

SOEs Management Assistance Reform and Transformation (SMART) Programme TC Project UKRAINE: Rapid Energy Security and Transparency Support

TERMS OF REFERENCE Activity 1: Rapid Energy Security Support

Final version (v4), late July 2024.

A. BACKGROUND

Since the Russian invasion in 2022, Ukraine's energy sector has faced severe disruptions. Recent intensified attacks in March, April, and May 2024 have shifted from their previous focus on transmission assets and targeted generation, resulting in the destruction or severe damage of two-thirds of Ukraine's balancing power capacities, which represent 60% of available generation capacity. About 80% of Ukraine's thermal and hydropower capacity has been hit¹, notably Trypilska TPP near Kyiv, damaged beyond repair, and Zaporizhzhia Dnipro HPP, which lost a third of its generation capacity, compromising supply reliability and system flexibility². The attacks have forced authorities to impose rolling blackouts in many regions, with the full impact yet to be revealed by future high-demand periods, that is, peak summer and autumn-winter 2024-2025.

This situation highlights the urgent need to enhance energy security with rapidly deployable solutions and rebuild power generation and transmission assets. The decentralization of energy assets could make the grid more resilient and harder to target. Additionally, balancing generation capacities must be constructed urgently, notably to support the development of renewables.

For energy security-enhancing improvements to materialize, proactive energy planning and measures to rapidly unlock investments – including from the private sector – are crucial and require new approaches. Thus far, IFIs and donors have focused on funding public energy utilities, notably through liquidity financing. As SOEs are currently busy with restoring damaged assets and lacking resources to launch new projects or new comprehensive energy security strategies in parallel³, international development partners now need to identify, support, and help launch new approaches able to tangibly increase energy security and energy market transparency and integrity and enable sector recovery in Ukraine in the nearest term. Additionally, Ukraine's strategic objectives in the energy sector in 2024-2027 explicitly include the critical objectives of the decentralization⁴ and decarbonization of the domestic energy sector and its integration into the wider EU energy market.

To address some of the urgent challenges, since late May 2024, the European Bank for Reconstruction and Development (the "EBRD") has been assisting the Ministry of Energy of Ukraine ("the Ministry") with the establishment of a Rapid Response Unit (the "RRU") within the Ministry, the creation of which was mandated by the Prime Minister of Ukraine on 9 May 2024. Established under the Ukraine Reforms Architecture programme, the RRU is composed of up to 10 experts and tasked with coordinating efforts to analyse the current state of the energy system, identify priority actions for

⁴ As of late June 2024, the Ministry of Energy was working on the finalization of a Strategy on Development of Distributed Generation and its Action Plan for 2024-2026.



¹ "Thermal and hydropower facilities as well as power transmission systems bore the brunt of the attacks, resulting in the loss of about 80% of Ukraine's thermal power generation capacity and increasing reliance on its three nuclear power plants, which produce about 50% of the country's electricity." – Reuters (2024), *Ukraine plans record power imports after infrastructure damage*, 13 May. Link.

² BBC (2024), Russia ramps up attacks on Ukraine's power plants, 9 May. Link.

³ Atlantic Council (2024), A decentralized power grid can help Ukraine survive Russian bombardment, 24 April. Link.

repair and protection of critical system components, and facilitate the procurement of equipment, in close collaboration and coordination with energy actors in Ukraine and international partners.

Additionally, on 13 June 2024, the Minister of Energy of Ukraine, ordered the creation of a Working Group to coordinate cooperation with international partners, particularly for the rapid restoration of power generating capacities and the readying of the energy system for autumn-winter 2024-2025. This Working Group is divided into five thematic subgroups (the "subgroups") respectively focusing on: (1) the protection of energy infrastructure facilities; (2) the repair and restoration of energy infrastructure facilities; (3) the development of distributed generation; (4) ensuring backup power and generators sources; and (5) support for sustainable heat supply.

In the wake of the creation of the Working Group, the Ministry has requested rapid assistance from the EBRD to support the analytical work and implementation capacity of the different subgroups to deliver on urgent energy system recovery and resilience objectives.

To answer this call by Ukrainian energy sector institutions, the EBRD is launching a targeted technical cooperation ("TC") project titled "Ukraine: Rapid Energy Security and Transparency Support". The TC is to be linked to the EBRD's Ukrenergo Resilience Support transaction (OPID 55539), a new financing package for Ukrenergo that comprises (1) a sovereign guaranteed loan for the reconstruction of selected substations in Ukraine and (2) an investment grant for procurement of autotransformer reserve inventory to enhance the resilience of the power transmission system under military attacks. This OPID 55539 transaction is under the Resilience and Livelihoods Framework.

The present terms of reference describe Activity 1 (the "Assignment") of the TC.

B. OBJECTIVES

The primary goal of this Assignment is to bolster the efforts of the Ministry of Energy, its subgroups, and the RRU in key areas:

- Providing expertise to enhance the analytical and strategy implementation capabilities of up five Ministry subgroups, as well as deliver on-demand technical support to the RRU.
- Providing expertise to support the Ministry teams' analysis of energy system needs, and more
 particularly of opportunities/project proposals in the energy sector received by the Ministry and
 the RRU from donors and other stakeholders particularly in the context of the energy system's
 urgent recovery and preparation for autumn-winter 2024-2025.
- Providing expertise to support the assessment of the energy sector needs and strategies of the
 different Ukrainian regions (oblasts). This includes analyses of how these needs and regional
 strategies may impact the energy system on a national scale.

In its execution, this Assignment, will prioritize flexibility and speed to adaptively meet the Ministry's evolving demand for specialized expertise across its energy sector response priorities.

To deliver on the Assignment, the EBRD will hire a technical adviser with expertise in power systems, energy economics, and finance, and an up-to-date knowledge of the Ukrainian energy sector (the "Consultant").

The Assignment is aligned with the strategic crisis response vision developed by SIG Energy Banking in early 2024, and with EBRD's parallel efforts to support the deployment of a Rapid Response Unit under the Ministry of Energy of Ukraine. **Expected outcomes** include improved energy security in the country and keeping Ukraine on track with EU alignment commitments.

C. SCOPE OF WORK

Task 1 - Analytical Support and Reporting

The Consultant will provide comprehensive and continuous analytical support and reporting services to up to five subgroups under the Ministry's guidance – and deliver on-demand technical support to the RRU. This support will focus on, but may not be limited to, the following items.

- **Preparation of Analytical Inputs:** as required, the Consultant will develop detailed reports and other energy sector expertise/analytical materials upon request from the subgroups and/or the RRU. Some indicative strategic priorities and needs of the subgroups may be defined as:
 - Protection of Energy Infrastructure: analysis of protection needs of energy facilities and infrastructure in Ukraine, including sensitive/confidential communications with donors.
 - Repair and Restoration of Energy Infrastructure: analysis of damage and needs for repair and restoration of energy infrastructure in Ukraine, and identification of opportunities for addressing these needs.
 - Distributed Generation Development: analysis of current opportunities for distributed generation development, including review of the proposals from donors/stakeholders and requests submitted by companies, and progress on project prioritization.
 - Backup Power/Generator Solutions: collection and updating of data on the needs for generators and critical infrastructure throughout Ukraine.
 - Sustainable Heat Supply: assessment of co-generation projects from municipalities and donors, aiding in the facilitation and part-electricity supply considerations.
- Strategy Implementation Support: as required, the Consultant will support the subgroups and the RRU with the effective translation and implementation of strategic decisions into actionable tasks, to deliver on the Ministry's priorities and operational needs for energy sector recovery.

Task 2 – Sector-Wide Analysis and Strategic Support

The Consultant will provide technical expertise and analytical support to help the relevant Ministry teams, notably the RRU, assess, prioritize and strategize for energy sector needs in Ukraine. To that end, it will deliver support on the following tasks:

- **Opportunity Analysis:** as required, the Consultant will help the Ministry's teams analyse and evaluate energy sector project proposals and funding opportunities from donors and stakeholders to enhance the energy sector's resilience, especially in preparation for the urgent recovery needs of the energy system and the upcoming autumn-winter 2024-2025 period.
- Regional Strategy Assessment: as required, the Consultant will help the Ministry's teams assess
 the energy needs and sector strategies of various Ukrainian regions, providing analysis on how
 these regional situations could impact the national energy system. This may include synthesizing
 data into actionable insights that can guide national-level action and regional coordination efforts
 in the energy sector.

Remarks applying to the execution of the Assignment as a whole

The Consultant's work scope will need to be flexible and remain aligned with the priorities identified by the Ministry of Energy and/or its Rapid Response Unit and subgroups. To this end, the precise scope of work of the Consultant will be defined in consultation with the relevant Ministry teams after contract signing, along the precise guidelines defined in Section C above, and may undergo minor adjustment during the execution period of this Assignment, as agreed by the Ministry and the EBRD OL after consultation with the Consultant. In executing this Assignment, the Consultant may expect to

frequently receive requests on an ad-hoc/as-needed basis. The Consultant will also be expected to support at least three subgroups under Task 1.

This Assignment requires a full-time commitment by the Consultant, preferably with the Consultant physically present at the Ministry's offices to enhance responsiveness and effective communication.

The Consultant must be prepared to handle sensitive information – and strictly follow any data safety protocols imposed by the Ministry and/or the Government of Ukraine – and engage closely with various stakeholders, ensuring timely and accurate dissemination of findings.

In fulfilling this Assignment, the Consultant will be expected to prepare clear, concise reports regularly, translating complex technical data into accessible language for the Ministry and other stakeholders.

The Consultant's activities and deliverables under this Assignment shall not contravene EBRD's redlines regarding energy investments or the provision of technical support in the energy sector, including EBRD's commitment to aligning its activities with the goals of the Paris Agreement. It should also inform on areas for future policy supports, where EBRD can provide further technical assistance to maintain and enhance energy security in Ukraine.

D. IMPLEMENTATION ARRANGEMENTS

Assignment Timeline. The start of the Assignment shall be as soon as the Consultant is selected and the contract is signed (CSD). The maximum duration of the Assignment is six (6) months from contract signing.

Assignment Beneficiary. The beneficiary is the Government of Ukraine, represented by the Ministry of Energy of Ukraine (the "Ministry"). On the operational level, the Assignment will be managed by the EBRD Operation Leader ("OL") while keeping a dialogue channel open with Ministry of Energy leadership. To assist, the Ministry of Energy will assign a project coordinator at the beginning of the project to co-ordinate these interactions. The project co-coordinator will be the primary point of contact for this Assignment.

Cooperation Modalities. The Ministry and relevant energy sector SOEs shall fully cooperate with the Consultant for the entire duration of the Assignment. The Consultant is expected to work in close coordination with the Ministry, its Rapid Response Unit, and its subgroups, as well as with a variety of stakeholders. Subject to confirmation by the Ministry and the EBRD OL, the Consultant shall preferably spend not less than one third of the Assignment time on site.

The Consultant shall collaborate, share findings, and hold regular meetings with any other consultants contracted by EBRD as relevant for Assignment implementation to align their work and findings. The EBRD and a representative of the Ministry can attend these meetings, as relevant and compliant with data confidentiality as defined by the Government of Ukraine and/or the Ministry.

Consultant Reporting. The Consultant shall report on the proper execution of this Assignment to Mark Lane, CGPA team, EBRD who will be the Operations Leader ("OL") for this assignment and who will supervise this TC package, or, should he be unavailable, to Paul-Etienne Pini or Irina Budyukova, CGPA team, EBRD. The Consultant shall immediately alert the EBRD OL and the Ministry on any delays or envisaged delays which impact or are likely to impact delivery deadlines. An important modality of regular reporting by the Consultant to EBRD will be the submission by the Consultant of biweekly (i.e. every two weeks) status reports – see section E, Deliverable 4 for more details.

Production of Deliverables. The Consultant shall arrange for translation of deliverables (listed in section E), as required by the EBRD OL. The Consultant will explicitly request confirmation from the EBRD OL on translation needs reasonably in advance of the delivery date of those deliverables. Costs of the translation shall be borne by the assignment budget.

Unless otherwise agreed by EBRD, the Consultant will provide electronic versions of all deliverables to EBRD in Microsoft Word format, submitted via email. All reports and deliverables for EBRD shall be provided to the EBRD OL.

No deliverable shall be considered final without explicit confirmation of the EBRD OL, which shall not be unreasonably withheld.

Budget. Cost overruns in executing the Assignment will not be covered by the Assignment's budget.

E. DELIVERABLES

In addition to the individual deliverables listed in the table below, the Consultant shall provide to the EBRD OL regular progress updates with a frequency to be determined between the EBRD OL and the Consultant after the project starts and in a way to minimize the diversion of the Consultant's time and resources from the execution of the Assignment.

Deliverable	Deadline
Deliverable 1: Inception/kick off meeting and work plan: an inception meeting (conference call, in-person, or hybrid as decided by EBRD), with EBRD, Ministry representatives, and other relevant stakeholders as decided by the Ministry, including discussion and confirmation of the Consultant's work plan.	Within 1 week from CSD.
Deliverable 2: Preparation of analytical document(s) (e.g. analyses, presentations, and other materials) and delivery of implementation assistance to support the work of the Ministry's subgroups — with a format and level of detail to be agreed with the Ministry and the EBRD OL in the work plan under Deliverable 1 but suitable for decision-making and operationalization.	On as-needed basis, on demand from the Ministry or EBRD.
Deliverable 3: Energy Security : Preparation of assessment report(s), strategic plan(s), and analysis(es) of energy sector project proposals and funding opportunities from donors and stakeholders, as well as energy sector needs and strategies of various Ukrainian regions — with a format and level of detail to be agreed with the Ministry and the EBRD OL in the work plan under Deliverable 1 but suitable for decision-making and operationalization.	On as-needed basis, on demand from the Ministry or EBRD.
Deliverable 4: Biweekly Status Reports: submission to the EBRD OL of concise (i.e. length of about 1 page) bi-weekly reports detailing progress on Assignment tasks, a list of the Consultant's ongoing activities and research topics, and key observations on potential delay, to enable EBRD oversight and adjustments.	Every two (2) weeks.
 Final report containing: a short summary of all major tasks completed during the Assignment – if confidentiality allows, as compared to work plan defined at Inception stage; a list of deliverables produced – if confidentiality allows; and a description of lessons learned while executing the Assignment. 	Upon completion of the Assignment.

F. CONSULTANT PROFILE

The Consultant is expected to be an independent consultancy company with a strong local presence in Ukraine and strong experience in the technical assessment of power systems and markets. In particular, the Consultant's expert team(s) is expected to include key experts as follows:

• Project Manager(s), with:

- Preferably at least 10 years' experience in project management, specifically in projects related to the power sector.
- Considerable experience in the electricity sector.
- Proven experience in leading a team of experts and the ability to demonstrate adequate project management skills.
- Fluency in English and/or Ukrainian for coordination and report writing purposes.
- Previous related experience in transaction advisory services for projects in the energy sector will be considered an advantage.

Lead Economist/Engineer, with:

- Preferably 10 years' project experience related to the power sector, including overseeing, or coordinating, the work of a team of economists/engineers.
- Experience in financial advisory projects, including energy-related ones, and experience
 of explaining engineering measures in financial terms.
- Fluency in English and/or Ukrainian for analytical and report writing purposes.
- [Optional but considered strong advantage] Support pool of Economists/Engineers with proven experience and expertise of power systems and the wider energy sector.

It is essential for the consulting team to include at least one local expert fluent in Ukrainian with significant expertise and at least some experience in formulating technical recommendations for public and private stakeholders, i.e. authorities and/or energy sector companies).

G. CONFIDENTIALITY AND DATA PROTECTION

The Consultant will perform their duties as per this Assignment to the maximum extent of their abilities and of the data that can be accessed.

The Consultant will keep all information in this Assignment, all deliverables, and all information provided for or associated with this Assignment strictly confidential, most notably any sensitive data on the location, status, or capacity on energy sector assets emplaced in Ukraine.

The Consultant commits to ensuring that all of the hardware, communications, and data storage infrastructure that the Consultant(s) will use in relation with this Assignment are effectively and ceaselessly compliant with all cybersecurity and confidentiality standards imposed by confidential business operations and/or Ukrainian authorities – whichever level of required data protection is highest.

