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| Programme: | EU4Energy Efficiency and Renewable Energy in Armenian Communities |
| PN | 2018.2062.0-015 |
| Assignment: | Study of the framework conditions, including institutional, legal, and technical capacities for promoting local manufacturers of energy efficient single-point stoves and household boilers working on solid biomass fuel |
| Country: | Armenia |

1. Brief information on the project

The “Management of natural resources and safeguarding of ecosystem services for sustainable rural development in the South Caucasus” (ECOserve) Environment Programme is part of the wider German support in the priority area “Environmental policy, conservation and sustainable use of natural resources in the South Caucasus”. It is commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

The objective of ECOserve is to improve the preconditions for the sustainable and biodiversity-friendly management of natural resources in pastures and grasslands in Armenia, with particular focus on the energy security of the rural population. ECOserve is implemented by GIZ jointly with the partner Ministry of Territorial Administration and Infrastructure, Ministry of Environment and Ministry of Economy of the Republic of Armenia.

EU-cofinanced “EU4Energy Efficiency and Renewable Energy in Armenian Communities” (EU4EE) project is part of ECOserve, commissioned by BMZ and implemented by GIZ. The objective is that communities and households have better access to energy efficiency and sustainable energy solutions, thereby contributing to the improved energy security of the rural population and the conservation of natural resources.

The project mainly focuses on energy-poor communities in Lori, Tavush, Shirak, Gegharkunik and Syunik marzes of Armenia. The local communities and inhabitants will benefit from the project results. The project targets mainly low-income vulnerable households and public/community buildings like kindergartens, health stations, cultural and sports centers, local museums, etc.

2. Context

The objective of EU4EE is that communities and households have better access to energy efficiency and sustainable energy solutions, thereby contributing to the improved energy security of the rural population and the conservation of natural resources. During the recent years GIZ environment programme has worked to promote marketable approaches for more efficient use or substitution of fuelwood or dung as a source of heating energy that addresses the specific benefits of women (e.g. indoor air quality, room temperature, fuelwood procurement legality). Improved energy efficiency (EE) in rural households can significantly reduce the use of fuel (fuelwood, dung, etc.) for heating with consequent reduction of forest degradation and energy poverty of the population. Alternative solid biofuel from renewable biomass also has the potential to replace fuelwood/dung as heating fuel. In the framework of GIZ environment programme during the recent years a number of studies on rural energy demand, supply and efficiency in Armenia have been implemented with particular focus on the aspects related to the use of fuelwood and dung.

In 2020-2021, an expert assessment of the EE and other technical specifications/parameters of selected stoves manufactured by local craftsmen in different regions of Armenia during the recent years and “in demand” by the population was carried out, taking into account the applicable standards as much as possible. The article on stove assessment is available via [this link](#) (see pp. 87-94). A pilot intervention was carried out in selected community clusters in Lori, Shirak and Kotayk marzes of Armenia promoting the three models of stoves with the highest EE rates selected during the assessment and use of biomass briquettes (from straw raw material) produced in the existing briquetting facilities. In total 72 beneficiaries obtained locally produced EE stoves on a cost-sharing basis, the details are available in a [brief leaflet](#).

In 2023-2024, in the framework of the Project “EU4Energy Efficiency and Renewable Energy in Armenian Communities” locally produced single-point stoves and local heating boilers working on solid biomass fuel were assessed and improved in terms of energy efficiency (EE) and other technical specifications based on national and EU standards. The national standards of Armenia related to single-point stoves and boilers working on solid biomass fuel are the voluntary intergovernmental GOST standards. The EU standards are not obligatory for the manufacturers in Armenia.

Two different models of energy efficient single-point stoves were assessed and improved, during 2024 about 450 stoves were produced and disseminated in the target marzes of EU4EE project. Five different models of local heating boilers working on solid biomass fuel and used in the households in different marzes of Armenia were assessed. Out of those, two selected models with the best baseline parameters were improved in terms of energy efficiency and other parameters conforming them as much as possible to the requirements of the acting standards. Detailed schemes for manufacturing as well as user guides were produced for 4 improved models of stoves and boilers, all materials with detailed drawings were provided to the manufacturers. The selected models of boilers are produced in Gegharkunik and Vayots Dzor marzes, the annual demand during the recent years made 30-35 boilers per mode. All expert work materials are available in the project along with the final draft report.

In the framework of this assignment, it is expected that the hired expert will explore the institutional, regulatory, and technical framework of Armenia related to single-point stoves and local household boilers working on solid biomass fuel. In particular the needs should be assessed regarding institutional, regulatory, technical and other capacities for having the concerned locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state, identify the gaps and formulate recommendations for filling in the gaps. Up to 4 local manufacturers should be supported to get state documentation (registration/license/certificate as feasible and applicable) for the products they manufacture.

3. Tasks and terms

GIZ shall hire the contractor for the anticipated contract term from 01 November 2024 to 31 January 2025. The intended duration of the assignment is up to **18** expert days.

The contractor shall provide services in the following assignment scope:

- Explore the institutional, regulatory and technical framework of Armenia related to single-point stoves and local household boilers working on solid biomass fuel (fuelwood, biomass briquettes) with particular focus on the framework for having the above stated locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state. Carry out needs assessment, identify the existing gaps and capacity needs, formulate recommendations for filling in the gaps and capacities, bring the references from the European countries, which can be used as the best applicable examples to consider;

- Formulate further steps and recommendations for local manufacturers and support up to 4 local manufacturers in having the manufactured EE heating devices registered/licensed/certified (as feasible and applicable) by the state;
- Consultations and meetings with the relevant state structures such as the National Body for Standards and Metrology of the RA Ministry of Economy, research institutions and other actors engaged in the field, including international projects and participation with respective expert input in the project related meetings/workshops/discussions on the relevant topics.

The contractor is responsible for the provision of the following services and products:

| Tasks | Activities and Deliverables | Number of days (up to) | To be submitted by |
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| <p>1. Explore the institutional, regulatory and technical framework of Armenia related to single-point stoves and local household boilers working on solid biomass fuel (fuelwood, biomass briquettes) with particular focus on the framework for having the above stated locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state; carry out needs assessment, identify the existing gaps in the sector, formulate draft recommendations for filling in the gaps, bring references from the European countries, which can be used as the best applicable examples to consider.</p> | <p>Activities:</p> <p>1. Conduct desk study to identify and review the existing studies/reports related to the institutional, regulatory and technical framework of Armenia related to single-point stoves and local household boilers working on solid biomass fuel (fuelwood, biomass briquettes).</p> <p>2. Based on the results of Activity 1 above, review the institutional, regulatory, and technical framework of Armenia related to single-point stoves and local household boilers working on solid biomass fuel (fuelwood, biomass briquettes) including the developments and the current state of existing institutional structure, legal/regulatory provisions and technical capacities of relevant structures.</p> <p>3. Carry out needs assessment of the framework for having the concerned heating devices registered/licensed/certified (as feasible and applicable) by the state, identify the main existing gaps and capacity needs for certification of the concerned devices, and develop draft recommendations (roadmap) for filling in those gaps with references to the EU countries/EU requirements, which can be used as the best applicable examples to consider;</p> <p>4. Summarize the review with particular focus on the framework for having the stated locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state; this shall include the actors with mandates (in particular the National Body for Standards and Metrology of the RA Ministry of Economy),</p> | 5 | November 25, 2024 |

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| | <p>procedures with steps and timeframe, required documents, the feasibility of passing the procedures and any other requirements for having the stated locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state.</p> <p>Deliverables: short intermediate draft report in Armenian language (max. 10 pages plus annexes) including the list of existing studies/reports on the topic, the results of implemented desk study, review and needs assessment including related institutional structure, lists of legal documents, relevant procedures applicable for local manufacturers, technical capacities of relevant institutions to ensure the procedures, identified gaps and capacity needs for certification of the concerned devices, draft recommendations (roadmap) to fill in those gaps including the references to the European countries/EU requirements, which can be used as the best applicable examples to consider.</p> | | |
| <p>2. Formulate further steps and recommendations for local manufacturers and support them in having the manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state.</p> | <p>Activities:</p> <p>1. Develop an easily understandable summary guide for local manufacturers with clear steps and all required templates/documentation, which are needed for having the locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state;</p> <p>2. Support up to 4 local manufacturers (who produce heating devices, which have been assessed in terms of different technical parameters with GIZ support) in guiding them in the needed steps and procedures; support the manufacturers in preparing the required packages of documentations for submission to the relevant state bodies to have the manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state, this includes the revision and adjustment of the packages based on the possible feedback and requests by the state bodies; the contacts of</p> | <p>5</p> | <p>December 2, 2024</p> |

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| | <p>up to 4 manufacturers will be provided by GIZ, most probably they will be from from Gegharkunik, Vayots Dzor, Lori marz, and in the marzes nearby Yerevan.</p> <p>Deliverables: Intermediate report in the Armenian language (max. 10 pages plus annexes) including the summary guide for local manufacturers with clear steps and all required templates/documentation, which are needed for having the locally manufactured heating devices registered/licensed/certified (as feasible and applicable) by the state and up to 5 packages of required documentations ready for submitting to the relevant state body/ies.</p> | | |
| <p>3. Finalize the needs assessment and recommendations (roadmap) for certification of single-point stoves and local household boilers working on solid biomass fuel (fuelwood, biomass briquettes) including the references from the European countries.</p> | <p>Activities:</p> <p>1. Based on the results of Tasks 1 and 2 as well as on further consultations with relevant state bodies, other actors with mandates and the feedback by GIZ, finalize the needs assessment and recommendations (roadmap) for certification of the concerned heating devices.</p> <p>Deliverables: Intermediate report in the Armenian language (max. 10 pages plus annexes) including the needs assessment of related institutional structure, lists of legal documents, relevant procedures applicable for local manufacturers, technical capacities of relevant institutions to ensure the procedures, identified gaps and capacity needs for certification of the concerned devices, recommendations (roadmap) to fill in those gaps with the references to the European countries/EU requirements, which can be used as the best applicable examples to consider.</p> | 2 | January 20, 2025 |
| <p>4. Support the local manufacturers to obtain the state documents for heating devices (registration/license/certificate as feasible and applicable)</p> | <p>Activities:</p> <p>1. Follow up the processes after submission of up to 5 packages of required documentations</p> <p>2. Support respective local manufacturers to review/supplement the submitted packages based on the feedback and requests by relevant state bodies</p> | 1 | During the contract timeframe |

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| | Deliverables: Up to 5 packages of submitted documents updated and complemented based on the feedback from the state bodies | | |
| 5. Consultations and meetings with the relevant state structures, research institutions and other actors engaged in the field, including international projects and participation in the project related meetings/workshops/discussions on the relevant topics. | <p>Activities:</p> <p>1. Meet and consult with relevant state structures (including the National Body for Standards and Metrology of the RA Ministry of Economy), institutions, international projects and other actors with mandates and roles in the field for needs assessment, identification of gaps and information as well as clarifications to fulfil the tasks of the assignment.</p> <p>2. Participate and make expert input (presentation, Q&A, etc.) in related meetings/workshops/ discussions on the relevant topics organized by the project.</p> <p>Deliverables:</p> <p>Participation and expert input during up to 4 events</p> | 3 | During the contract timeframe |
| 6. Final report | <p>Activities:</p> <p>1. Summarize the findings from the contract tasks in a final report</p> <p>Deliverables:</p> <p>1. Final report incorporating the main results of the implemented tasks with the main findings, conclusions and recommendations on how to fill in the gaps and needs in the sector (max. 10 pages plus annexes including developed guides, templates, etc)</p> <p>2. Summary final report with the main findings and recommendations from the implementation of the assignment (max. 10 pages).</p> | 2 | January 24, 2025 |

4. Steering and Reporting

The Consultant shall report to GIZ. All the activities and technical issues should be closely coordinated and agreed upon with GIZ team beforehand.

GIZ shall provide the Consultant with all the available information and materials in relevant areas, necessary background information and other technical information upon request.

The Consultant shall be responsible for the planning of assignment-related meetings and the timely delivery of the agreed deliverables.

All reports and technical deliverables shall be prepared in the official EU4EE reporting format and submitted to the GIZ electronically in the Armenian language.

5. Qualification requirements

- Higher degree in law, energy, environment or a related field, PhD degree will be considered as an asset.
- At least 5 years of work experience/research in the field of national legal/regulatory frameworks related to energy/heating devices. Knowledge and experience in the field of single-point stoves and household boilers working on solid biomass fuel would be an asset.
- At least 5 years of professional experience in Armenia in the relevant field and knowledge of the situation related to household heating in rural Armenia with relevant track record. Experience in the relevant field in EU countries would be an asset.
- Excellent analytical, research, advisory and report-developing skills;
- Excellent interpersonal and communications skills.
- Fluency in Armenian (comprehension, speaking and writing skills), knowledge of English will be considered an asset.

6. Technical offer and price offer submission requirements

Interested candidate expert should submit a CV not exceeding 3 pages with demonstrating relevant capacities and experience, as well as up to 3 relevant reports from the previously implemented expert works related to the required qualifications and assignment tasks.

Interested candidate expert should submit a price offer including the number of expert days and the daily rate as well as the travel needs (including transportation, accommodation, etc.) – as per specifications in the table below. The number of days and the budget amount shall be agreed upon in the contract as ‘up to’ amounts’. The contracted consultant has no claim to fully exhaust the budget for expert days and other expenses.

| Fee days | Number of experts | Number of days per expert | Comments |
|------------------------|--------------------------|--|-----------------|
| • Implementation | 1 | up to 18 | days |
| Travel expenses | Number of experts | Number of days/nights per experts | Comments |
| • Overnight allowance | 1 | up to 2 | days |
| • Travel costs | 1 | up to 3 | days |