

Non-Technical Summary

Corporate Environmental & Social Due Diligence - UHE
Hydro Power Plants Restoration

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CONTENT

1. Project Description.....3

2. Background.....3

3. Process.....7

4. Environmental Benefits, Adverse Impacts, Mitigation and management Measures.....9

5. Social Benefits, Adverse Impacts, Mitigation and Management Measures.....11

6. Communications13

1. PROJECT DESCRIPTION

The European Bank for Reconstruction and Development (the “EBRD” or the “Bank”) is considering providing finance to PJSC Ukrhydroenergo (“UHE” or the “Client” or the “Company”) for procurement of hydraulic power equipment (turbine and generator) for the Dnipro HPP branch, which was damaged as a result of the Russian Federation’s military aggression in Ukraine, as well as hydromechanical equipment (superstructure covers) for the Kyiv HPP and PSP Cascade and Kaniv HPP branches, which has suffered significant physical wear and tear and become obsolete over the years of operation, has undergone multiple repairs, and does not meet modern requirements for HPP equipment.

PJSC Ukrhydroenergo is a 100% state owned enterprise, with 100% of its shares owned by the state, represented by the Cabinet of Ministers of Ukraine, Ukraine’s main hydropower generation company and the Bank’s long-standing client, which owns and operates hydroelectric power plants and pump storage power plants with a total nominal capacity of 5.8 GW.

The loan and investment grant proceeds will be used to finance the replacement of damaged or highly amortized critical equipment for selected hydro power plants, required by UHE to mitigate the consequences of recurring Russian attacks and maintain the uninterrupted operations of hydro power facilities across the country. The loan proceeds will also finance a Project implementation support consultant.

Procurement under the Project will be carried out in accordance with the requirements of the EBRD Environmental and Social Policy (ESP 2024), EBRD procurement rules, and the provisions of the contract with the EBRD. Procurement within the Project will be subject to prior agreement with the EBRD.

The Bank has engaged a consultant (the ‘Consultant’) to undertake a comprehensive environmental and social due diligence (‘ESDD’) of the Project, which will include a corporate environmental and social due diligence assessment of the Client’s operations and a high-level review of the capital investment component (CAPEX).

The purpose of the environmental and social safety assessment is to identify and assess potentially significant existing and future adverse environmental and social impacts associated with the current activities of the Company existing operations and the proposed Project. Assessment also includes:

- assessing compliance with applicable laws and the requirements of the EBRD’s Environmental and Social Policy (ESP 2024);
- determining measures necessary to prevent or minimize and mitigate adverse impacts;
- identifying of potential environmental and social opportunities, including those that will improve the environmental and social sustainability of the Project and/or associated ongoing activities.

2. BACKGROUND

Rationale of the Project

UHE is the largest hydroelectric generating company in Ukraine, 100% owned by the state. The Company operated 10 large hydroelectric power plants and pumped storage power plants on the Dnipro and Dniester rivers, however, as a result of a terroristic attack of Russian Federation, which resulted in the destruction of Kakhovka HPP, Company now operates nine large hydroelectric power plants and pumped storage power plants.

UHE’s strategic goal is to provide the Ukrainian power system with electricity and power reserves using the hydro resources of the Dnipro and Dniester rivers.

Since 2023, the Company has been intensively working to restore the Ukrainian infrastructure damaged by numerous missile attacks and is also working to protect its facilities.

The objective of the Project is to ensure stable operation of Ukrhydroenergo under martial law, as well as to carry out emergency replacement of equipment to improve operational reliability and trouble-free

operation of four hydroelectric power plants of Ukrhydroenergo. The Project is aimed at restoring the energy infrastructure to ensure the balance and integrity of the Ukrainian energy system and enhance the energy security of the state and the economy as a whole.

Hydropower plants are critical infrastructure objects in accordance with the Law of Ukraine “On Critical Infrastructure”, which imposes increased requirements for their reliability and safety.

The replacement of equipment is therefore a vital component of the Project, aimed at improving the reliability, safety, and operational efficiency of the stations. The Project will also contribute to the overall performance and stability of the national power system due to the above-mentioned factors, such as reducing costs and time for maintenance and repair of hydroelectric power plant equipment. Any new equipment procured under the Project will be required to feature modern designs with advanced safety mechanisms and control systems. Suppliers must deliver fully functional systems compliant with national safety standards and technical requirements as set out in the procurement documentation. The scope of supply will include all auxiliary devices necessary to support effective operational use and long-term functionality.

Legal aspects and compliance with relevant environmental and social laws

All activities within the Project comply with the requirements of Ukrainian national legislation, international legislation, and the EBRD's Environmental and Social Policy. Legal and regulatory frameworks include the following.

Sector	Regulation	Relevance and compliance
Energy Sector Regulation	Law of Ukraine “On the Electricity Market” (No. 2019-VIII, 2017) ¹	Establishes the legal framework for electricity market operations, including generation, transmission, and distribution. Ukrhydroenergo holds the necessary licenses for electricity generation and complies with market rules and grid codes as stipulated by the National Energy and Utilities Regulatory Commission (NEURC).
	NEURC Resolutions ²	The Company adheres to relevant NEURC resolutions, including the Transmission System Code, Distribution Systems Code, Market Rules, and Licensing Conditions for electricity generation activities.
Environmental Protection and Water Resource Management	Water Code of Ukraine (1995) ³	Governs the use and protection of water resources. Ukrhydroenergo complies with requirements related to water use permits, maintenance of water protection zones, and implementation of measures to prevent water pollution.
	Law of Ukraine “On Environmental Impact Assessment” (No. 2059-VIII, 2017) ⁴	Mandates the assessment of environmental impacts for planned activities. The Company conducts Environmental Impact Assessments (EIAs) for new projects and significant upgrades, ensuring public participation and transparency in accordance with the law.
	Law of Ukraine “On Strategic Environmental Assessment” (No. 2354-VIII, 2018) ⁵	Requires the integration of environmental considerations into strategic planning documents. Ukrhydroenergo incorporates environmental assessments into its long-term development strategies.

¹ Source: Law of Ukraine “On the Electricity Market”. [Link](#).

² Source: NEURC Resolutions. [Link](#).

³ Source: Water Code of Ukraine. [Link](#).

⁴ Source: Law of Ukraine “On Environmental Impact Assessment”. [Link](#).

⁵ Source: Law of Ukraine “On Strategic Environmental Assessment”. [Link](#).

Occupational Health and Safety (OHS)	Labour Code of Ukraine (1971, as amended) ⁶	Sets out the rights and obligations of employers and employees, including provisions for safe working conditions. Ukrhydroenergo maintains compliance with labour laws, ensuring proper employment contracts, working hours, and rest periods.
	Law of Ukraine “On Occupational Safety” (No. 2694-XII, 1992) ⁷	Establishes the framework for occupational health and safety. The Company has implemented occupational health and safety management systems and conducts trainings, occupational health and safety knowledge tests, medical examinations of employees, and workplace attestation in accordance with applicable standards. Based on the results of these measures, decisions are made regarding the permission of employees to work.
Labour Relations and Social Protection	Law of Ukraine “On Collective Agreements and Contracts” (No. 3356-XII, 1993) ⁸	Regulates the negotiation and implementation of collective agreements. Ukrhydroenergo has a collective agreement in place, developed in consultation with employee representatives, outlining labour conditions and social guarantees.
	Law of Ukraine “On Ensuring Equal Rights and Opportunities for Women and Men” (No. 2866-IV, 2005) ⁹	Promotes gender equality in the workplace. The Company upholds principles of non-discrimination and equal opportunity in its employment practices.
Emergency Preparedness and Civil Protection	Code of Civil Protection of Ukraine (2012) ¹⁰	Outlines the responsibilities of enterprises in emergency situations. Ukrhydroenergo has developed emergency response plans and conducts regular drills to ensure preparedness for potential accidents or natural disasters.
	Law of Ukraine “On Critical Infrastructure” (No. 1882-IX, 2021) ¹¹	Mandates the protection of critical infrastructure. The Company implements measures to safeguard its facilities against potential threats, including physical security enhancements and cybersecurity protocols.
Alignment with International Standards	European Union Directives ^{12 13}	The Company works towards harmonization with EU environmental and energy directives, as part of Ukraine’s commitments under the EU-Ukraine Association Agreement.
	IFIs standards	Ukrhydroenergo adheres to the EBRD’s Environmental and Social Policy ¹⁴ and WBG standards, implementing Performance Requirements related to environmental and social assessment, labour

⁶ Source: Labour Code of Ukraine. [Link](#).

⁷ Source: Law of Ukraine “On Occupational Safety”. [Link](#).

⁸ Source: Law of Ukraine “On Collective Agreements and Contracts”. [Link](#).

⁹ Source: Law of Ukraine “On Ensuring Equal Rights and Opportunities for Women and Men”. [Link](#).

¹⁰ Source: Code of Civil Protection of Ukraine. [Link](#).

¹¹ Source: Law of Ukraine “On Critical Infrastructure”. [Link](#).

¹² Source: European Union Directives on environment. [Link](#).

¹³ Source: European Union Directives on renewable energy. [Link](#).

¹⁴ Source: EBRD’s Environmental and Social Policy. [Link](#).

		and working conditions, resource efficiency, and stakeholder engagement.
	ISO Standards	The Company is progressing towards implementation and certification of environmental management system in accordance with international standard ISO 14001 ¹⁵ (Environmental Management Systems) to further enhance its management practices.

No Environmental Impact Assessment (EIA) is legally required for this type of Project, in accordance with the provisions of the Law of Ukraine "On Environmental Impact Assessment"¹⁶, as it is carried out within existing facilities and does not involve reconstruction or construction of new facilities.

Current environmental and social situation and considerations

Since the onset of Russia's full-scale invasion of Ukraine in February 2022, UHE's infrastructure has suffered significant damage:

- Destruction of Kakhovka HPP (June 2023)¹⁷: On June 6, 2023, the Kakhovka Hydroelectric Power Plant was completely destroyed following an internal explosion in the power plant building, an act committed by Russian occupying forces.
- Shelling of Dnipro HPP (March 2024)¹⁸: In March 2024, the Dnipro Hydroelectric Power Plant in Zaporizhzhia was subjected to missile strikes by Russian forces.
- Other Incidents: other facilities faced threats and disruptions to their operations due to targeted attacks on Ukraine's energy infrastructure¹⁹.

Given all these losses, UHE has an urgent need to replace outdated or damaged power units, improve safety standards and operational efficiency, which will contribute to the sustainable and reliable operation of Ukraine's critical energy infrastructure.

History of Project development and planning

The Project is being under development to finance ongoing activities under existing UHE Projects and includes procurement of critical hydropower generation and auxiliary equipment for existing HPPs.

All procured equipment will replace outdated or damaged units, improve safety standards and operational efficiency, contributing to the sustainable and reliable operation of Ukraine's critical energy infrastructure.

Due to the current martial law, in accordance with Presidential Decree No. 64/2022 from 24.02.2022²⁰, and restrictions on the publication of information, as well as the fact that UHE is an operator of critical infrastructure facilities, detailed information on the Project activities and the facilities to be affected by the Project will not be mentioned in this document.

The project implementation requirements, including technical specifications, are defined based on the technical solutions developed by the General Designer, PJSC "Ukrhydroproject", in accordance with the operational needs and technical characteristics of the equipment subject to replacement or modernization. These requirements are approved through an internal procedure and reflected in the project and procurement documentation, which in turn forms the basis for conducting open procurement procedures in accordance with Ukrainian legislation and Ukrhydroenergo's internal procedures. The

¹⁵ Source: ISO 14001 Standard. [Link](#).

¹⁶ Source: Law of Ukraine "On Environmental Impact Assessment". Article 3. [Link](#).

¹⁷ Source: Russian forces destroy Kakhovka dam, triggering humanitarian disaster. *Kyiv Independent*. [Link](#).

¹⁸ Source: Ukraine's largest hydroelectric dam in critical condition after Russian strikes, authorities say. *CNN*. [Link](#).

¹⁹ Source: Attempted to attack with missiles: Chernivtsi RMA discloses details of the attack on the Dniester HPP. *FrontNews*. [Link](#).

²⁰ Source: Presidential Decree No. 64/2022 from 24.02.2022. [Link](#)

contract is awarded to the bidder that offers the most suitable option based on a combination of technical, economic, and qualification criteria.

In the current Project, the technical solution was selected taking into account the strategic importance of the facility, the need to improve the reliability of the hydroelectric units, minimize accident risks, and ensure the rapid restoration of equipment in the event of damage related to military operations.

3. PROCESS

The current ESDD has been conducted to assess the alignment of UHE operations and the proposed Project with the EBRD Environmental and Social Policy, Ukrainian legislation, and international good practice. The assessment covers UHE's environmental, labour, health and safety, biodiversity, stakeholder engagement, and cultural heritage management systems.

Environmental and social impact assessment process and integration with design

As part of the project preparation, environmental and social considerations have been integrated into the Project design to minimize negative impacts and enhance sustainability outcomes. No Environmental Impact Assessment (EIA/OVD) is legally required for this type of project, as it is carried out within existing facilities and does not involve reconstruction or construction of new facilities²¹. No other E&S studies were conducted for the Project earlier.

Compliance with National and EU regulatory requirements

Ukrhydroenergo operates within legal and regulatory framework governing the hydropower sector in Ukraine. The Company demonstrates a high level of compliance with national legislation across environmental, water, energy, occupational health and safety, and labour domains:

- holds the necessary licenses for electricity generation and complies with market rules and grid codes as stipulated by the National Energy and Utilities Regulatory Commission (NEURC);
- complies with requirements related to water use permits, maintenance of water protection zones, and implementation of measures to prevent water pollution;
- conducts Environmental Impact Assessments (EIA/OVD) for new projects and significant upgrades, ensuring public participation and transparency in accordance with the national regulation of Ukraine;
- incorporates strategic environmental assessments into its long-term development strategies;
- maintains compliance with labour laws, ensuring proper employment contracts, working hours, and rest periods;
- implements occupational health and safety management systems, conducts regular occupational health and safety training and workplace certification, and has a collective bargaining agreement developed with the participation of employee representatives that defines working conditions and social guarantees;
- upholds principles of non-discrimination and equal opportunity in its employment practices;
- develops emergency response plans and conducts regular drills to ensure preparedness for potential accidents or natural disasters;
- implements measures to safeguard its facilities against potential threats, including physical security enhancements and cybersecurity protocols;
- works towards harmonization with EU environmental and energy directives, as part of Ukraine's commitments under the EU-Ukraine Association Agreement.

Public consultations, disclosure and dealing with objectives

²¹ Source: Law of Ukraine "On Environmental Impact Assessment". Article 3. [Link](#).

Due to martial law, public consultations and information disclosure are lawfully restricted, particularly regarding critical infrastructure. While justified under national security provisions, this constraint limits the Company's ability to conduct fully transparent engagement and may reduce opportunities for stakeholder feedback. Reputational risks may also emerge where community concerns remain unaddressed or are deferred.

To manage those risks Company have implemented following measures:

- maintains active communication through official channels, including its website, Facebook, telegram, and LinkedIn;
- conducts targeted stakeholder engagement where legally permissible, and has committed to resuming full-scale engagement post-conflict;
- public messages, safety notices, and Project updates are published online, and Project-level SEPs are prepared in advance, as seen during the second stage of reconstruction of Dnipro HPP and construction of Kakhovka HPP-2 consultations;
- a grievance mechanism with postal, email, and telephone access remains operational and is monitored by the Corporate Secretary.

4. ENVIRONMENTAL BENEFITS, ADVERSE IMPACTS, MITIGATION AND MANAGEMENT MEASURES

P-positive impact

N-negative impact

Environmental factors	Impacts description	P	N	Impact mitigation and management measures
Air quality	The primary electricity generation process does not result in air emissions, auxiliary operations (e.g., use of diesel generators, welding workshops, vehicle fleets) produce stationary and non-stationary emissions. Company holds valid environmental permits for air emissions at each operational site, in accordance with national legislation requirements.	P	-	
Associated infrastructure	The Project will not have a significant impact on associated infrastructure during construction, as all activities will take place within existing facilities.	-	-	
Biodiversity and nature conservation	While no significant biodiversity risks are associated with the current Project, monitoring and habitat assessments have been carried out as part of recent investments. The Company does not conduct activities in protected areas, although certain operational zones border Emerald Network sites.		N	Regular monitoring of sites adjacent to sensitive natural areas. Implement pre-construction screening for future projects near critical or legally protected habitats. Develop and implement a corporate-level Biodiversity Management Plan (BMP) to ensure consistent identification, assessment, and mitigation of biodiversity risks across all Company activities. Integrate biodiversity screening into future project design and procurement processes of Company, including biodiversity-related requirements for contractors and suppliers.
Consistency with policy, law and other plans	The Company demonstrates a high level of compliance with national legislation across environmental, water, energy, occupational health and safety, and labour domains. The main gap relates to the need for formal internal procedures in areas where national law allows discretionary interpretation (e.g. land screening, contractor oversight, grievance reporting consistency).	P	N	

Cumulative impacts	Overall renovations in hydropower energy align with national energy strategies and plans. However, the cumulative environmental impact may include increased waste generation.	P	N	Effective waste management will help mitigate these impacts. Expanding the EMS scope to include internal waste minimization and circular economy principles where applicable.
Induced (indirectly consequential) impacts	The Project is expected to provide the necessary resources for the efficient operation of hydroelectric power plants and to maintain and increase the percentage of renewable energy in the national grid.	P		
Land use planning and changes	The Project is implemented entirely on land already under the Company's permanent land use. No changes and planning in land use is expected	-	-	For future projects that may involve land or assets, independent valuations are planned in accordance with Ukrainian law and EBRD ESR 5.
Landscape and visual impacts	The Project will not have a significant visual impact during construction, as all activities will take place within existing facilities.	-	-	
Raw material sourcing and transportation, including borrow pits	The Project will require construction materials, which may increase demand for transportation activities. This could lead to temporary environmental impacts, including dust emissions, noise, and traffic congestion from material transport.		N	To mitigate these effects, sustainable sourcing practices, covered transportation methods, and optimized delivery schedules shall be implemented.
Road safety	Vehicle use is regulated, insured, and monitored under corporate procedures.	-	-	To further strengthen transport-related risk management, it is recommended that the Company enhance road safety principles into its vehicle use procedures to minimise accidents and enhance operational safety.
Traffic, noise and vibration	Operational noise is monitored and controlled; no complaints from nearby communities have been recorded. Preventive maintenance reduces vibration risks.	-	-	Maintain and periodically review noise and vibration control systems to ensure performance and readiness.
Waste management	Waste is managed under licensed contracts, with documented procedures and staff training.	-	N	Assess opportunities for waste minimization, reuse, and recycling. Consider opportunities to integrate circular economy principles into procurement and operational planning processes, where applicable.
Water resources	Water is used without contamination. Water quality and discharge are monitored and compliant. Oil products spill prevention measures are in place.	-	-	

5. SOCIAL BENEFITS, ADVERSE IMPACTS, MITIGATION AND MANAGEMENT MEASURES

Social factors	Impacts description	P	N	Impact mitigation and management measures
Community impacts	Access control and perimeter security are in place, to minimize risks related to community health and safety. Once the project is operational, there will be a significant positive impact on community by providing efficient operation of hydroelectric power plants and possible increase the percentage of renewable energy in the national grid.	P	-	
Contractor management	Contractors are required to meet OHS standards; however, monitoring effectiveness of contractor performance could be reinforced.		N	Strengthen contractor and third-party labour management by formalizing the processes for their admission to perform work, verifying compliance with the requirements and measures specified in the acts of transfer of sites for work performance, and removing violators of occupational safety requirements from work.
Cultural heritage	No significant impact on cultural heritage is anticipated, as all project activities will take place within existing facilities that do not hold historical or architectural significance. The Company follows procedures to identify, assess, and manage cultural heritage risks in line with national law and international good practice. Cooperation with archaeological and cultural authorities is embedded in project planning. Field engagement and site-specific mitigation have been successfully implemented during past projects.	-	-	Cultural heritage agencies will be engaged in future projects if required.
Disruption and public health and safety during construction	Access control and perimeter security are in place, to minimize risks related to community health and safety	-	-	
Impacts on businesses and employment	Construction activities will generate temporary employment, providing income opportunities for local residents, including displaced persons.	P		
Impacts to existing infrastructure and public services	No disruption of existing infrastructure and public services is expected, as all activities will be conducted within existing facilities.	-	-	

Labour issues and standards	Comprehensive Collective Agreement, internal policies, and structured HR department ensure alignment with national law and good practice.	-	-	
Land acquisition and resettlement	The Project is implemented entirely on land already under the Company's permanent land use rights, with no physical or economic displacement involved. No private land acquisition or negotiated agreements are required.	-	-	For future projects that may involve land or assets, independent valuations are planned in accordance with Ukrainian law and EBRD ESR 5.
Local traffic and access impacts	Access control and perimeter security are in place. No reported incidents.	-	-	
Occupational and public health and safety issues	OHSMS in place; responsibilities formally assigned. Work permits, hazard lists, and regular inspections are operationalized. PPE provision is comprehensive and regulated. Extensive mandatory training and refreshers delivered; automated testing systems and participation in sectoral forums noted.	-	-	
Socio-economic impacts, including vulnerable groups	The project is expected to have a significant positive impact on community by providing efficient operation of hydroelectric power plants and possible increase the percentage of renewable energy in the national grid.	P	-	

6. COMMUNICATIONS

Contact details

UHE offers stakeholders the opportunity to submit appeals, complaints, suggestions, and inquiries through an established system that ensures all submissions are handled in accordance with Ukrainian legislation, specifically the Law of Ukraine “On Citizens’ Appeals.”

Stakeholders can submit their appeals through various channels:

- By Email: UHE’s email addresses: Office@uhe.gov.ua
- Through the following web page: <https://uhe.gov.ua/kontakty>
- Through the phone line: +38 04596 58 450
- In writing to UHE: Sent to the address of: Vyshgorod city, Vyshgorod district, Kyiv region, 07300, Ukraine
- In person: at the above addresses or at the addresses of delegated authority by the latter.

Process for addressing any issues arising

UHE has established a grievance redress mechanism that outlines a process to resolve stakeholder concerns. This procedure has been successfully applied and accepted within previous projects and is recognized by the Company as a standard practice. As such, it is suitable for replication across all facilities and can be effectively implemented within the scope of the current Project under assessment. The grievance mechanism process consists of the following steps.

- Receipt and Registration: All inquiries (except those, related to the cases of corruption) received through the Company's general communication channels are registered by the corporate secretary in the inquiry log in the electronic system.
- Investigation: according to Ukrainian law, complaints are to be resolved within 15–30 days, and no later than 45 days. Within this period, the investigator collects facts (site visits, document review, meetings). Findings and a proposed response are collected by the corporate secretary and sent to UHE senior management for approval.
- Response to complainant: Response is provided via letter or email and includes findings and legal references if applicable. Deadlines for response may be extended by 30 working days if additional consultations or document reviews are required.

The UHE Grievance Mechanism does not replace or limit the right to use judicial or administrative remedies, such as mediation or arbitration, which may be necessary to resolve disputes that fall outside the scope of the Grievance Mechanism. In case of dissatisfaction with the results of the grievance consideration, the interested party retains the right to apply to the court.

Link to Stakeholder Engagement Plan

More detailed information on stakeholder identification, engagement methods, planned consultations, grievance procedures, and monitoring responsibilities is provided in the Stakeholder Engagement Plan (SEP). The SEP outlines the Company’s commitments to inclusive, transparent, and ongoing dialogue throughout the Project lifecycle.

A copy of the SEP (or summary version) is available upon request by contacting the Company through the channels listed above. Once martial law restrictions are lifted, additional public consultation activities will be resumed in accordance with national and international standards.