russia to Persian Gulf and China to Europe. Among the overall objectives of the Organization are the promotion of conditions for sustainable development of the ECO Region and intensification of mobilization of its natural resources, in particular energy resources.

3. Project Background

In the context of ECO Vision 2025, ECO Energy Strategy, ECO Clean Energy Corridors and the Global Network of Regional Sustainable Energy Centers (GN-SEC) Program,¹ the United Nations Industrial Development Organization (UNIDO) and the Economic Cooperation Organization (ECO), with the financial support of the Austrian Development Agency (ADA), resolved on assisting the ECO Member States in the establishment of the ECO Clean Energy Centre (hereinafter CECECO).² ECO Member States include: Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyz Republic, Pakistan, Tajikistan, Turkey, Turkmenistan and Uzbekistan.

¹www.gn-sec.net

² Name to be defined in the preparatory phase

The idea of establishment of CECECO was pioneered as the outcome of ECO-UNIDO consultations held in Vienna and Tehran over the past few years. This initiative was reflected in the ECO Vision 2025 – key strategic document of ECO – and its Implementation Framework stipulates the establishment of the Centre up to 2025 by ECO Secretariat and ECO Member States. The UN-ECO Resolutions on Cooperation adopted by UNGA sessions in 2014 and 2016, respectively, welcomed the idea of establishment of a regional energy centre with possible assistance of UN agencies. The major general objective of CECECO is the contribution towards increased access to modern, affordable, reliable and sustainable energy services, energy security and mitigation of negative externalities of the energy system (e.g. local pollution and GHG emissions) by creating an enabling environment for renewable energy and robust energy efficiency markets and investments. The project has progressed steadily throughout 2018 in terms of approval procedures and fund-raising.

The CECECO process is closely linked to the other centers operating under the umbrella of the GN-SEC. Energy represents one of the priority areas of cooperation within ECO along with trade and transport. ECO's energy agenda has recently been undergoing the paradigm shift towards transformation to clean and sustainable energy. This regional mainstream targets on unlocking ECO Region's tremendous cooperation opportunities in renewables (notably solar, wind, hydro and geothermal) as well as energy efficiency and conservation. The establishment of the Centre will complement and significantly contribute to the existing efforts of ECO to promote energy and transport connectivity in the region.

It has been recognized that there is a lack of ECO Region-wide in-depth analytical studies, which would quantify and evaluate the potential for transition to sustainable energy and investigate constraints to regional cooperation. In the light of the aforementioned and with a view to address the renewables and energy efficiency/conservation issues in an integrated manner, the partners have agreed to undertake a comprehensive consultative preparatory process, which will determine the added value, feasibility as well as the technical and institutional design of the center. The process envisages the broad stakeholder consultations, consultative/validation meetings, a needs assessment, feasibility study, and consideration and approval of a project document which will define the institutional and technical design of the center during the subsequent stage of development – start up/the first operational phase. The expected following project document will be based on the lessons learned from other centers and provide an overview on the preparatory results and activities. More specifically, the consultative preparatory phase will include the following interrelated milestones in coherence with each depending on the outcome/result of the former milestone:

- a. Develop the baseline and needs assessment report to set a quantifiable benchmark, determine the added value of the centre, and identify the priority needs of various stakeholders;
- b. Based on the results of the baseline and needs assessment, elaborate a feasibility study report with a view to determine the most effective/optimal institutional and technical design of the centre;
- c. Present the draft baseline/needs assessment and first outcomes of feasibility study of the process at a Consultative Meeting in the mid of 2019.
- d. Based on the results, map out the CECECO project document on the first operational phase, and present it, together with the feasibility study at a Regional Validation Meeting in the end of 2019;
- e. Discussion and approval of the project document by one of the ECO decision-making bodies (Council of Permanent Representatives, Regional Planning Council, Ministerial Meeting on Energy);
- f. Publication of the outline of the feasibility study/project document as a brochure/pamphlet for, *inter alia*, promotion and wider publicity among the ECO Member States and beyond, prior to launching the first operational phase.

In this context, the partners seek support of a professional energy consultancy company/institution/individual consultant with a strong focus on renewable energy and energy facility.

4. Objectives

The objectives of the consultancy assignment are as follows:

- a. Undertake broad stakeholder consultations and develop the baseline and needs assessment report to study prerequisites and existing conditions in the ECO Region for establishment of the centre, set a quantifiable benchmark, determine the added value of the centre, and identify the priority needs of various stakeholders;
- b. Based on the results of the baseline and needs assessment, elaborate a feasibility study report with a view to determine the most effective/optimal institutional and technical design of the centre and its financial sustainability;
- c. Present the draft baseline/needs assessment and first outcomes of feasibility study of the process at a Consultative Meeting in the mid of 2019.
- d. Based on the results, map out the CECECO project document on the first operational phase and present it, together with the feasibility study at a Regional Validation Meeting in the end of 2019;
- e. Publication of the outline of the feasibility study/project document as a brochure/pamphlet for, *inter alia*, promotion and wider publicity among the ECO Member States and beyond, prior to launching the first operational phase. The information and recommendations of the feasibility study/project document should be instrumental to the policy-makers and other stakeholders at the regional and national level.

5. Scope of the required consultancy services

Tasks	Deliverables	Estimated Duration	
		Inter national Cons.	Local Cons. in ECO countries (local rates/ working days)
<p>1. <u>Preparation of an inception report on the assignment</u> (including detailed time schedule, mile-stones, needs assessment and feasibility study methodology, planned stakeholder meetings and interviews); participate in a physical kick-off meeting at ECO; It should also provide:</p> <p>a. A table of content of the needs assessment report;</p> <p>b. A list of documents to be reviewed</p> <p>c. A list of stakeholders to be contacted and interviewed;</p> <p>The finalised questionnaire based on the draft questionnaires received from UNIDO and ECO, which shall also reflect the nexus approach and important cross-cutting issues, such as gender equality, social standards, poverty reduction, trade, water, and environmental sustainability and climate resilience.</p>	Inception report (incl. UNIDO, ECO and ADA comments)	5 w/d	5 w/d

<p>2. <u>Designing and elaboration of the baseline and needs assessment report</u> (maximum of 60 pages) to determine the need and added value of such a regional RE&EE centre, which will serve as a basis for the feasibility study; the report shall offer a flexible, value for money service, which delivers high quality advice and documentation within required timelines; the report will feed into the ongoing ECO energy agenda; the report will be produced by desk review of existing publications, policy documents and studies, as well as through the collection of inputs from key stakeholders by using a questionnaire (e.g. interviews, filled questionnaires); if the scope of the assignment and the team structure of the contractor allows, the stakeholder consultations should include a number national workshops with key players in the respective countries (working on the questionnaire in groups); UNIDO will provide a draft questionnaire for the baseline and needs assessment to be adapted by the consultants; the baseline and needs assessment report will include at least the following aspects/tasks:</p> <p>a. <u>Situation Analysis</u>: General energy overview of the ECO region and its attendant features (technical, commercial, organizational, institutional, regulatory, etc.): Energy access and security challenges; energy, water, food and environment/climate nexus issues; potential contribution of RE&EE solutions and their co-benefits; RE&EE market survey and trends in the ECO region; status of local private sector and employment in the RE&EE sector; existing regional and national sustainable energy policy and incentive frameworks; availability of local RE&EE human resources; existing capacity development initiatives and research institutions/ programs; availability of RE&EE investment and market data; the analysis will include gender aspects and provide gender aggregated data;</p> <p>b. <u>Analysis of challenges/barriers and drivers/opportunities</u> in the RE&EE sector: Identify and prepare a list of enabling factors and barriers for the local RE&EE market, private sector and industry in ECO; determine how</p>	<ul style="list-style-type: none"> - Validated baseline and needs assessment report in English (incl. inputs from consultative/ validation meeting and partners); the report will be provided fully edited and ready to be published; it shall be written in a form that it can be easily integrated into the CECECO project document later on; - List of contacted stakeholders and reviewed literature; - Photo documentation on meetings and potential national workshops; - Statistical analysis of the received results through the questionnaire and interviews (the latter in .xls format and including graphs); the consultants will provide/ accumulate at least 25 filled questionnaires per ECO country; 	<p>20 w/d</p>	<p>30 w/d</p>
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<p>regional cooperation could contribute to reduce barriers (comparative advantage) and strengthen existing drivers to reach economies of scales.</p> <p>c. <u>Stakeholder and needs analysis</u>: Undertake a mapping of the most important public and private RE&EE stakeholders and analyse them according to their interests, positioning and possible roles in the CECECO initiative; clearly identify the individual priority needs of relevant stakeholders in the RE&EE sector; consider particularly the views of the private sector and civil society (e.g. gender groups); Elaborate a matrix of planned, ongoing and completed RE&EE programs and projects in the ECO region and identify possible fields of cooperation and synergies exploring inputs from other relevant institutions within the ECO region and outside (e.g., IRENA, UN, EU, IFIs, GIZ, GEF and other environment-related facilities, etc.);</p> <p>d. <u>Institutional SWOT Analysis</u> of the current regional support framework concerning RE&EE in the ECO; outline strengths and weaknesses including the risk factors.</p>			
<p>3. Elaboration of a feasibility study report (maximum 50 pages) on the ECO Clean Energy Centre (CECECO) upon the guiding premise of the baseline and needs assessment. The study will be formulated in a way, which will allow its easy integration into the CECECO project document using a template of its structure, to be provided by UNIDO. The feasibility study will include at least the following elements/tasks:</p> <p>a. Map out the most effective and feasible institutional and technical design of the center; the design shall be guided by the principles of relevance (for the needs of the population and private sector), local ownership, socio-economic and environmental sustainability and impact (see guiding principles of the UNIDO regional centres model); review and consider the lessons learned of ECO and other regional sustainable energy centres and incorporate them in the design;</p>	<p>- Validated feasibility study report in English (incl. received comments during the validation meeting and partners); the study will be provided fully edited and ready to be published; it shall be written in a form that it can be easily integrated into the CECECO project document later on.</p>	<p>20 w/d</p>	<p>15 w/d</p>

<p>undertake a risk analysis and propose a risk mitigating activities for each of the potential risks identified during the stakeholder and SWOT analysis and incorporate them in the design;</p> <p>b. Propose the most effective and feasible scope of mandate, strategic positioning, areas of intervention, key functions and services of CECECO; the mandate and focus of the centre shall demonstrate strong added value (relevance), contribute to the ECO energy agenda and complement or up-scale other regional and national programs or projects in the short-term and long-term; define the clear comparative advantage of the centre and specify the fields in which it should not work; clarify its connection and relevance to the ECO private sector and industry; examine the role of the public and private sectors and options for public-private partnerships (PPPs) in promoting renewables and energy efficiency/conservation within the centre;</p> <p>c. Outline the most effective and feasible integration of the Centre in the existing ECO institutional structure in the context of its upcoming energy agenda; define the cross-cutting areas with other thematic and regional programs; work out the suitable governance structure and internal decision making process, as well as internal rules and procedures (e.g. procurement, staff); define the relationship between the centre and other regional organizations; identify the division of labour between the centre and other institutions or the private sector (what should the centre do and what others can do better);</p> <p>d. Develop the result framework (incl. measurable gender-sensitive indicators) for the recommended list of technical activities of the centre during the first operational phase for each of the areas of intervention to be defined (e.g. technology demonstration, promotion of trade, investment, entrepreneurship and innovation, policy development and implementation, capacity development, knowledge management and awareness raising);</p>			
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<p>the framework shall aim at high impact; propose a cost estimate for each of the activities for the first operational phase of the centre (expected to be four years); UNIDO/ECO will provide a template for the result framework;</p> <p>e. Based on the result framework for the technical program and the ECO resource planning concerning its energy agenda, develop an estimation of needed administrative and staff resources required for the first operational phase of the center; develop a staff chart for the first operational phase;</p> <p>f. Based on the result framework, and administrative and staff resource planning, elaborate an indicative budget for the first operational phase of the centre (42 months); it shall include running costs (e.g. office, staff, equipment), as well as technical operational costs (technical activities); determine the financial feasibility of the centre based on the funding and available resources (equity, donor commitments, in-kind contributions); define different financial scenarios;</p> <p>g. Suggest a financial sustainability/fund mobilization strategy for the first operational phase; propose different business models to ensure the long-term financial sustainability of the centre; propose revenue generation activities;</p> <p>h. Identify development partners with interest to support the first operational phase of the Centre financially and technically (e.g. seconded experts).</p>			
<p>4. Contribute to the execution and follow-up of the Regional Consultative Meeting on the needs assessment and feasibility study in the end of 2019; prepare the meeting report in collaboration with ECO Secretariat and incorporate the comments of the working groups (to be established at the meeting) into the documents; contribute to the agenda-setting, power point presentations and other necessary proceedings; act as moderator in working groups; the contractor will develop and</p>	<ul style="list-style-type: none"> - Meeting report - Incorporated comments - Meeting agenda - Presentations - Photo documentation 	<p>7 w/d</p>	<p>2 w/d</p>

hand-over a photo documentation of the meeting; Present the outline of the CECECO project document at the subject Meeting.			
5. Develop the CECECO project document in cooperation with UNIDO using the template/structure to be provided.	- Final CECECO Project document fully edited and publishable - Meeting minutes	15 w/d	3 w/d
6. Develop a brochure and power point presentation on the center in English.	Brochure and power point presentation in English;		3 w/d
TOTAL		67 w/d	58 w/d

6. Deliverables and indicative time schedule

The consultant will be required to deliver the **following project outputs in accordance with the time schedule**:

• Item Final Inception report - incl. table of content of baseline report and of the feasibility study as well as proposed changes to the scope of work made in the kick-off meeting (take minutes of the meeting)	<i>Within two weeks</i>
• Item Final report including final needs assessment report, feasibility study report, CECECO project document and a brochure/pamphlet	<i>15 November 2019</i>

In addition, the consultant will be required to deliver the following to the partners:

- Item **High-resolution photographs (min. 2 MB, at least ten photos)** – that illustrate the undertaken activities. The consultants will cede all appertaining rights to unlimited use of the respective pictures to UNIDO, ECO and ADA.

The reports should be submitted in English language, as MS Word files in a format suitable for electronic transmission. In addition, twelve hard copies of the CECECO project document and brochures/pamphlets each should also be provided. The Consultants may be required to make a presentation on the findings to ECO Member States' officials. This decision could be made at a later stage.

7. Coordination and Reporting

The experts/consultants will work under the supervision and guidance of the UNIDO and ECO Project Managers. During the assignment, the consultant will coordinate closely with the Austrian Development Agency (ADA) and other regional and national key stakeholders. Close coordination of the desk study with the project partners, at their discretion, is required to the extent needed to ensure the study's relevance to the ECO Region.

8. Qualification and Evaluation Criteria

QUALIFICATION REQUIREMENTS

The contractor is expected to have the following profile:

- Company or institution with at least seven (7) years of public consulting experience in the international energy sector;
- Team shall demonstrate strong academic background in energy technologies, energy policy and/or energy economics with expertise in social, economic and environmental dimensions of sustainability and in the design and formulation of energy project; the lead consultant(s) shall be a bearer/bearers of at least a Master degree in energy economics, engineering, or renewable energy technologies.
- Team experiences and skills encompass, but not limited with, the policy, institutional, and regulatory areas, investment and planning, sustainable market structure, as well as the areas of project structuring and finance, and fluency in English.
- Multi-cultural team shall involve international expert(s) not from the ECO region (to ensure independence) and local experts in various ECO countries under the supervision of the lead international consultant.
- Scope and quality of track-record of public consulting experience in renewable energy and/or energy efficiency particularly with regard to energy policy development and sector planning;
- Scope of experience in the energy sector in the ECO region;
- Experience in developing project documents (incl. results frameworks) is an added value;
- Previous involvement of the team in complex assignments with a similar scope and focus;
- Experience in setting up technology centers is an added value;
- Team Leader/Lead Consultant (in case of team assignment) shall have the ability to coordinate an inter-disciplinary team and manage complex assignments in a multicultural setting;
- Strong problem solving, communication, research and analytical writing skills.

9. Application Procedure

Applicants shall submit their written proposals in English:

- Short technical proposal (including proposed approach and methodology, work plan, detailed CVs of experts, copies of university degrees, certifications, licenses as well as proven track record of implemented assignments).
- Financial proposal in Euro including all costs and taxes (includes a detailed work-time-expert-diagram indicating daily rates for individual team members, travel costs).
- In general, the financial and technical offer should focus more on local experts in various ECO Member States rather high travel budgets.

10. Further information

- <http://www.gn-sec.net>
- www.eco.int
- <http://www.unido.org>