**DOCUMENT OF THE EUROPEAN BANK
FOR RECONSTRUCTION AND DEVELOPMENT**

Approved by the Board of Directors on 4 December 2024[1]

UKRAINE

RLF - UZ ENERGY
Resilience and Livelihoods Framework

[Redacted in line with the EBRD's Access to Information Policy]

[Information considered confidential has been removed from this document in accordance with the EBRD's Access to Information Policy (AIP). Such removed information is considered confidential because it falls under one of the provisions of Section III, paragraph 2 of the AIP]

1 As per section 1.4.8 of EBRD's Directive on Access to Information (2019), the Bank shall disclose Board reports for State Sector Projects within 30 calendar days of approval of the relevant Project by the Board of Directors. Confidential information has been removed from the Board report.

For the avoidance of any doubt, the information set out here was accurate as at the date of preparation of this document, prior to consideration and approval of the project.

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ABBREVIATIONS / CURRENCY CONVERSIONS

AESR	Annual Environmental & Social Report
BoD	Board of Directors
CGAP	Corporate Governance Action Plan
CHP	Combined heat and power
CPI	Consumer Price Index
CSD	Climate Strategy & Delivery
CT	Carbon Transition
DAM	Day-Ahead Market
DC	Direct current
DSCR	Debt Service Coverage Ratio
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortisation
ECEPP	EBRD Client e-Procurement Portal
EHSS	Environmental, Health and Safety, and Social
EIB	European Investment Bank
EMIS	Energy Management and Information System
eop	End of period
EPG	Economics, Policy and Governance
EPP	Enforcement Policy and Procedures
ESAP	Environmental and Social Action Plan
ESD	Environment and Sustainability Department
ESDD	Environmental and Social Due diligence
ETI	Expected Transition Impact Score
EU	European Union
EUR	Euro
FW	Framework
FX rate	Foreign exchange rate
G7	The Group of Seven (Canada, France, Germany, Italy, Japan, the United Kingdom, the United States)
GB	Guaranteed Buyer
GBP	The British pound sterling
GDP	Gross Domestic Product
GET	Green Economy Transition
GHG	Greenhouse gas
GW	Gigawatt
HCII	Human Capital Investment Incentive Grant Programme
IDP	Internally displaced person
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IRR	Internal Rate of Return
LCP	Low-carbon pathway
LGD	Loss Given Default
LTM	Last Twelve Month
MFA	macro-financial assistance

MW	Megawatt
NBU	National Bank of Ukraine
NDC	Nationally Determined Contribution
NECP	National Energy and Climate Plan
NWC	Net Working Capital
OCCO	Office of the Chief Compliance Officer
PC	Physical climate
PD	Probability of Default
PIU	Project Implementation Unit
pkm	Passenger-kilometre
PPA	Power Purchase Agreement
PPR	Procurement Policies and Rules
PSD	Project Summary Document
PSO	Public Service Obligation
RAROC	Risk Adjusted Return on Capital
RE	Renewable energy
RST	Reform Support Team
SDR	Special Drawing Rights
SIG	Sustainable Infrastructure Group
SO	Single Obligor
SSF	EBRD Shareholder Special Fund
TA/TC	Technical Assistance/Technical Cooperation
tkm	Tonne-kilometre
UAH	Ukrainian Hryvnia
UAS	Ukrainian Accounting Standards
UK	the United Kingdom
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
USD	United States Dollars
UZ PJSC, Company	Public Joint Stock Company Ukrainian Railways (Ukrzaliznytsia)
YE	Year-end

CURRENCY CONVERSION
(year to date average NBU rate)

EUR 1 = UAH 43.18

PRESIDENT'S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of Joint Stock Company "Ukrainian Railways" (the "Company", "UZ"), a vertically-integrated national railway operator incorporated in Ukraine, are submitted for consideration by the Board of Directors.

The operation will consist of a sovereign guaranteed loan to the Company in the amount of up to EUR 180 million (the "Loan"). The Loan will be co-financed by a parallel investment grant of up to GBP 10 million (EUR 12 million) from the Government of the United Kingdom of Great Britain and Northern Ireland to the Ukraine Energy Support Fund administered through the Energy Community and up to EUR 56 million investment grant from a multilateral or bilateral international donor. The Loan and the grants will finance supply and installation of up to 270 MW of small-scale gas-fired power generation capacity at the existing UZ sites (the "Project").

The operation will enable the Company to address the critical needs of Ukraine to curb the electricity deficit and to ensure uninterrupted energy supply to the population and businesses, despite the devastating impact of the war on Ukraine.

The expected transition impact of the Project is driven by the need to support the resilience of the Company and its operations as well as to improve energy security by covering critical investments in the Company's distributed power generation infrastructure (*Resilient*). The Project will help safeguard access to electricity among people whose livelihoods and economic security remain under immense risk due to the Russian war on Ukraine. It will also allow UZ to help cover peak demand in the energy sector, prevent electricity disruptions and maintain a reliable supply of vital energy services for the Ukrainian population and businesses (*Inclusive*). The Project will also support human capital recovery and resilience among veterans and other war-affected groups through a veterans' rehabilitation centre and improvements to UZ's network of field hospitals, broadening access to timely care, support and training opportunities for UZ staff and their families (Gender SMART). The Project will finally assist with the development and implementation of an Anti-Corruption Action Plan for UZ's power generation and distribution subsidiaries.

Pre-signing and post-signing Technical Cooperation ("TC") support for the Project is expected to be financed by international donors and/or the SSF.

The Project is fully in line with the criteria set forth in the Energy Sector Strategy partial derogation, approved by the Board of Directors in July 2024, for gas-fired electricity and heat generation projects in Ukraine. [REDACTED].

I am satisfied that the operation is consistent with the "War on Ukraine – EBRD Resilience Package", the Bank's Strategy for Ukraine, the Bank's Transport Sector Strategy 2019-2024, the Energy Sector Strategy 2024-28, the Bank's Equality of Opportunity Strategy 2021-2025, the Bank's Strategy for the Promotion of Gender Equality 2021-2025, and with the Agreement Establishing the Bank.

I recommend that the Board approve the proposed loan substantially on the terms of the attached Report.

Odile Renaud-Basso

BOARD DECISION SHEET

UKRAINE – RLF - UZ ENERGY - DTM 55879 Resilience and Livelihoods Framework	
Transaction / Board Decision	Board approval[2] is sought for a senior loan of up to EUR 180 million in favour of JSC "Ukrainian Railways" (the "**Company**" or "**UZ**"), a joint stock company organised and existing under the laws of Ukraine. The Loan will finance the supply and installation of up to 270 MW of small-scale gas-fired power generation capacity at selected existing UZ sites across Ukraine, helping to address the electricity deficit and to ensure uninterrupted energy supply to the population and businesses. The Project will be co-financed by a parallel investment grant of up to GBP 10 million (EUR 12 million) from the UK Government to the Ukraine Energy Support Fund administered through the Energy Community and a grant of up to EUR 56 million from a multilateral or bilateral international donor.
Client	UZ is a vertically integrated railway company fully owned by the Government of Ukraine. Existing exposure: EUR 221 million. Available commitment: EUR 188 million.
Main Elements of the Proposal	In the current crisis environment triggered by the war on Ukraine, the emergency capex program covering supply and installation of up to 270 MW of small scale power generation capacity will support the Company in addressing critical needs to address the electricity deficit and to ensure uninterrupted energy supply to the population and businesses. Transition impact *Primary Quality* – Resilient. Through funding critical investments in small scale power generation capacity the Project supports the Resilience of the Ukraine's energy system and it also ensures improved resilience and continued sustainable operations of the Company. *Secondary Quality* – Inclusive. The Project will help safeguard access to electricity among people whose livelihoods and economic security is at immense risk due to the Russian war on Ukraine. It will also support human capital recovery and resilience among veterans and other war-affected groups through EBRD's engagement to establish a dedicated new veterans' rehabilitation centre and improve UZ's network of field hospitals, broadening access to timely care, support and training opportunities for UZ staff and their families. Additionality – Financing Structure: *Crisis response* **-** EBRD financing is provided under the extraordinary circumstances of the war and effectively bridges the financing gap when the market for long-term capex financing in Ukraine is nearly closed. *Standard-setting*: The Client will benefit from EBRD's Human Capital Investment Incentive Grant programme. Sound banking – The transaction is sovereign-guaranteed. Additionally, it is expected to be parallel financed by significant investment grants from multilateral or bilateral international donors.
Key Risks	[REDACTED]
Strategic Fit Summary	The operation is consistent with: • War on Ukraine – EBRD Resilience Package: Focus on national infrastructure services in Ukraine. • Strategy for Ukraine • Transport Sector Strategy 2019-2024 • Energy Sector Strategy 2024-28 • Equality of Opportunity Strategy 2021-2025 and the Strategy for the Promotion of Gender Equality 2021-2025: Ensuring access to vital services, employment and livelihood opportunities during crisis.

[2] Article 27 of the AEB provides the basis for this decision.

ADDITIONAL SUMMARY TERMS FACTSHEET

EBRD Transaction	A senior sovereign-guaranteed loan of up to EUR 180 million to UZ to finance supply and installation of up to 270 MW of small-scale gas-fired generation capacity at UZ's selected existing sites across Ukraine, helping to address the electricity deficit and to ensure uninterrupted energy supply to the population and businesses. The EBRD loan will be co-financed by a parallel investment grant of up to GBP 10 million (EUR 12 million) from the UK Government to the Ukraine Energy Support Fund administered through the Energy Community and a grant of up to EUR 56 million from a multilateral or bilateral international donor.
Associated Derivative Exposure	*None*
Existing Exposure	**Total outstanding exposure to UZ:** EUR 220.8 million, including: • Project Voyager– [REDACTED]; • UZ Electrification – [REDACTED]; and • UZ Emergency Support– [REDACTED].
Maturity / Exit / Repayment	10-year tenor [REDACTED]
Potential AMI eligible financing	None
Use of Proceeds - Description	The proceeds of the Loan and the investment grants will be used to finance emergency capex covering the procurement (supply and installation) of small-scale gas-fired power generation/ cogeneration equipment to be installed across selected existing Company sites.
Use of Proceeds – Assessment and Controls	The use of proceeds will be monitored through direct payment to suppliers, involvement of an independent consultant, Client reporting, provision of documentary evidence and auditing. The conditions for the use of proceeds shall be covenanted in the Loan Agreement.
Investment Plan	• Procurement of small-scale gas-fired power generation equipment financed from the EBRD Loan and the investment grants.
Financing Plan	[REDACTED]
Key Parties Involved	• UZ as the Borrower; • Ukraine as the Guarantor represented by the Ministry of Finance; • Ministry of Restoration (former Ministry of Infrastructure); • Grant providers (multilateral or bilateral international donors); • EBRD.
Conditions to subscription / disbursement	[REDACTED]
Key Covenants	[REDACTED]
Security / Guarantees	Sovereign Guarantee of Ukraine.
Other material agreements	Guarantee Agreement between the Bank and Ukraine.
Associated Donor Funded TC and co-investment grants/concessional finance	**A. Technical Cooperation (TC)** *Pre-signing:* **TC 1: Advanced Procurement Support and Tender Preparation.** The estimated total cost of this assignment is up to **EUR 62,700**, proposed to be financed by an international donor and/or the SSF. *Post-signing:* **TC 2: Human Capital Development Programme support**. Gender and Economic Inclusion TC support under EBRD's Human Capital Response for Ukraine TC Programme will help UZ to establish key workforce skills in line with its new energy

	generation facilities alongside other key human capital needs. The estimated cost of the assignment is up to **EUR 250,000**, expected to be financed under the Action for Equality and Gender (A4EG) Multi-Donor Fund or via the Ukraine MDA or via an international donor (TBC). **TC3: Anti-Corruption Action Plan** for power generation and distribution subsidiaries of UZ and support to the Company with its implementation. The estimated cost of the assignment is **EUR 150,000,** proposed to be financed by an international donor and/or the SSF. **TC4: Project Implementation Support** to assist with UZ with implementation of signed contracts. The estimated cost of the assignment is up to EUR 2,00,000 out of which EUR 500,000 is proposed to be financed by an international donor and/or the SSF, while the remainder will be financed from EBRD loan proceeds. *Client contribution:* UZ will provide a financial contribution in the amount of up to EUR 1.5 million by co-financing the services of Project Implementation Support consultants (TC4) **B. Concessional Finance** The EBRD loan is expected to be supported by an investment grant of up to GBP 10 million (EUR 12 million) from the UK Government to the Ukraine Energy Support Fund administered through the Energy Community and an investment grant of up to EUR 56 million from a multilateral or bilateral international donor. The latter will encompass an incentive grant for up to EUR 3 million under the Human Capital Investment Incentive (HCII) Grant Programme reimbursing capex expenses of critical importance for UZ's human capital recovery priorities.

[REDACTED]

INVESTMENT PROPOSAL SUMMARY

1. STRATEGIC FIT AND KEY ISSUES

1.1 STRATEGIC CONTEXT

PJSC "Ukrainian Railways" is a vertically-integrated national railway operator in Ukraine wholly owned by the Government of Ukraine. UZ is a monopoly provider of rail transportation, operating circa 20 thousand kilometre-long railway network and related infrastructure. It is one of the largest single contributors to Ukraine's GDP with UZ revenue pre-war representing 2.34% of Ukraine's GDP - as well as the single largest employer in Ukraine with circa 200 thousand full-time employees.

The war affected significantly and adversely the country, people, businesses and the operations of UZ. Notwithstanding the war, UZ maintained cargo operations at circa 50%, while passenger transportation operations almost recovered to the pre-war level. Moreover, UZ has quickly stepped in to address the immediate critical needs of evacuating people from the areas affected by military hostilities and delivering humanitarian aid. The war has led to a constant flux of Internally Displaced Persons (IDPs) and refugees, including a rising number of people with conflict-related injuries, disabilities and psychological conditions. Current estimates are that 35% of Ukraine's pre-war population have had to leave their jobs and homes and become displaced either abroad (7.8 million people) or internally (6.5 million people). The majority of these are women with children, older people and people with disabilities who face significant challenges accessing transport. As of Q3 2024, since the start of the war UZ has evacuated over 4.0 million people and delivered circa 200,000 tons of humanitarian aid across Ukraine.

Ukraine's energy infrastructure has been under regular attacks since the start of the full-fledged war in 2022. The attacks intensified in the spring 2024, with a barrage of combined drone and missile strikes. Since the beginning of the war, Ukraine lost ca. 9 gigawatts (GW) of its generation capacity, including thermal and hydro assets as well as numerous substations. These attacks have directly impacted Ukrainian households and businesses, causing frequent rolling blackouts that disrupted the lives of millions during the summer months of 2024. During those months Ukraine experienced a power deficit as generation capacity fell more than 2 GW below the peak demand of 12 GW. According to the International Energy Agency, the country now operates at about one-third of its pre-war capacity. [REDACTED].

In the current war environment, the proposed emergency capex programme will support Ukraine's energy security by financing the construction of distributed flexible power generation capacities as well as support the resilience of the Company (through, inter alia, providing energy for UZ's own use whenever necessary). This is key for the continuation of UZ's operations and provision of essential railway cargo and passenger transportation services to Ukraine's population, critically underpinning the country's macro-economic functioning and the feasibility of supply chain and labour inputs to private sector as well as for humanitarian relief efforts following attacks across the front-line areas.

The Project is consistent with the objectives of the War on Ukraine – EBRD Resilience Package . The Project is also in line with the Strategy for Ukraine, the Energy Sector Strategy 2024-28, and the Transport Sector Strategy 2019-2024 as it will strengthen railway sector operations in the country. The Project also aligns with the Bank's Equality of Opportunity Strategy 2021-2025 and the Strategy for the Promotion of Gender Equality 2021-2025 through its focus on broadening access to vital services, employment and livelihood opportunities for people and communities in crisis situations. [REDACTED].

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1.2 TRANSITION IMPACT

Primary Quality: Resilient

Obj. No.	Objective	Details
1.1	*The sub-operation supports the Resilient quality of the FW through Energy security measures, strengthening municipal service providers directly affected by the wider economic consequences of the war, facilitating imports and exports of production equipment and related materials (capital goods) and TF-related technical assistance, or supporting businesses directly affected by the conflict (i.e., in Ukraine, including those trying to relocate) and businesses indirectly affected (Ukraine part of value chain).*	The Project will enhance Ukraine's energy security by financing the construction of small scale distributed flexible generation capacities as well as ensure improved resilience of the Company's operations. The Project will also enhance the resilience of the integrated power system of Ukraine amidst continuing military attacks on the energy infrastructure and enable the Company to contribute to an uninterrupted energy supply to the population, municipal utilities, industry and businesses throughout the country. The Project will also support continued corporate governance and anti-corruption reforms through development and adoption of an Anti-Corruption Action Plan for UZ power generation and distribution subsidiaries.

Secondary Quality: Inclusive

Obj. No.	Objective	Details
2.1	*The sub-operation contributes to the Inclusive quality of the FW by promoting access to vital services and/or goods that enable people's livelihoods (e.g. food, energy, accommodation, infrastructure, communications, health services, basic utilities, and products...).*	The Project will help safeguard access to electricity and heating in the context of the elevated risks to people's lives and livelihoods due to Russia's ongoing full-scale aggression in Ukraine. The Project, in particular, will help reduce war-related disruptions to electricity and consequently water and heating supply to people's homes and workplaces alongside the hours of power outages, enabling people to carry out their activities and, in practice, to maintain their livelihoods. Through EBRD's engagement under the Project, UZ will establish a dedicated new veterans' rehabilitation centre offering physical and psychological care services; retraining opportunities; and targeted support to UZ's demobilised staff members (veterans) and their families. EBRD's engagement under the Project will also support UZ in refurbishing and modernising its network of field medical facilities, boosting workers' timely access to healthcare support in case of injury or attack, alongside other capex needs relating to UZ's

		human capital recovery and resilience alongside national-level priorities for Ukraine’s labour market.

[REDACTED]

1.3 ADDITIONALITY

Identified triggers	Description
A subsequent/consecutive transaction (issuance) with the same client/group either with the same use of proceeds or in the same destination country (**repeat transaction**).	The on-going war on Ukraine materially affected the Company's operations and its financial position. [REDACTED]. By supporting critical investments in small scale flexible distributed power generation, the Bank's financing will help Ukraine's energy security as well as support UZ to maintain its operations and ensure continued provision of vital services to people and businesses in Ukraine.
Additionality sources	**Evidence of additionality sources**
Financing Structure - EBRD offers financing that is not available in the market from commercial sources on reasonable **terms and conditions**, e.g. a longer grace period. Such financing is necessary to structure the Project. - EBRD offers a **tenor**, which is longer than available to the client in the market on reasonable terms and conditions. - Crisis response: EBRD financing **effectively bridges a financing gap** due to adverse market conditions.	- EBRD is offering financing, which is not available on reasonable terms in the market due to the ongoing war and high level of risk and uncertainty in Ukraine. - EBRD is offering 10-year tenor for the Project, which is longer than available in the market in the current war environment.
Risk mitigation EBRD's ability to absorb risk in a certain country/region, where other **IFIs/commercial financiers reached their limit exposure.**	EBRD is able to absorb the risk in Ukraine, while the financing from other IFIs/commercial financiers is constrained in particular for longer term capex projects.
Standard-setting: helping projects and clients achieve higher standards - Client seeks/makes use of EBRD expertise on **best international procurement practices and standards**. - **<u>Gender SMART</u>**: Client seeks/makes use of EBRD expertise for the adoption of **gender standards and/or equal opportunities action plans.**	- EBRD funding and application of Bank's PPR will ensure wider market outreach, particularly in the current high- risk environment. - UZ's dedicated new veterans' rehabilitation facility, supported under the Project, will deliver psychological support, legal advice and retraining opportunities to its demobilised staff members and their families. In the immediate term, it will directly support the reintegration of UZ's demobilised staff members alongside those returning to civilian life within the months ahead. Support programmes delivered under the new facility will encompass mental healthcare and wellbeing programmes supporting veterans' family members (predominantly women) alongside the spouses of fallen soldiers in coping

	with the ongoing difficulties imposed by Russia's full-scale aggression in Ukraine. By explicitly targeting this group, the client's commitments in this area are credited and monitored in line with EBRD's established Gender SMART approach.

1.4 SOUND BANKING - KEY RISKS

Risks	Probability / Effect	Comments
Project specific risks		
Counterparty credit / liquidity risk	*High/ Medium*	UZ's financial and operational position has been adversely affected by the ongoing Russian aggression against Ukraine, which negatively affects UZ's cargo volumes, due to damage to its existing infrastructure (destroyed bridges, railroads and auxiliary buildings), periodic power outages across the country and general economic slowdown in Ukraine. The war has also forcefully displaced millions of people to western Ukraine and the EU (mostly women and children) and UZ played an instrumental role here, providing evacuation trains free of charge from all affected cities. Nevertheless, a 70% increase of tariffs for the Company's cargo as well as unblocked grain export via Black Sea ports helped to mitigate the negative effect of the war in 2022 and 2023. *Mitigants: While the duration and outcome of the war are unpredictable, EBRD's credit risk will be mitigated by the presence of the sovereign guarantee from Ukraine.* [REDACTED].
FX Risk	High / High	While the proposed transaction is in EUR, most of the UZ's revenues are in UAH. [REDACTED]. *Mitigants: This risk is partially mitigated by the managed exchange rate regime applied by the National Bank of Ukraine, and the four-year IMF programme which underpins macroeconomic stability. The stable and predictable inflow of external financing from the EU, IFI and other bilateral donors fully covers Ukraine's external financing gap. Medium-term risk is likely to be mitigated by the support of developed economies pledging significant financial aid for the reconstruction phase in Ukraine.*
Guarantor risk	Low / High	[REDACTED]. *Mitigants: This risk is likely to be mitigated by support of developed economies pledging significant financial aid to support the Country's budget in 2024-2027, including the Ukraine Facility of up to EUR 50 billion from the EU, as well as other bilateral pledges announced by international donors.*
External risks		
Political risk	High / Low	[REDACTED]

Macro-economic risk	High / Low	[REDACTED]. External financing remains essential for sustaining macroeconomic stability. Financing from the EU and the USA which provided around 70% of the total of USD 73.5 billion in the previous two years was hit by delay at the beginning of 2024. Eventually, the new EU package of EUR 50 billion for the period 2024-27 (around EUR 16 billion expected to be released in 2024) was approved in February, and the US contribution of around USD 8 billion - in April. Together with the inflows from other bilateral and multilateral creditors, external financing is expected to fully cover the budget deficit in 2024, forecast at USD 38.6 billion or 20% of GDP. In October 2024, the EU agreed on an up to EUR 35 billion MFA for Ukraine, connected to a new loan mechanism linked to the G7 agreement from June 2024 on the use of the immobilised Russian assets. The MFA amount would be provided to Ukraine in tranches with the full amount disbursed by end of 2025. It is expected that at least EUR 10 billion will be provided by USA, UK, Japan etc. Heavy reliance on foreign debt financing has lifted public debt by more than 60% since the start of the war, to USD 155.0 billion as of August 2024, or close to 90% of GDP. Bilateral creditors from the G7+ group of countries have extended the grace period for debt repayments to March 2027. Meanwhile, Ukraine reached a deal on debt restructuring terms with a committee of bond holders for bonds totaling USD 20.4 billion (13% of total public debt. As a result, it will gain significant short-term cash flow relief of USD 11.4 billion in the next three years. *<u>Mitigants:</u> External financing provided by bilateral partners and the IFIs help maintaining macroeconomic stability.*

[REDACTED]

2. MEASURING / MONITORING SUCCESS

Primary Quality: Resilient

Obj. No.	FW monitoring indicator	Corresponding SO monitoring indicator	Details	Baseline	Target	Due date	TC related
1.1	Infrastructure Services Sustained and Expanded	Installed small scale flexible electricity generation capacity	Net increase in small scale electricity generation capacity installed	0 Mw	240 MW	[REDACTED]	[REDACTED]
1.2	Practices of the relevant stakeholder improved	Improved corporate governance and anti-corruption standards	Relevant Anti Corruption Action Plan developed and adopted by UZ power generation and distribution subsidiaries	No	Yes	[REDACTED]	[REDACTED]

Secondary Quality: Inclusive

Obj. No.	FW Monitoring indicator	Corresponding SO Monitoring indicator	Details	Base line	Target	Due date	TC related
2.1	Livelihoods and employment opportunities of affected people ensured.	Practices of the relevant stakeholder improved (career progression and remuneration)	The Project will support the Company in further strengthening its HR practices with respect to human capital development.	No	Yes	[REDACTED]	[REDACTED]
2.2	Livelihoods and employment opportunities of affected people ensured	Practices of the relevant stakeholder improved (care-related)	The Company's new physical rehabilitation centre and retraining facility will broaden access to healthcare and training services for its employees and their family members.	N	Y	[REDACTED]	[REDACTED]
2.3	Livelihoods and employment opportunities	Number of individuals with improved	The Company's new physical rehabilitation centre and retraining facility	0	1,000	[REDACTED]	[REDACTED]

	of affected people ensured	access to healthcare	will serve large numbers of people within its operations.				

Additional Indicators

Indicator type	Monitoring indicator	Details	Baseline	Target	Due date	TC related
Gender SMART	Practices of the relevant stakeholder improved (care-related)	Support programmes delivered under the Company's new veterans' rehabilitation facility will encompass mental healthcare and wellbeing programmes supporting veterans' family members (predominantly women) alongside the spouses of fallen soldiers in coping with the ongoing difficulties imposed by Russia's full-scale aggression in Ukraine.	No	Yes	[REDACTED]	[REDACTED]
	Advanced procurement and tender preparation support completed	Competitive procurement undertaken in line with agreed rules	No	Yes	[REDACTED]	[REDACTED]
	Project Implementation Support Completed	Compliance with all financing requirements (procurement, disbursement, covenants and project reporting)	No	Yes	[REDACTED]	[REDACTED]

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3. KEY PARTIES

3.1 Borrower

PJSC "Ukrainian Railways" is a vertically-integrated national railway operator in Ukraine wholly owned by the Government of Ukraine. UZ is a regulated monopoly provider of rail transportation in Ukraine and operates Ukraine's circa 20 thousand kilometre-long railway network and related infrastructure. UZ is one of the largest single contributors to Ukraine's GDP, with UZ's revenue representing 2.34% of Ukraine's GDP (pre-war), as well as one of the largest employers in Ukraine, with circa 200 thousands full-time employees. The war affected significantly and adversely the country, the people, businesses and, correspondingly, the operations of UZ. Notwithstanding the war, UZ maintained both cargo [REDACTED] and passenger transportation operations. Moreover, UZ has quickly stepped in to address the immediate critical needs of evacuating people from the areas affected by military hostilities and delivering humanitarian aid.

JSC "Ukrainian railways" is one of the 7 largest energy companies of Ukraine that carry out activities in the field of distribution of electric energy through distribution networks. Electric networks and high-voltage substations of JSC "Ukrainian railways" are spread over the entire territory of Ukraine, a number of substations of the Company are of systemic importance for the Ukraine energy system and provide inter-system flows with all operators of distribution systems and NPC "Ukrenergo".

Notwithstanding the war the Company provides stable and reliable power supply to consumers of electric energy, primarily critical infrastructure, organization of transit flows of electric energy in the network of adjacent licensees. At the same time, in order to overcome the crisis processes caused by the destruction of power generation facilities as a result of military operations and the shortage of electricity throughout the country, JSC "Ukrainian railways" plans to build distributed electricity generation facilities in its networks (that are to be operated by UZ power generation subsidiary UZ Energo llc) as part of the "Ukrainian Railways Emergency Distributed Generation" Project. [REDACTED].

3.2 Guarantor

[REDACTED]. The destruction of electricity generation and transmission capacities is impacting Ukraine's economy and has interrupted four quarters of solid gross domestic product (GDP) growth.

The Ukrainian economy grew by an estimated 6.5% year on year in the first quarter of 2024, after growing 5.3% in 2023, marking a partial recovery from a sharp fall at the start of the war in 2022. However, growth has slowed since the first quarter of 2024 because of power shortages and the higher costs of imported electricity.

Although Ukraine has now secured sufficient external financing for the whole of 2024, delays in agreeing those funds in the early months of the year also created uncertainty, which negatively affected the exchange rate. The Ukrainian hyrvnia has lost around 10% against the US dollar since it moved from a fixed exchange rate to a managed float at the beginning of October 2023.

Inflation, which had stabilised below the NBU target level of around 5% in the first half of the year, recently started to rise again, reaching 5.8% in July 2024. This prompted the central bank to pause its relaxation of monetary policy after seven policy-rate cuts between July 2023 and June 2024, during which time the rate was reduced from 25% to 13%.

Ukraine's export prospects have improved, boosted by a Black Sea export corridor along the coast that opened last year. This has removed some of the wartime uncertainty about the safety of using the Black Sea to export Ukraine's vast offerings of agricultural produce and other bulk good such as metals and ores. Nevertheless, the country's economic prospects for the upcoming winter months might be negatively affected by potential prolonged rolling blackouts.

Ukraine is currently rated as "RD" by Fitch (affirmed on 5 September 2024), "SD" by Standard & Poor's (affirmed on 30August 2024) and "Ca" by Moody's (downgraded on 10 February 2023). The ratings from S&P and Fitch reflect the impact of recent restructuring of the country's international bonds for the total amount exceeding USD 20 billion.

4. MARKET CONTEXT

4.1 ENERGY MARKET CONTEXT AND REGULATIONS

The Ukrainian energy sector moved to a liberalized market system on 1 July 2019, consisting of the following organised and competitive market segments: (i) a bilateral contracts market; (ii) a day-ahead market; (iii) an intraday market; (iv) a balancing market; and (iv) an ancillary services market.

The war has disrupted energy security in Ukraine. As of October 2024, Russia destroyed 9.2GW[3] of Ukraine's power generation capacities, which represented the majority of the flexible power generating capacities of Ukraine, comprising of thermal and hydro generation. [REDACTED]. This has caused a massive energy deficit, which has resulted in power outages. Import capacity from neighbouring countries is currently capped at 1.7 GW, with the potential to be increased to 2.2 GW, which is not sufficient to close the supply gap and necessitates the urgent construction of new flexible distributed generation capacities. In July 2024, Ukraine adopted the respective Strategy for the development of distributed generation until 2035, and it outlines the list of technologies, essential for the Strategy, spanning renewable and gas-powered power assets.

Electricity market prices have surged. Prices on day-ahead market (DAM) have been steadily increasing, reaching record 134 EUR/MWh in July 2024 (+49% YoY). This increase has been driven by the significant deficit of electricity supply, which, particularly for the summer months, was aggravated by the scheduled repairs of blocks of nuclear power plants and further shelling of power assets. The sector Regulator increased the price caps starting from June 1, 2024, which contributed to the increase of DAM prices. Imports peaked at 859 GWh in June (+91% vs May 2024), adding up to 3,626 GWh for March-October 2024, reflecting the effect of massive attacks on power assets this year. Electricity prices are expected to grow in the medium-term in line with ones of neighbouring EU countries, due to Ukraine's integration into ENTSO-E in March 2022.

Regulatory developments are facilitating expansion of power generation. In July 2024, the state passed laws on *VAT and import customs exemption* for new power generation assets, including gas piston engines, until the end of martial law or beginning of 2026, whichever is earlier. Grid *connection requirements* for new assets, including gas-powered ones, were eased in April 2024.

4.2 RAILWAYS MARKET CONTEXT AND REGULATIONS

UZ operates Ukraine's 19,800 kilometre-long railway network (47,2% of which is electrified) and related infrastructure, which is the fourth largest rail network in Europe as measured by

[3] The actual damage is above the presented figure. The most recent data on the amount of destruction, according to the public sources, dates to July 2024, i.e., it does not account for the impact of Russian attacks in August 2024 and later.

both passenger and freight turnover. Ukraine rail transport system is enhanced in main trans-European transport corridors (East – West, Baltic Sea – Black Sea).

Ukrainian railway directly borders and cooperates with railways of Moldova, Poland, Romania, Slovakia, Hungary and ensures the work with 40 international railway cross-walks, and also serves Ukrainian seaports of the Black Sea and Sea of Azov basin.

UZ derives circa 80% of its revenues from freight transportation, but also engages in passenger transportation, locomotive traction, infrastructure operations, rolling stock repair and maintenance, logistics, engineering, research and development, and construction.

UZ accounted for > 80% of all freight transported in Ukraine by turnover (excluding transportation by pipeline) and > 30% of passenger transportation by turnover (excluding inner city transport) in 2021 prior to the war. Over the years, the Company has undertaken significant efforts to upgrade its infrastructure, rolling stock and services, despite facing financial challenges.

The Company plays a pivotal role in the economy, enabling the transport of heavy industry products, agricultural goods, and minerals, which are key transport commodities for Ukraine. Additionally, UZ's passenger services connect major cities, towns, and rural areas within Ukraine, providing essential mobility for millions of people.

UZ is subject to State regulation of its tariffs for domestic freight transportation and domestic transportation of passengers and baggage. The new tariff methodology is planned to be developed in line with the requirements of EU Directive 2001/14/EU. It is expected to include an infrastructure component in order to reflect costs related to use of the railway infrastructure and investment components through which a portion of the tariff would be budgeted to help UZ to modernise its existing infrastructure and rolling stock. The implementation of the tariff methodology would also lead to a review of the freight tariffs structure, including the mechanisms for compensation to railway carriers for lost revenue. Reflective of the increased operational costs the Government adopted an increase of circa 70% for the freight tariffs effective since July 2022.

5. FINANCIAL / ECONOMIC ANALYSIS

5.1 Financial Projections

[REDACTED]

5.2 Sensitivity Analysis

[REDACTED]

5.3 Projected Profitability for the Bank

[REDACTED]

6. OTHER KEY CONSIDERATIONS

6.1 ENVIRONMENT

Categorised B (ESP 2019). The Environmental and Social Due Diligence (ESDD) is being undertaken by an independent consultant and will be partially finalised before Board. The Borrower is an existing Client, and its Corporate Environmental and Social Management Systems are satisfactory as is the Client's implementation of previous Environmental and Social Action Plans (ESAPs) and regular updates via Annual Environmental and Social Monitoring

Reports (AESRs). Additionally, the E&S risks posed by this type of Project, and the likely mitigants, are well known to the Bank.

The Project E&S impacts relate to both construction and operations and mitigations, included in an ESAP, have been drafted based on the ESDD conducted to date. The ESDD will be finalised to the extent possible, and the ESAP agreed with the Client prior to Board. Due to constraints associated with the ongoing war, the Project will not have been fully assessed at the time of Board consideration, for example in terms of NOx emissions and noise abatement. Notwithstanding, the E&S risks and impacts of the proposed Project have been assessed as far as practical and appropriate measure will be included in the ESAP to ensure that the installations meet National and EU requirements. Therefore, the Project requires a technical derogation from the Bank's Environmental and Social Policy ESP in relation to Performance Requirement 3 as its E&S impacts related to air emissions and noise would not have been fully assessed at the time of submission, and in relation to Performance Requirement 4 as energy facilities can be subject to increased fire and explosion risks in war conditions. However, the Bank will retain an independent consultant to conduct additional studies and complete the E&S impact assessments before the plots preparation construction activities of the plots begin in February 2025. The Client has also confirmed that additional studies and mitigation measures can be included in the design stage yet to commence from January 2025. Installation of the first generators is expected to take place by June 2025.

Generator units will be installed at brownfield sites on land either currently owned or designated for use by the Company. Gas pipes and electrical distribution infrastructure are also necessary associated facilities, with no economic displacement or resettlement risk identified for those. Some of the residential areas are in proximity to the Project locations, therefore, baseline noise modelling and impact assessment will be included into design works, but can be carried out after Board consideration. Gabion walls will be in place around the units as a defensive feature and would also act as noise barriers, mitigating potential impacts, as needed along with any other measures. The Client confirmed flexibility to reduce capacity at some sites and move generators to the reserve sites, if necessary to address noise impacts.

Most of the 16 plants with generators aggregated into power generation units are subject to the EU Medium Combustion Plant Directive, and compliance with EU requirements is included in technical procurement specifications. Although not currently required under martial law, the Project will be subject to an environmental permit approval within 6 months of restrictions being lifted. At this stage, it is expected that no sensitive ecological receptors or protected zones will be affected. Mitigations to address risks associated with labour and working conditions are also included in the ESAP, and the Client is committed to appointing suitably qualified E&S personnel to the sites. Workers and community health and safety risks mitigation measures are included in the ESAP. Emergency response plans will be developed for the specific Project plants' locations. Potential technical cooperation support to implement specific ESAP items will be considered.

A Stakeholder Engagement Plan (SEP) will be developed, including awareness raising of the community health and safety measures and a community grievance mechanism.

An independent environmental and social audit will be undertaken both on the project, and on corporate Environmental, Social and Governance management systems, within 12 months of the operations start or from martial law lifting in Ukraine, whichever earlier. Based on this audit the Project and existing corporate ESAP will be updated. The Bank will continue to monitor Client's E&S performance and ESAP status under the this and previous deals based on AESRs.

6.2 INTEGRITY

In conjunction with OCCO, integrity due diligence was undertaken on the Company and its senior management. [REDACTED].

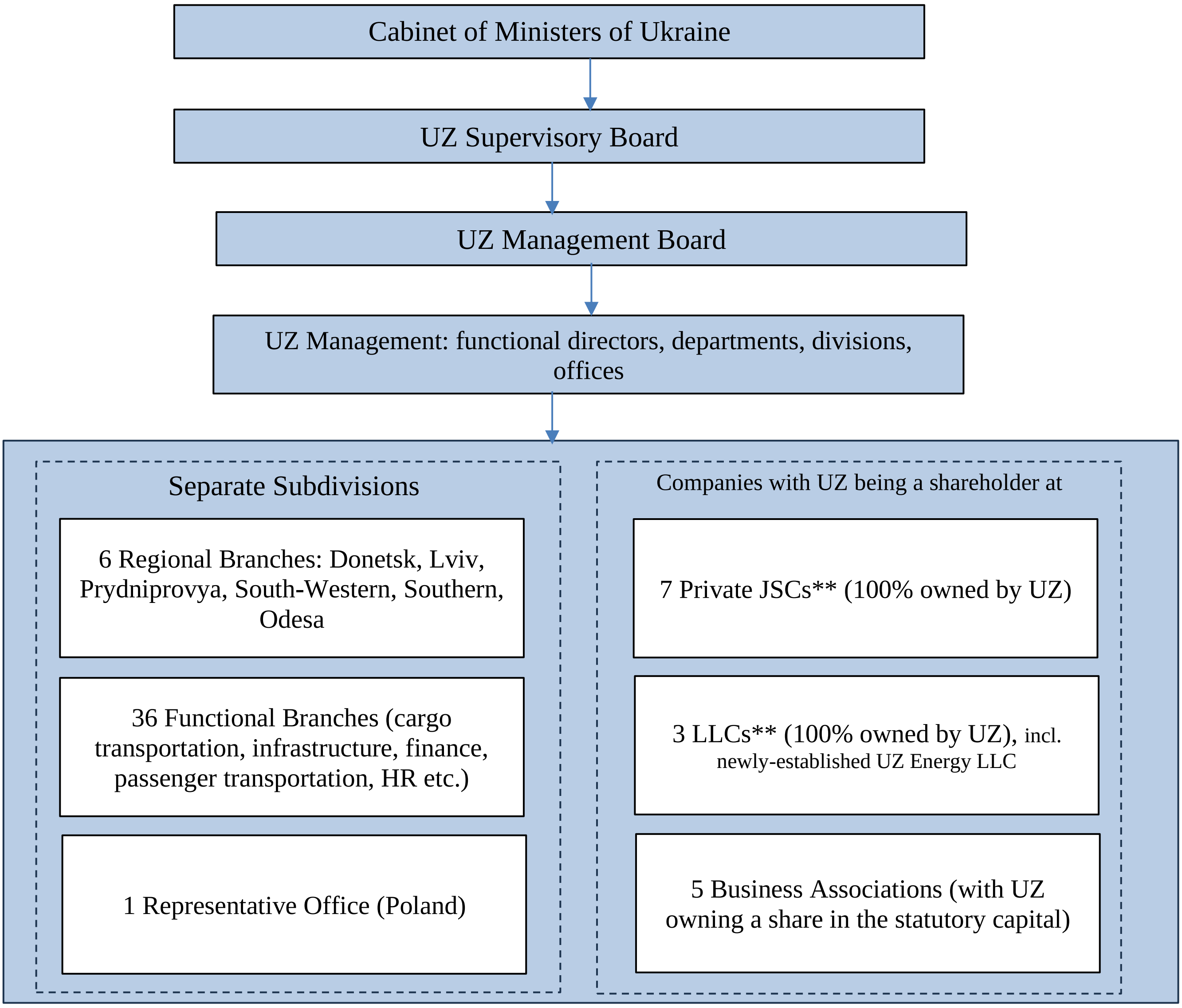
All actions required by applicable EBRD procedures relevant to the prevention of money laundering, terrorist financing and other integrity issues have been taken with respect to the project, and the project files contain the integrity checklists and other required documentation which have been properly and accurately completed to proceed with the Project.

ANNEXES TO OPERATION REPORT

ANNEX 1	SHAREHOLDING STRUCTURE
ANNEX 2	GREEN ASSESSMENTS
ANNEX 3	HISTORICAL FINANCIAL STATEMENTS
ANNEX 4	PROJECT IMPLEMENTATION

ANNEX 1 – SHAREHOLDING STRUCTURE

UZ is fully owned by the Government of Ukraine. The Company's organisation structure* is provided below.



[REDACTED]

ANNEX 2 – GREEN ASSESSMENTS

SUMMARY

- The Project provides financing for emergency small-scale distributed gas-based electricity generation to Ukraine. While this technology is emission intensive, it is an emergency response to the destruction of a much larger amount of more emission intensive assets, and it is the only technically available option for the provision of these essential services within the required timeframe in Ukraine.
- The Project is determined **aligned with both mitigation and adaptation goals of the Paris Agreement.**
- The Project is attributed 0% **GET.**
- [REDACTED].

Energy Sector Strategy (ESS) partial derogation:
The Project falls under the partial derogation from the EBRD ESS for Ukraine as it meets the criteria defined therein for eligible "Project Types".

- Projects involving financing of *gas-fired electricity generation plants* that supply to the grid, gas-fired heat generation (including combined heat and power (CHP) plants and heat only boilers) that supply to district energy networks and gas-fired industrial and commercial applications for own consumption (downstream only projects);
- can be promptly deployed to meet the current urgent needs;
- provide decentralised and small-scale energy supply (up to 50 MWe of installed electric capacity per unit);
- is flexible (i.e., except for CHP units, able to ramp up and down quickly to meet considerations of variable demand and security of supply);
- has an overall low risk of long-term lock-in, such that it provides a fast response to the current capacity shortfall and is compatible with a domestic long-term low carbon transition, either by being decommissioned, or transitioned to operating as peaking plants.

PARIS ALIGNMENT ASSESSMENT

Alignment with the mitigation goals of Paris Agreement - General screening

The project is determined as aligned with the mitigation goals of the Paris Agreement based on the application of the Bank's Paris alignment approach for direct finance.

- The projects activity is not included in the 'MDBs' aligned list'.
- There are no activities included in the 'non-aligned list'.

Alignment with the mitigation goals of Paris Agreement – specific assessment
A PA mitigation specific assessment has been conducted, including a review of the project against policy plans such as NDC/LTS, low-carbon pathway consistency, and the application of a carbon lock-in test.

The individual specific assessments were informed by the ESS partial derogation for Ukraine. The partial derogation provides considerations on how to evaluate the PA mitigation alignment of gas-fired electricity generation in the context of wartime Ukraine.

- Consistency with Nationally Determined Contribution (NDC) and climate and energy planning in Ukraine

Ukraine's recently approved and adopted its National Energy and Climate Plan (NECP[4]) consistent with its commitments under the Energy Community Treaty to align with the European Union energy acquis and approved by the Energy Community Secretariat. The NECP commits Ukraine to an economy-wide net domestic reduction of 65 % in GHG emissions by 2030 and a 27% share of renewable energy sources and coal phase out by 2035. The NECP also expects to install 1250 MW of highly-manoeuvrable gas power with quick start-up capability

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4 Ukraine approves National Energy and Climate Plan on the day of the start of EU accession negotiations | Cabinet of Ministers of Ukraine (kmu.gov.ua)

to ensure system stability given the expected high penetration of intermittent renewables. The country has also publicly announced a Net Zero 2050 for the energy sector and a Net Zero 2060 commitment for the whole economy.

Support for Ukraine's urgent electricity and heat needs will only partially replace the damaged thermal generation capacities (mostly coal based), which had a much higher emissions intensity. Therefore, the Project is expected to be consistent with Ukraine's climate ambitions.

- Low-carbon pathway (LCP) review

The *Clean Energy Roadmap: From Reconstruction to Decarbonization in Ukraine*5 developed in 2023, and presented by the government to the international community, shows how Ukraine can decarbonise the energy sector to Net Zero by 2050, and the role of different fuels and technologies. As presented in Figure 1, in a Net Zero transition scenario, unabated natural gas will continue to play a role out to 2035, for electricity generation.

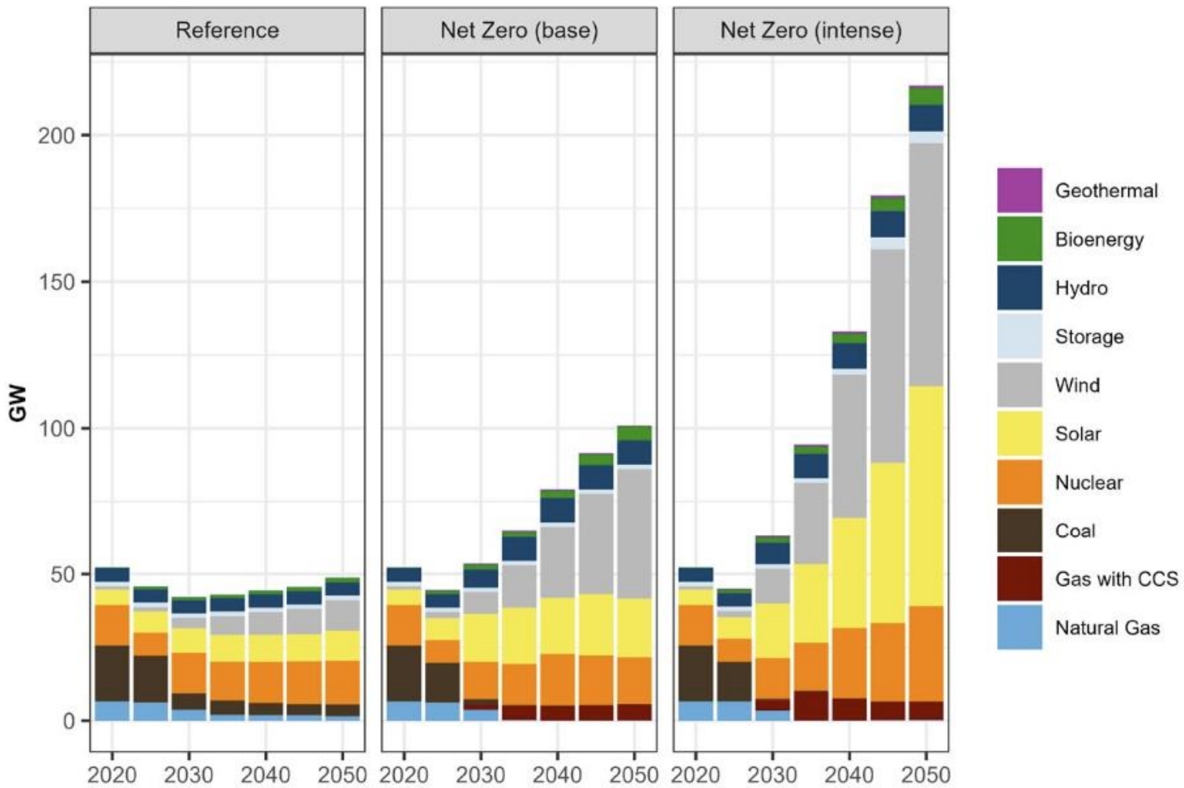

Figure 1. Electricity generation capacity by technology

Due to current system conditions, it is expected that new flexible gas generation is needed and will play a stronger role in the short term, while renewables are built out. As such, flexible and relatively small-scale natural gas-based power generation is aligned with this transition pathway.

- Carbon lock-in tests

Carbon lock-in occurs when technical, economic or institutional factors mean that an asset will continue to operate even though there are economically preferable, lower-carbon options to replace it.

The carbon lock-in risk of the Project is low, for the following reasons:

5 Clean energy roadmap 2023

i. The project can reasonably operate for the short term and be compatible with low carbon solution as and when these can be developed. The project is consistent with the best available modelling of a Net Zero 2050 transition for the power sector.

ii. The assets to be financed are high-efficiency, relatively short-lived (smaller units have an expected lifetime of 10 years, larger units are expected to have a 20-years technical lifetime) and of limited scale (all less than 50 MWe). The assets are not expected to run at high utilisation rates as the energy system normalises. The assets financed are new and have the highest efficiency for this size or turbine. The assets may not be utilised until the end of their full operating life after the war ends and instead be sold and/or redeployed elsewhere.

iii. The financing arrangements for these assets will specify the use of gas. The Project do not have take-or-pay contracts and will sell electricity directly to the Ukrainian electricity market. The market and regulatory framework of the energy system in Ukraine is unlikely to favour continued operation when lower-carbon replacements are economically preferable. Moreover, renewables (combined with energy storage) are expected to make up a significant share of electricity generation in the long term, due to its low costs. Ukraine has already transitioned to market-based pricing of wholesale and retail energy markets. Ukraine has recently agreed a trajectory for EU membership which gives confidence that in due course Ukraine will adopt EU climate policy and regulations, including an emissions cap and trading system in the long term.

The financing of the Project is an emergency short-term response to meet immediate energy needs. Current provision of electricity in the regions of Ukraine, particularly to cover peak demand, is chronically insufficient due to damaged thermal generation assets and consequent reliance on a few small and inefficient diesel-based generators. There are no credible low-carbon alternatives with compatible deployment timescales that can meet these needs. The risk of carbon lock-in is low.

- Economic viability test incorporating a shadow carbon price

The economic assessment is applicable to projects with significant carbon emissions, where it is additionally informative to other PA tools. An economic assessment has not been done for these principal reasons:

i. It is not likely to be additionally informative to other PA tools. The recent NECP and the energy sector LCP out to 2050 provides sufficient information on the compatibility of the project with Net Zero 2050 for the sector.

ii. It would likely lead to a positive conclusion. The baseline for comparison is the existing damaged coal-fired generation assets and a variety of small and inefficient diesel-based emergency generators or solid fuel boilers, that are widely installed. There are no credible low carbon alternatives with compatible deployment timescale. The conclusion of an economic assessment would be positive (i.e. a positive relative NPV compared to the baseline) as these solutions save emissions and costs relative to the baseline. Assessment of a typical high efficiency gas project relative to this baseline shows that the Levelised Cost of Energy[6] (LCOE) is much lower than the baseline. The lower financial LCOE and lower CO_2 and air pollution emissions make natural gas a

6 The Economic Levelised Cost of Electricity (LCOE) is the discounted lifetime cost of building and operating a generation asset, including carbon costs, expressed as a cost per unit of electricity generated ($/MWh). It covers all relevant costs faced by the generator, including pre-development, capital, operating, fuel, and financing costs.

preferable choice for reducing both costs and environmental impact in power generation7.

Alignment with the adaptation goals of Paris Agreement

The project is determined as aligned with the adaptation goals of the Paris Agreement as it satisfies all three steps of the assessment. No material physical climate risks have been identified.

ANNEX 3 – HISTORICAL FINANCIALS

[REDACTED]

ANNEX 4 - PROJECT IMPLEMENTATION

Procurement classification – *Public sovereign*

[REDACTED]. UZ has been working with EBRD for some time now and they have successfully implemented projects under EBRD financing, although these were only for procurement of goods; so far UZ has not worked on construction projects under EBRD financing.
Having conducted the capacity assessment of UZ it has been determined that UZ's international projects department acts as a PIU. They have staff experienced with procurement under EBRD rules, and also have access to various technical experts throughout the organisation and its daughter companies who can provide necessary support to the PIU team when necessary.

In order to support the Client's capacity, the Bank has hired an advance procurement consultant who is working closely with UZ's PIU assisting them in structing the project and providing hands-on support in running the tenders included in the project. Furthermore, the project envisages hiring of a PIU Support Consultant who will provide full fledged project management and construction supervision services.

Based on the above, the capacity related risks are assessed as moderate low.

*Contracts risk assessment – **High***

The project is quite complex as it includes several supply contracts and several works contracts to be procured under design and build approach. The Client will need to manage interface between various contracts, and the works contracts included in the project by themselves are also somewhat complex, requiring close guidance and management. UZ's team has no experience of managing FIDIC contracts, therefore the risks associated with contracts are assessed as high.

Hiring of an experienced PIU Support Consultant will be essential to ensure that the above risks are mitigated.

Project implementation arrangements:

The Project has a complex structure and envisages the following implementation strategy:

7 The LCOE for natural gas power generation typically ranges from 50-100 Euro per MWh, depending on factors like the type of gas technology. Diesel power generation is significantly more expensive, with LCOE figures ranging from €150 to €200 per MWh. Diesel is often used in backup or remote applications due to its high operational costs and fuel prices. Emissions intensity for natural gas power plants is approximately 400-450 kg CO_2 per MWh of electricity produced. Diesel power generation has a higher emissions intensity, typically ranging from 700-750 kg CO_2 per MWh. For more detailed analysis and further information please see Lazard LCOE June 2024

Tender #1 encompasses procurement of Goods, divided into three lots (subject to further adjustment during implementation). These shall be containerized Gas Engine Power Plants with individual electric generation capacity. The decision to procure these as standalone goods is based on results of market consultation carried out by the Client, as well as the fact that largely this equipment will be co-financed by EU grant, which will need to be disbursed quickly due to emergency nature of the project. [REDACTED]

Tender #2 is the equipment provided to UZ by UK energy community grant as an in-kind contribution. The funds will not be channelled through EBRD and UZ will not need to carry out procurement, but instead they will receive ready equipment as a contribution. This item has been added to PP to provide full picture of investments under the subject project, but this contract will not be procured by the Client and therefore will not be subject to PPR.

Tender #3 is for procurement of design and civil works for installation of the above equipment. Considering the nature of the gas engine power plants, the contractors will need to prepare construction platforms and connect the power plants to a gas pipeline as well as the electrical grid of the country. [REDACTED].

Procurement arrangements:

The Project is classified as public sector for procurement purposes and shall be subject to the provisions of the PPR applicable to public sector operations. No derogations or exemptions are envisaged from open competitive procedures.

All procurement will be conducted through ECEPP (or its successor) using the Bank’s latest standard templates. [REDACTED].