



TERMS OF REFERENCE

Job Title:	National expert for energy efficiency in the residential and public sector
Duty Station:	Chisinau, Republic of Moldova
Project reference	Accelerating a Just Energy Transition Portfolio Programme, Greening the Future Project
Contract type:	Individual Contract (IC)
Duration of assignment:	Up to 155 working days during March 2025 – December 2025

I. Background:

In light of the regional energy crisis and the significant impact of the war in Ukraine on the regional and national energy market, energy resource supply, and price fluctuations, a series of intervention and restructuring measures are required in the energy sector of the Republic of Moldova to align with new realities and to establish new sustainable operating and assurance mechanisms, with maximum efficiency in procurement, supply, and customer service of electricity. Moldova's efforts to enhancing energy security and facilitating the energy transition is fortified by its ambition to join the European Union as a "candidate" country. In this capacity, the country is committed to aligning its policies with the EU's energy and climate acquis and diligently fulfilling the diverse obligations and criteria established by the European Union.

The energy sector reforms in Moldova, supported by its commitment to align with European Union standards, are guided by the transposition of the EU's Third Energy Package into national legislation. This has led to the adoption of key laws, including the Electric Energy Law No. 107/2016, the Natural Gas Law No. 108/2016, and the Energy Law No. 174/2017. These legislative measures aim to ensure a more competitive energy market. However, despite these reforms, challenges remain in fully aligning with EU directives.

Nationally, the country faces the challenging task of modernizing its energy infrastructure to reduce dependence on imported energy and to mitigate the effects of the current energy crisis. Strategic goals include a significant reduction in greenhouse gas emissions, with Moldova's commitment to unconditionally reduce its national GHG emissions by 70% by 2030, including emissions and absorptions from land use, land use change, and forestry. In addition, Moldova aims to increase the share of renewable energy in final energy consumption to 27% by 2030, including 30% from RES in electricity, and to improve energy efficiency by setting a target of 2.8% of final energy consumption by 2030.

The challenge of the country's development is further complicated by its outdated and inefficient energy infrastructure, which not only increases vulnerability to energy supply disruptions but also hinders economic growth. The implementation of smart metering technologies, as part of a broader initiative to modernize and digitalize the energy network, represents a critical component of Moldova's strategy to address these challenges and improve energy efficiency in the country. The country's metering infrastructure includes 1.4 million static electricity meters, of which less than 20,000 are smart meters and about 350,000 are basic electronic meters. Most electricity meter readings are still performed manually, indicating a significant area for the implementation of this technology.

In response to these challenges, the Government, in collaboration with the UNDP, has implemented various interventions. One key milestone in addressing energy security is the establishment of the Energy Vulnerability Reduction Fund (EVRF). This fund aims to mitigate the impact of increased energy tariffs on energy-poor and vulnerable households, reducing their vulnerability to energy and income poverty. In addition, efforts have been made to address the energy crisis comprehensively. These efforts include the development of legislative and regulatory frameworks, capacity building of key energy stakeholders, awareness-raising campaigns, crisis communication strategies, and practical pilot initiatives. These interventions aim to tackle both the immediate challenges and the underlying causes of the energy crisis, setting the stage for a sustainable and equitable

future.

Recognizing the importance of a just energy transition in addressing the root causes of the energy crisis and ensuring a sustainable future, the programme “**Accelerating a Just Energy Transition in the Republic of Moldova**” has emerged. The programme's interventions have been carefully co-designed with energy stakeholders to ensure their relevance and effectiveness. It takes a systemic approach, considering the interconnections and interdependencies among various components of the energy system.

Key area of interventions that the portfolio focuses on:

- Accelerate energy diversification and efficiency;
- Decarbonizing industries and economic sectors;
- Foster sustainable consumption patterns;
- Strengthen inclusive energy governance;
- Addressing energy vulnerability and promoting resilience.

Specifically, through funding from the Government of Italy, the JET Programme encompasses targeted **short-to medium-term energy efficiency interventions** focusing on both the residential sector and critical public infrastructure.

Under these measures, up to 35,000 households are receiving smart meters, enabling real-time monitoring of electricity consumption and the development of pilot programs to reduce peak demand and establish differentiated or Time of Use tariffs. This smart metering initiative is intended to enhance household-level energy management and also to inform broader policy and grid requirements for transitioning towards a smart grid.

Alongside these household-focused initiatives, the JET Programme is greening critical public infrastructure by integrating photovoltaic (PV) systems of up to 200kW into select facilities, particularly hospitals. This approach aims to reduce reliance on non-renewable energy sources, cut operational costs, and redirect potential savings into improved public services, such as patient care.

Additionally, the JET Programme provides retrofitting support in residential buildings by bolstering the capacity of at least 20 Homeowners Associations (HoAs) to implement energy-saving measures—ranging from insulation and window replacements to heating distribution upgrades and rooftop PV installations with funds from REEF/Residential Energy efficiency Fund managed by Government.

Collectively, these interventions reinforce Moldova’s progress toward a just energy transition, ensuring that the country advances its energy security and European integration commitments while fostering resilience and inclusivity in its energy sector.

II. Objective and key responsibilities of the consultancy:

The primary objective of this consultancy is to strengthen the Government of Moldova’s capacity to advance a just energy transition by enhancing energy efficiency in the residential sector and critical public infrastructure, as well as piloting smart metering solutions to optimize energy consumption and demand-side management.

The National Consultant will provide technical expertise for the Programme as follows:

- 1. Strategies to identify target beneficiaries for support under JET Programme in line with donor agreement and work plan**, i.e. at least 20 Homeowners Associations (HoAs), at least 5 critical public infrastructure (hospitals) and energy system operators using quantitative energy performance data, and socio-economic vulnerability criteria to ensure targeted and impactful energy efficiency improvements and Renewable Energy solutions under the Programme in close cooperation with the Ministry of Energy, National Center for Sustainable Energy (NCSE) and Ministry of Health including system operator.
- 2. Deliver institutional capacity-building and information initiatives for Program targeted beneficiaries** in close cooperation with the relevant Governmental institutions, tailored to HoAs, hospital administrators, and technical staff, equipping them with practical knowledge on:

- Targeted Homeowners Associations (HoAs) Administrators and apartments owners – in close cooperation with NCSE staff, deliver guidance on accessing the Residential Energy Efficiency Fund (managed by NCSE), including application procedures, required documentation, and the step-by-step process for implementing energy efficiency upgrades such as building insulation, window replacements, efficient heating systems, and LED retrofits and other measures in line with Fund’s operational manual and legislation in place.
 - Critical infrastructure (Hospitals) Administrators & relevant staff from health sector/institution – deliver guidance and technical expertise on renewable energy integration, with a focus on solar PV feasibility, regulatory approvals, procurement processes, and grid interconnection to improve energy autonomy and reduce operational costs.
 - Targeted Smart Metering beneficiaries from residential and public sectors – provide technical guidance and expertise to the electricity system operators and Ministry of Energy and Programme on consumer outreach strategies for effectively engaging electricity consumers who would benefit most from smart metering deployment, such as:
 - Consumers with renewable energy systems (RES) – in close cooperation with NCSE and Programme engineer, provide technical expertise to solar PV owners, prosumers in understanding bidirectional metering, net billing schemes, and self-consumption optimization to maximize efficiency using also Smart Metering infrastructure.
 - Consumers benefiting from Smart Metering & Time-of-Use Tariffs – in close cooperation with electricity system operators, Ministry of Energy and Programme engineer, provide strategies to identify and engage high-consumption residential and institutional electricity consumers who could optimize energy costs through demand-side response, load shifting strategies, and peak-hour avoidance. In close cooperation with Programme Communication staff, develop targeted communication and educational materials to increase consumer awareness of the benefits of hourly consumption metering, accurate billing, and improved energy management, addressing common misconceptions and concerns around smart metering initiative.
- 3. Provide technical expertise to the Programme in implementing required technical/institutional support for targeted beneficiaries such as:**
- a. Energy audits and technical designs are planned to be elaborated under the Programme for at least 20 Homeowners Associations to assess baseline energy performance and potential savings and designs for implementation of energy efficiency retrofits, ensuring compliance with national energy performance standards and Residential Energy Efficiency Fund provisions.
 - b. Renewable energy system is planned to be installed under the Programme for 1 hospital, and energy audits will be conducted for priority public buildings in the health sector, including grid-tied PV systems, battery storage solutions, and hybrid energy systems for critical infrastructure.
- 4. Provide expertise to the Programme and relevant beneficiaries in assessing the socio-economic and cost-effectiveness of implemented measures for targeted beneficiaries (households and public institutions):**
- a. The National Consultant will track and evaluate all interventions, focusing on energy savings, cost-benefit outcomes, and socio-economic improvements for Homeowners Associations, hospitals, and Smart Metering beneficiaries. This includes gathering and analyzing baseline and post-implementation data, such as energy consumption, financial returns, and beneficiaries feedback to quantify effectiveness and guide improvements under the Programme.
 - b. The consultant will document the key findings that will be compiled into structured reports for the Programme, donors, and Government highlighting progress, challenges, and best practices. These evidence-based insights will support data-driven decisions, ensuring alignment with national and EU energy policy objectives while guiding the scale-up and replication of successful measures.

In delivering these tasks, the Consultant must ensure compliance with UNDP and national standards, maintain transparent communication with all stakeholders, and address any emerging challenges proactively. The scope

of work may be adapted based on evolving project priorities or donor requirements, subject to mutual agreement with UNDP Moldova and relevant partners.

III. Expected Deliverables:

ITEM NO.	TASKS/DELIVERABLES	Estimate Workdays	Tentative timeframe
I.	<p>Key responsibility: Establish selection criteria and conduct assessments to identify 20 beneficiary Homeowners Associations (HoAs) in coordination with CNED and Ministry of Energy to benefit from support in elaboration of energy audits and/or technical designs under JET Programme.</p> <p>Deliverable 1.1: Pre-selection report on first 5 eligible HoAs including their General Assembly Minutes accepting the intervention for board endorsement.</p> <p>Deliverable 1.2: Pre-selection report on following 10 eligible HoAs including their General Assembly Minutes accepting the intervention for board endorsement.</p> <p>Deliverable 1.3: Pre-selection report on remaining 5 eligible HoAs including their General Assembly Minutes accepting the intervention for board endorsement;</p>	<p>Deliverable 1.1 Up to 10 working days</p> <p>Deliverable 1.2 Up to 15 working days</p> <p>Deliverable 1.3 Up to 10 working days</p>	<p>by April 2025</p> <p>by April 2025</p> <p>by April 2025</p>
II.	<p>Key responsibility: Organize capacity-building & information sessions for targeted HoAs on Programme support and the Residential Energy Efficiency Fund, in close cooperation with the National Center for Sustainable Energy.</p> <p>Deliverable 2.1: Conduct a needs assessment exercise for HoAs from 5 cities of Moldova to identify the specific needs on capacity building and skills development for accessing financial support, including the Residential Energy Efficiency Fund Program implemented by National Center for Sustainable Energy. Report has to include information on administrative and functional barriers, financial challenges and comprehensive recommendation for separate HoA's organizational forms. To be organized discussions with at least 7 stakeholders, including HoAs, public authorities, CNED.</p> <p>Deliverable 2.2: Conduct series of sessions (10 out of 15), documenting agendas, minutes, participant feedback, and any follow-up actions.</p> <p>Deliverable 2.3: Conduct series of sessions (remaining 5), documenting agendas, minutes, participant feedback, and any follow-up actions.</p>	<p>Deliverable 2.1 Up to 15 working days</p> <p>Deliverable 2.2 Up to 20 working days</p> <p>Deliverable 2.3 Up to 10 working days</p>	<p>By April 2025</p> <p>By July 2025</p> <p>By November 2025</p>

ITEM NO.	TASKS/DELIVERABLES	Estimate Workdays	Tentative timeframe
III.	<p>Key Responsibility: Establish selection criteria and conduct assessments to identify the 1 beneficiary critical public infrastructure (hospitals) for PV system and other 5 for energy audits, in coordination with CNED, Ministry of Health, and Ministry of Energy.</p> <p>Deliverable 3.1: Pre-selection report listing eligible hospitals, including rationale and criteria and complemented with validation/confirmation by national stakeholders.</p>	Deliverable 3.1 Up to 10 working days	By March 2025
IV.	<p>Key Responsibility: Organize capacity-building and information sessions (5 total) with hospital administrators/staff on the benefits of PV systems, regulatory approvals, and expected outcomes.</p> <p>Deliverable 4.1: Summary reports (5 in total) evaluating session effectiveness and outlining next steps for hospital-level interventions including Agendas, minutes, and participant feedback for each of the 5 expected sessions (2 w.d. per report of delivered session).</p>	Deliverable 4.1 Up to 10 working days	By November 2025
V.	<p>Key responsibility: Provide input to the procurement processes for elaboration of technical designs and/or energy audits for selected beneficiary HoAs and Hospitals as a follow up to the selection process:</p> <p>Deliverables 5.1: 2 standard drafts of Terms of Reference (ToRs) for energy audits and technical designs coordinated by National Center for Sustainable Energy and 2 technical evaluation inputs for procurement cases.</p> <p>Deliverables 5.2: 2 standard drafts of Terms of Reference (ToRs) for PV System installation and energy audits with Hospitals (end-beneficiaries) and National Center for Sustainable Energy and 2 technical evaluation inputs for procurement cases.</p>	Deliverable 5.1 Up to 5 working days Deliverable 5.2 Up to 5 working days	By May 2025 By May 2025
VI.	<p>Key Responsibility: Organize capacity-building and information sessions (10 total) on saving electricity and dynamic tariff structures for pilot smart metering beneficiaries (residential, prosumers and public).</p> <p>Deliverable 6.1: Session agendas, training materials, and minutes for all 10 sessions (2 w.d. per session report).</p>	Deliverable 6.1 Up to 20 working days	By November 2025
VII.	<p>Key Responsibility: Collect and analyze data for the Monitoring, Evaluation (M&E), and reporting process to the donor on capacity-building activities and technical support provided to the targeted beneficiaries under the scope of this ToR.</p>		

ITEM NO.	TASKS/DELIVERABLES	Estimate Workdays	Tentative timeframe
	<p>Deliverable 7.1: At scheduled intervals (e.g., monthly), provide 10 interim data updates (or partial input reports) to the Programme that highlight progress and offer an overview of social and energy impacts of the interventions. <i>These updates should include data-based interim results, behavioural shifts, and any emerging lessons for potential course corrections, covering energy savings, cost-benefit outcomes, and social impact for all targeted beneficiaries (HoAs, hospitals, and smart metering users).</i> (2 w.d. per detailed interim input. Payments shall be done monthly based on reports submitted).</p> <p>Deliverable 7.2: Final inputs to donor report, detailing overall impacts and cost-effectiveness and social impact of the interventions targeting HoAs, public institutions (hospitals) and electricity consumers piloting Smart Metering.</p>	<p>Deliverable 7.1 Up to 20 working days</p> <p>Deliverable 7.2 Up to 5 working days</p>	<p>By December 2025</p> <p>By December 2025</p>

IV. Organizational Setting:

The incumbent will work under the direct supervision of the JET Programme Analyst and Portfolio Programme Manager of UNDP Moldova, in close collaboration with the Ministry of Energy and National Center for Sustainable Energy. She/he will be part of the team supervised by the EECC Cluster Lead of UNDP Moldova.

V. Financial arrangements:

The financial proposal shall specify a total **lump sum** amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in instalments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. To assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including the daily fee, taxes, transportation and number of anticipated working days).

VI. Confidentiality

Materials provided to the consultant and all proceedings within the consultancy contract shall be regarded as confidential, both during and after the consultancy. Violation of confidentiality requirements may result in immediate termination of contract.

VII. Qualifications and skills required:

I. Academic and other Professional Qualifications:

- University degree or above in Energy Management, Public Administration, Economic or another relevant field.
- Certified expert in energy management and/or audit, at least one of the below (copy of certificate to be included in application documents):
 - Certified Energy Auditor (Law No. 139/2018 on Energy Efficiency, National Centre for Sustainable Energy Register)
 - Certified Building Energy Performance Assessor (Law No. 128/2014 on Energy Performance of Buildings, Ministry of Infrastructure and Regional Development Register)
 - Renewable Energy Specialist (Law No. 10/2016 on Renewable Energy, Institutional Certification)

- Certified Energy Manager (Professional Certification, National Centre for Sustainable Energy Register)
- Licensed Energy Systems Installer (Government Decision No. 160/2011, State Register of Licensed Activities).

II. Years and sphere of experience:

- At least 5 years of demonstrated professional experience in energy efficiency and management in the Republic of Moldova.
- At least 3 relevant assignments regarding energy-related initiatives within local or central public authorities, showcasing the ability to plan, allocate, and oversee financial resources for energy efficiency, renewable energy, or related infrastructure projects.
- Previous experience in development assistance or related work for a donor organization, development partners, UN Agencies is an advantage.

III. Competencies:

- Demonstrated knowledge of the energy sector legal framework and practices in R. Moldova.
- Solid understanding of and ability to apply research tools and techniques, including the ability to analyse and use financial and socio-economic data demonstrated via previous assignments.
- Proven ability to organize and prioritize tasks, draft structured and clear documents, and manage time effectively under pressure.
- Knowledge of Romanian, English and Russian effectively for the requirements of the assignment
- Computer literacy and ability to effectively use office technology equipment, IT tools.

The UNDP Moldova is committed to workforce diversity. Women, persons with disabilities, Roma and other ethnic or religious minorities, persons living with HIV, as well as refugees and other noncitizens legally entitled to work in the Republic of Moldova, are particularly encouraged to apply.

VIII. Documents to Be Included When Submitting the Proposals

Interested individual consultants must submit the following documents/ information to demonstrate their qualifications:

- Offeror's letter to UNDP confirming interest and availability for the individual contractor (IC) assignment, incorporating financial proposal in Annex 2 (in USD, specifying a total requested amount per working day, including all related costs, e.g., fees, phone calls etc.).
- Proposal (Motivation Letter): explaining why they are the most suitable for the work including previous similar or relevant experience in Projects (please provide brief information on each of the above qualifications, item by item);
- CV with at least 3 references.
- Copy of professional qualification certificate/s

Important notice: The applicants who have the statute of Government Official / Public Servant prior to appointment will be asked to submit the following documentation:

- a no-objection letter in respect of the applicant received from the Government, and
- the applicant is certified in writing by the Government to be on official leave without pay for the entire duration of the Individual Contract.

IX. Evaluation

Initially, individual consultants will be short-listed based on the following qualification criteria:

- a. Citizen of the Republic of Moldova;
- b. University degree or above in Energy Management, Public Administration, Economic or another relevant

field;

c. At least 5 years of professional experience in energy efficiency and management in the Republic of Moldova.

d. At least 3 relevant assignments regarding energy-related initiatives within local or central public authorities, showcasing the ability to plan, allocate, and oversee financial resources for energy efficiency, renewable energy, or related infrastructure projects.

e. Certified expert in energy management and/or audit, at least one certification

The short-listed individual consultants will be further evaluated based on the following methodology.

Cumulative analysis

The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as:

a) responsive/ compliant/ acceptable, and

b) having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

* Technical Criteria weight – 60% (300 pts).

* Financial Criteria weight – 40% (200 pts).

Only candidates obtaining a minimum of 210 points would be considered for the Financial Evaluation.

Criteria	Scoring	Maximum Points Obtainable
Technical		
University degree or above in Energy Management, Public Administration, Economic or another relevant field	Bachelor's Degree – 15 pts. Master's Degree – 25 pts.	25
Certified expert in energy management and/or audit, at least one of the following: Certified Energy Auditor, Certified Building Energy Performance Assessor, Renewable Energy Specialist, Certified Energy Manager, Licensed Energy Systems Installer	One certification – 25 pts., each additional certification – 5 pts, up to max. 35 pts	35
Previous experience in development assistance or related work for a donor organization, development partners, UN Agencies is an advantage	Each project – 5 pts, up to max. 25 pts	25
At least 5 years of professional experience in energy efficiency and management in the Republic of Moldova.	5 years – 20 pts., each additional year – 5 pts., up to max. 35 pts;	35
At least 3 relevant assignments regarding energy-related initiatives within local or central public authorities, showcasing the ability to plan, allocate, and oversee financial resources for energy efficiency, renewable energy, or related infrastructure projects.	At least 3 assignments / projects – 15 pts; for each additional assignment / project – 10 pts; up to max. 45 pts;	45
Subtotal desk review Scoring – 165 pts.		
Interview (demonstrated technical knowledge and experience in similar assignments, as well as previous working experience in development cooperation field within international organizations; interpersonal skills – organizational, analytical skills; initiative; resourcefulness) Only the first 5 applicants that have accumulated the highest technical score shall be invited to the interview.		
Solid understanding of and ability to apply research tools and techniques, including the ability to analyse and	limited – up to 10 pts, satisfactory – up to 20 pts,	35

use financial and socio-economic data demonstrated by previous assignment.	extensive – up to 35 pts	
Demonstrated knowledge of the energy sector legal framework and practices in R. Moldova.	limited – up to 10 pts, satisfactory – up to 20 pts, extensive – up to 30 pts.	30
Proven ability to organize and prioritize tasks, draft structured and clear documents, and manage time effectively under pressure.	limited – up to 10 pts, satisfactory – up to 20 pts, extensive – up to 35 pts	35
Strong ability to use Romanian, English and Russian effectively for the requirements of the assignment	Romanian – 10 pts. English – 10 pts, Russian – 5 pts.	25
Belonging to the group(s) under-represented in the UN Moldova and/or the area of assignment*	(no – 0 pts., to one group – 5 pts., to two or more groups – 10 pts)	10
Subtotal Interview Scoring – 135 pts.		
Maximum Total Technical Scoring		300
Financial		
Evaluation of submitted financial offers will be done based on the following formula: $S = F_{min} / F * 200$ S – score received on financial evaluation; F_{min} – the lowest financial offer out of all the submitted offers qualified over the technical evaluation round; F – financial offer under consideration		200

* *Under-represented groups in UN Moldova are persons with disabilities, LGBTI, ethnic and linguistic minorities, especially ethnic Gagauzians, Bulgarians, Roma, Jews, people of African descent, people living with HIV, religious minorities, especially Muslim women, refugees, and other non-citizens*

Winning candidate

The winning candidate will be the candidate who has accumulated the highest aggregated score (technical scoring + financial scoring)