

## **Terms of Reference**

<b>Title:</b>	National Expert on Gender in the energy sector
<b>Assignment:</b>	Expert in the development of a training, professional development, and retraining system for the development of renewable energy sources taking into account the expansion of professional opportunities for women in the energy sector.
<b>Place of work:</b>	Home-based
<b>Period:</b>	September 2021 - February 2022 (50 working days over six months)
<b>Type of contract:</b>	Individual contract
<b>Project title:</b>	#00101058 UNDP/GEF Project "Derisking Renewable Energy Investment in Kazakhstan"

## **Project Description**

The objective of the project is to promote private sector investment in renewable energy sources in Kazakhstan to achieve the country's 2030 and 2050 renewable energy targets. The project targets both large-scale and small-scale renewable energy sources.

The goal of this project is to achieve transformation of the energy market in Kazakhstan by significantly increasing the scale of the use of renewable energy sources in electricity production, thereby increasing the share of renewable energy in the country's power generation mix from 1.1% in 2017 to 10% by 2030.

To achieve its objective, the project includes activities to support renewable energy projects that are expected to bring about a collective GHG emission reduction of at least 460,000 tonnes of CO<sub>2</sub>. In addition, by the end of the project, the project would have supported the commissioning of 9.5 MW of direct, small-scale renewable energy system (RES) that will produce about 500 GWh of electrical energy.

The project is comprised of three components:

- Component 1 – Large-Scale Renewable Energy: Policy and Financial Derisking Measures
- Component 2 – Renewable Energy for Life: Policy Derisking
- Component 3 – Renewable Energy for Life: Financial Derisking and Incentives

This consultancy assignment is part of Activity 1.2.1 under Component 1/ Output 1.2 of the DREI Project.

At the first stage of work on the Roadmap for the organization of a system of advanced training and improvement of the educational process in the field of renewable energy sources, the following assessments were given: (1) the existing status of education for training personnel for working with renewable energy sources; (2) the level of existing educational and informational activities for the formation of competencies among key population groups in the use of renewable energy sources; (3) the impact of competencies on reducing the risks of investing in renewable energy sources.

The designed Roadmap consists of two blocks. The first block is related to organizational tasks, the second block is associated with the implementation of work to improve educational programs for training personnel for renewable energy sources and work on the creation of educational and information programs aimed at increasing the competencies of key groups related to energy and renewable energy sources.

The next stage is the implementation of the Roadmap program. It should start with a comprehensive analysis of the content of educational programs for training personnel for renewable energy sources to prepare general recommendations for their correction, and with the development of information and educational programs to improve the competencies of key groups of people interested in knowledge in the field of renewable energy. This project will be devoted to solving these problems.

The section of the Roadmap related to the development of information and educational programs to improve the competencies of key groups was prepared based on an analysis of the results of the introduction and use of RES in the republic. As a result, a very low level of involvement of the population of Kazakhstan in the development of renewable energy sources was revealed.

An important moment now is the expansion of professional opportunities for women in the energy sector. During the training stage, there is a growing interest among women in the energy industry, but after graduation, most women become housewives, and trained professionals drop out of the production process. Increased participation of women is a potential source of the increased talent competition in the energy sector in Kazakhstan, especially in the context of the rapidly changing global energy landscape. International research shows that companies investing in women's employment and leadership can reap a range of benefits, including increased shareholder value of capital, improved access to a talented and skilled workforce, greater innovation and team cohesion, and enabling more innovative people to be adopted. and informed decisions at the level of company management.

The participation of women in the energy sector is also an important aspect of the country's leadership, given that energy is a key strategic sector of Kazakhstan and an important part of the country's economic development history since its independence in 1991. Thus, the underrepresentation of women in the energy sector and the associated lost profits and opportunities for business and growth are of broader implications for the country's economic and social development.

Improvement and implementation of the sections of the Roadmap will determine and correct actions aimed at solving the problems of improving the education system and the system of raising awareness and competence in the field of renewable energy.

## **Purpose**

Improving the Roadmap on the development of a system of training, advanced training, and retraining of personnel in the field of development of renewable energy sources.

## Scope of work

1. Analysis of current trends and dynamics of the labor market needs for personnel for working with RES, forecasting the trajectories of professional development of various categories of specialists in RES, taking into account the increase in specialists from women to the energy industry.
2. Development of recommendations for creating new or adjusting existing educational programs for training personnel for the RES industry, taking into account the creation of a gender balance.
3. Analysis of the content of educational information and practical requests from key groups in the Renewable Energy (RE) sector. Preparation of a package of educational and information programs on renewable energy sources for key groups interested in competencies on renewable energy sources.
4. Analysis of the qualified personnel needs by regions, based on the analysis of the territorial and climatic potential of renewable energy sources in the country. Recommendations for the optimal geographical distribution of the proposed programs by region.
5. Development of recommendations on the content of online courses on renewable energy sources to improve the qualifications of employees in the field of renewable energy sources on the job (together with the Renewable Energy Association).

To solve the above tasks, it is necessary to use the data obtained from:

- collection and analysis of trajectories of professional development of various categories of specialists working with renewable energy sources;
- collection and analysis requests from key groups in obtaining competencies in the field of renewable energy.
- collecting information on energy sectors where women are employed, analyzing the possibilities of expanding it in the future.
- analysis of educational programs used in universities for teaching students in the field of RES;

## Expected results

No.	Results	Payment terms	Checked and approved
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1.	<p>Analysis of current trends and dynamics of the labor market needs for personnel for working with RES, forecasting the trajectories of professional development of various categories of specialists in RES, taking into account the increase in specialists from women to the energy industry.</p> <p>Recommendations for creating new or adjusting existing educational programs when training personnel for the RES industry, taking into account the creation of a gender balance.</p>	8 weeks from the date of signing the contract	ICTA and Project Manager
2.	<p>Analysis of the content of educational information and practical requests from renewable energy from key groups.</p> <p>Recommendations on the content of educational and information programs for representatives of key groups.</p> <p>A package of educational and information programs on renewable energy sources for key groups interested in competencies on renewable energy sources.</p>	16 weeks from the date of signing the contract	ICTA and Project Manager
3.	<p>Analysis of the needs for qualified personnel by regions of the country, based on the analysis of the territorial and climatic potential of renewable energy sources in the regions of Kazakhstan. Recommendations for the optimal geographical distribution of the proposed programs by regions of the country</p> <p>Recommendations on the content of online courses on renewable energy sources to improve the qualifications of employees in the field of renewable energy sources on the job</p>	24 weeks from the date of signing the contract	ICTA and Project Manager

**Indispensable conditions:**

When carrying out all types of work that may have to be done in the performance of this consultancy assignment, the contractor must ensure the safe and legal production of the required deliverables (e.g., reports and finished products, excluding the creation of counterfeit products).

It is necessary to ensure compliance with the copyright (and related rights) laws and regulations of the Republic of Kazakhstan.

All rights to products produced, including originals of documents and their copies, can be transferred to any third person by the decision of the client (DREI Project), and such transfer can be carried out directly to the third person and immediately upon completion and acceptance of all work, in accordance with this Terms of Reference.

The UNDP project reserves the right to amend the Terms of Reference (up to a maximum of 20% of the content) but ensuring no change in the general essence of the consultancy assignment and the cost of services under the Agreement.

### **Responsibility and accountability:**

The contractor bears full responsibility for the accuracy and legality of the information provided and for the timely provision of reports.

- Coordinates actions to be carried out with the DREI Project Manager and international CTA.
- Collaborates with the expert team of the DREI Project.
- Ensures unconditional fulfillment of the requirements specified in the contract and Terms of Reference.

**Reports and materials:** must be provided in Russian in electronic form in MS WORD (2003 and above) according to the format adopted by the UNDP; the font used: Times New Roman, 12.

**Duration of work:** September 2021 - February 2022 (50 working days over 6 months)

**Place of work:** home-based

### **Required skills, work experience:**

- Higher technical education (Master's degree, Ph.D., and/or equivalent in applied sciences are encouraged);
- At least 5 years of experience in:
  - preparation of analytical studies in the field of energy, including renewable energy sources;
  - conducting scientific and applied research in the field of energy;
  - organization of scientific work in higher educational institutions, organization of scientific competitions and conferences;
  - educational work in universities;
  - in state expert commissions in the field of energy and higher education;
  - development and implementation of state, international programs in the field of energy;
- Experience in implementing projects with the support of international organizations and government agencies is encouraged;
- Availability of published publications on the development of alternative energy in Kazakhstan;
- A high level of proficiency in the Russian (oral, written) language, knowledge of the Kazakh language is encouraged.

### **Price offer volume and payment schedule:**

%	Stage of work
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30	Result 1
30	Result 2
40	Result 3

OiC GEF Portfolio Manager		
Irina Goryunova	<i>Irina Goryunova</i>	Date: 09-Jul-2021
Project Manager		
Syrym Nurgaliyev	<i>Syrym Nurgaliyev</i>	Date: 08-Jul-2021