DOCUMENT OF THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT

Approved by the Board of Directors on 9 July 20251

UKRAINE

UKRNAFTA PROJECT II

[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]

As per section 1.4.8 of EBRD's Directive on Access to Information (2024), 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.

PUBLIC

TABLE OF CONTENTS

		Page
	BLE OF CONTENTS	
	BREVIATIONS / CURRENCY CONVERSIONS	
PRE	SIDENT'S RECOMMENDATION	6
1.	STRATEGIC FIT AND KEY ISSUES	11
	1.1 STRATEGIC CONTEXT	11
	1.2 TRANSITION IMPACT	11
	1.3 ADDITIONALITY	
	1.4 SOUND BANKING - KEY RISKS	16
2.	MEASURING / MONITORING SUCCESS	16
3.	KEY PARTIES	18
	3.1 BORROWER / INVESTEE COMPANY	18
	3.2 GUARANTOR	19
4.	MARKET CONTEXT	19
5.	FINANCIAL / ECONOMIC ANALYSIS	20
	5.1 FINANCIAL PROJECTIONS	20
	5.2 SENSITIVITY ANALYSIS	20
	5.3 PROJECTED PROFITABILITY FOR THE BANK	20
6.	OTHER KEY CONSIDERATIONS	21
	6.1 Environment	21
	6.2 Integrity	
ANN	NEXES TO OPERATION REPORT	23
ANN	NEX 1 – SHAREHOLDING STRUCTURE	24
ANN	NEX 2 – PROJECT IMPLEMENTATION	25
ANN	NEX 3 – GREEN ASSESSMENT SUMMARY	27
ANN	NEX 4 – HISTORICAL FINANCIAL STATEMENTS	35

ABBREVIATIONS / CURRENCY CONVERSIONS

Annual Mobilised Investment
Advance Procurement Support Consultant
Asset Recovery and Management Agency
Automatic frequency restoration reserve
EBRD's Strategy for Ukraine
EBRD's Energy Sector Strategy 2024-28
Billion
Basis points
Circa
Capital Expenditure
Corporate Climate Governance
Corporate Climate Governance Facility
Combined Cycle co-Generation Plant
Combined Cycle Gas Turbine
Chief Executive Officer
Cabinet of Ministers of Ukraine
Public Joint Stock Company Ukrnafta
Climate Transition
Day-ahead market
Due diligence
District Heating
Debt Service Cover Ratio
Distribution system operator
Debt Service Reserve Account
Earnings Before Interest, Tax, Depreciation and Amortisation
Environmental, Health and Safety
Energy Community Secretariat
European Network of Transmission System Operators for Electricity
Environmental and Social Action Plan
Environmental and Social Department
Economics, Policy and Governance
Environmental, Social and Governance standards
Environmental and Social Policy
Expected transition impact
European Union
Euro currency unit
Euro Interbank Offered Rate
Frequency containment reserve
Fédération Internationale Des Ingénieurs-Conseils (International Federation of
Consulting Engineers)
Feed-in-tariff
Framework
Foreign Exchange
Group of Seven
Guaranteed Buyer
Gross Domestic Product

GET	Green Energy Transition
GW	Gigawatt Gigawatt
GWh	Gigawatt hour
HCII	Human Capital Investment Incentive
HPP	Hydroelectric Power Plant
IFI	International Financial Institution
IFRS	
IMF	International Financial Reporting Standards
	International Monetary Fund
IPM	Investment Profitability Model
JECF	Japan-EBRD Cooperation Fund
kW	Kilowatt
kWh	Kilowatt hours
LGD	Loss Given Default
LPG	Liquefied petroleum gas
LTM	Lender's Technical Monitor
m	Million
MNPI	Material Non-public Information
MoU	Memorandum of Understanding
MW	Megawatt
NAK	PJSC "National Joint Stock Company Naftogaz of Ukraine"
N/A	Not applicable
NATO	The North Atlantic Treaty Organization
NDC	Nationally Determined Contribution
NECP	National Energy and Climate Plan
NJSC	National Joint-Stock Company
NPP	Nuclear Power Plant
OCCO	Office of the Chief Compliance Officer
OGC	Office of General Counsel
PC	Physical Climate
PD	Probability of default
PIS	Project Implementation Support
PIU	Project Implementation Unit
PPR	Procurement Policies and Rules
PPA	Power Purchase Agreement
PPAD	Procurement Policy and Advisory Department
PJSC	Public joint stock company
PSD	Project Summary Document
PSO	Public Service Obligation
PSPP	Pump Storage Power Plant
RAROC	Risk Adjusted Return on Capital
RE	Renewable energy / electricity
RES	Renewable energy sources
RLF FW	Resilience and Livelihoods Framework
SDR	Special Drawing Right
SO	Sub-Operation
SOE	State-Owned Enterprise
SSF	Shareholder Special Fund
SWF	Sovereign Wealth Fund
TA	Technical Assistance
171	1 echnical Assistance

PUBLIC

TC	Technical cooperation
TI	Transition Impact
ths	thousand
TSO	Transmission System Operator of Ukraine
UAH	Ukrainian Hryvnia
UGV	PJSC "Ukrgazvydobuvannya"
US	United States of America
USD	United States Dollar
USS	Universal Service Supplier
у-о-у	Year over year

CURRENCY EQUIVALENTS

(year to date average NBU rate)

1 EUR 48.08 UAH

WEIGHTS AND MEASURES

1 Megawatt $(MW) = 1,000 \text{ kilowatts } (10^3 \text{ kW})$ 1 Gigawatt $(GW) = 1 \text{ million kilowatts } (10^6 \text{ kW})$ 1 Megawatt-hour $(MWh) = 1,000 \text{ kilowatt-hours } (10^3 \text{ kWh})$ 1 Gigawatt-hour (GWh) = 1 million kilowatt-hours (106 kWh)

PRESIDENT'S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of Public Joint Stock Company "Ukrnafta" (the "Company", "Ukrnafta"), a Ukrainian State-owned oil and gas company, are submitted for consideration by the Board of Directors.

The facility will consist of a sovereign guaranteed loan to the Company in the amount of up to EUR 160m (the "Loan"). The Loan will be co-financed by parallel investment grants of up to EUR 121m to be channelled by international donors directly to the Company. The Loan and the grants will finance the construction and installation of c.250 MW of peaking distributed gas-fired co-generation capacity (with individual unit capacity of up to 70 MW) in the Dnipro region (the "Project").

The operation will enable the Company to provide more resilient functioning of the Ukrainian power sector with the substantial addition of flexible generation in the energy mix, thus improving energy security and availability and quality of electricity supplies to the Ukrainian population and businesses.

The expected transition impact of the Project is driven by energy security through the construction of urgently needed distributed flexible power generation and crisis response actions in line with the Company's governance and human capital recovery priorities. The Project aims to enhance the resilience of the Ukrainian power system amidst continuing military attacks on the energy infrastructure and enable the Company to contribute to an uninterrupted electricity and heat supply to the population, industry and businesses. (Resilient). The Project will introduce significant enhancements to the Company's corporate governance and corporate climate governance (CCG) frameworks, recognising that robust CCG is strategic for long-term business resilience, energy security, investor confidence and alignment with the global shift towards a low-carbon economy. This will include developing a comprehensive sustainability strategy and a climate transition plan, incorporating a roadmap for investment opportunities in clean energy and low-carbon technologies, alongside clear decarbonisation targets and a rigorous GHG reduction framework. The Project will also contribute to advancing EBRD's long-standing engagement to reform governance of SOEs in the country by supporting improvements to the Company's Charter and helping safeguard a transparent CEO appointment process through EBRD's active (non-participatory) monitoring. (Well-Governed). The Project will also help safeguard access to electricity and heat and reduce supply disruptions in the context of elevated risks to people's livelihoods due to Russia's ongoing aggression in the country as well as promote job quality and access to skills development within the Company (Inclusive).

Technical Cooperation ("TC") support for the preparation of the Project is financed by the EBRD Shareholder Special Fund (the "SSF"), while TC support for the Project implementation and corporate governance reforms is expected to be financed by international donors and/or the SSF.

The Project is in line with the Energy Sector Strategy and related Partial Derogation in the Context of Emergency Support to Ukraine ("Partial Derogation"), approved by the Board of Directors in July 2024 for gas-fired electricity and heat generation projects in Ukraine, except for a) size, which exceeds the limit of 50 MW per unit, and b) project category (Category A). The alignment with the Paris Agreement has been confirmed through a detailed independent assessment based on main criteria and general conditions allowing limited engagement as set out in the Partial Derogation memo. Therefore, the Board is requested to extend the Partial Derogation to cover this Project. Such extension is not expected to impact the Bank's overall Paris Agreement Alignment and ESS compliance assessment.

The Project also requires a technical and procedural derogation from the Bank's Environmental and Social Policy, as the Project's environmental and social impacts related to gas-fired generation will not be fully assessed by the time of the Board consideration due to associated security risks and, consequently, the

Project will be subject to a limited implementation monitoring. An independent environmental and social audit will be undertaken at the Project's site within 12 months of termination of the martial law in Ukraine.

Additionally, there is a statutory limitation in Ukraine on disclosure of geographical locations, other sensitive information, and stakeholder engagement due to the ongoing war. Co-generation facilities are also exempt from the Ukrainian EIA legislation. The limited disclosure reflects the Bank's approach to ESDD in Ukraine, aligned with Ukraine's wartime regulations. Given the above, the Board is requested to grant a derogation from the Bank's ESP 2024 and the Bank's ESRs (Environmental & Social Requirements), in addition to shortening the disclosure period from 120 to 60 days. These limitations also affect the depth of analysis possible for the economic assessment of the Project. A similar derogation in respect of the content and timing of disclosure has been sought under the Directive on Access to Information 2024.

The Bank has undertaken an independent risk based environmental and social due diligence and assessment, inclusive of a full ESIA scoping study and a preliminary E&S impact assessment based on available data and assumptions. This is summarized in the disclosed Non-Technical Summary (NTS) for the Project. The Bank's ESD has confirmed that the Project will not negatively impact environmental and social receptors during construction and operations. Through the implementation of the Bank's ESAP, the Company will meet the Bank's requirements in the future. A full ESIA will be undertaken by September 2025, based on detailed Technical Due Diligence (currently underway), and presented to the Bank. Additionally, an independent environmental and social audit will be conducted on the Project site and on corporate Environmental, Social, and Governance management systems within 12 months of termination of the martial law in Ukraine, with results to be communicated to the Board.

I am satisfied that the operation is consistent with the War on Ukraine – EBRD Resilience Package and with the objectives of the Resilience and Livelihoods Framework. The Project is in line with the Strategy for Ukraine, the Energy Sector Strategy 2024-2028 with due regard to the derogation outlined above, it aligns with the Bank's Equality of Opportunity Strategy 2021-2025 as well as 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 - Ukrnafta II

Framework: Resilience and Livelihoods Framework - BDS22-050 (Rev 2) (Corrigendum 1) (Add 65)

\mathbf{T}	ransaction
/	Board
D	ecision

Board approval² is sought for a sovereign guaranteed loan of up to EUR 160m in favour of Ukrnafta (the "Company"), a public joint stock company organised and operating under the laws of Ukraine. The Loan is expected to be supplemented by up to EUR 121m capex grant support from international donors, provided directly to Ukrnafta.[REDACTED]

Client

The PJSC "Ukrnafta" is 100% owned by the State of Ukraine, represented by NAK Naftogaz (50% +1 share) and the Ministry of Defence (50%-1 share). Ukrnafta is Ukraine's largest oil and gas producer as well as the operator of the largest fuel retail chain [REDACTED]

Main Elements of the Proposal

Transition impact

Primary Quality – **Resilient.** The proposed financing package will finance the construction of a brownfield flexible gas-fired heat and power generation capacity in Ukraine. The operation aims to enhance the resilience of Ukraine's power system and ensure uninterrupted energy supply to homes and businesses in the energy deficit regions of the country.

Secondary Quality – Well-Governed. The Project will help advance EBRD's long-standing engagement to reform governance of SOEs in the country by supporting improvements to the Company Charter and enabling EBRD to monitor (in a non-participatory manner) the process of CEO appointment to ensure that it is merit-based, impartial and transparent. In addition, the Project will support the development of a sustainability strategy and a climate transition plan, in line with emerging international standards and best practices.

Tertiary Quality – **Inclusive.** The Project will help safeguard access to electricity for people, preserving their living standards and livelihoods under Russia's ongoing full-scale aggression, and promote job quality improvements and access to skills within the Company's accounting team. 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. **Risk mitigation**: EBRD's ability to accept country and political risk enables it to continue financing in Ukraine during wartime, enabling continued financing and mobilising support from other donors and investors. **Standard-setting**: EBRD helps the client adopt international best practices in procurement, environmental management, and ESG standards, going beyond business-as-usual in a high-risk context

<u>Sound banking:</u> given the heightened risks, the presence of the Ukraine sovereign guarantee is important to mitigate financial risks arising from the war-stressed economy. The project is co-financed by a large amount of grants [REDACTED]

Key Risks

[REDACTED]

Strategic Fit Summary

War on Ukraine – EBRD Resilience Package - Resilience and Livelihoods Framework: Focus on energy security in Ukraine; Strategy for Ukraine: Strengthen energy security; Energy Sector Strategy: Energy security; Equality of Opportunity Strategy 2021-2025: Ensuring access to vital services and promoting human capital recovery and resilience.

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

ADDITIONAL SUMMARY TERMS FACTSHEET

-	ADDITIONAL SUMMARY TERMS FACTSHEET
EBRD Transaction	A sovereign guaranteed loan of up to EUR 160m (the "Loan") to Public Joint Stock Company "Ukrnafta" ("Ukrnafta" or the "Company"). The Loan will finance the construction of a combined-cycle co-generation plant in the Dnipro region (the "Project"). The Project has an estimated total generation capacity of up to 250MW [REDACTED]. The EBRD loan will be complemented with up to EUR 121m investment grants to procure equipment, provided directly to Ukrnafta.
Mutual Reliance	No
Existing Exposure	[REDACTED]
Maturity / Exit / Repayment	10-years [REDACTED] .
Potential AMI eligible financing	None
Use of Proceeds - Description	The Loan proceeds will be used for financing of an EPC works contract covering the installation of grant-funded gas-fired power generation/cogeneration units and other equipment with total capacity of c. 250MW, as well as the services of a Project implementation support/works supervision consultant.
Investment Plan	Procurement of gas-fired power generation/cogeneration equipment and related works financed by the EBRD loan (EUR 160m) and the capex grants (EUR 121m).
Financing Plan	[REDACTED]
Key Parties Involved	Borrower - Ukrnafta Guarantor - Ukraine represented by the Ministry of Finance Grant providers - multilateral or bilateral international donors.
Conditions to effectiveness	[REDACTED]
Mandatory Prepayment / acceleration event	[REDACTED]
Key Covenants	[REDACTED]

Sovereign Guarantee of Ukraine.	
Guarantee Agreement between the Bank and Ukraine.	
A. Technical Cooperation (TC)	
Pre-signing:	
TC1: Environmental and Social Impact Assessment of the Project.	
[REDACTED]	
TC2: Advance Procurement Support Consultant to assist the Borrower with	
preparation of procurement documents, and support with tendering and contracting.	
[REDACTED]	
Post-signing:	
TC3: Corporate Climate Governance assignment to support the development of	
the Borrower's sustainability strategy and climate transition action plan, including	
development of climate risk management tools and metrics, under the Corporate	
Climate Governance Facility (CCGF). [REDACTED]	
TC4: Executive Search Services for selection of Ukrnafta's CEO. EBRD may	
engage a third-party recruitment firm of recognised reputation and track record to	
assist the supervisory board with transparent, competitive and merit-based selection	
of a new Ukrnafta's CEO in line with best corporate governance standards.	
[REDACTED]	
TC5: Lender's Technical Monitor (Lender's Engineer) to be engaged by the Bank	
to monitor the implementation of the Project. [REDACTED]	
Client contributions: The Company will finance Project Implementation Support	
and FIDIC Engineer consultant from EBRD loan proceeds [REDACTED]	

[REDACTED]

INVESTMENT PROPOSAL SUMMARY

1. STRATEGIC FIT AND KEY ISSUES

1.1 STRATEGIC CONTEXT

The ongoing war on Ukraine has significantly impacted the country's energy generation capacity. To date, Russia has destroyed [REDACTED] of Ukraine's power generation assets, which represent the majority of flexible generation capacities of Ukraine, i.e. thermal and hydro generation as well as numerous power grid substations. The available installed capacities dropped significantly from the start of the war.

According to the International Energy Agency, the country now operates at about one-third of its pre-war capacity. Although the Ukrainian government has managed to stabilize the situation to some extent, the upcoming winters are expected to become a critical survival test for the war-torn country and its heavily damaged energy system.

The construction of a decentralized flexible energy system is now a key priority for Ukraine, aiming to improve its resilience to attacks and enhance its energy security.

Following these devastating events, the Ukrainian authorities requested EBRD to help stabilise the operation and enable rapid recovery of the power sector.

[REDACTED]

Ukrnafta launched and prioritised development of the co-generation programme in 2024, identifying a number of existing co-generation sites for the installation of gas co-generation facilities. By utilizing its own gas resources, the programme aims to alleviate pressure on the national grid, enhance energy security and bolster resilience, thereby reducing the risk of total power outages in the war-affected regions.

[REDACTED]

The Project is in line with the War on Ukraine – EBRD Resilience Package endorsed by the Board and consistent with the objectives of the War on Ukraine - EBRD Resilience Package - Resilience and Livelihoods Framework, aimed to help citizens, companies and countries affected by the war in Ukraine. The Project specifically targets the Resilience and Livelihoods Framework focusing on energy security in Ukraine through the construction of the distributed power generation facilities, enabling to provide uninterrupted energy supply to affected customers. The Project is also in line with the Strategy for Ukraine and the Energy Sector Strategy, as it will strengthen energy security in the country. Last but not least, the Project aligns with the Bank's Equality of Opportunity Strategy 2021-2025 through its actions towards human capital recovery and resilience in response to economic crises and shocks.

1.2 TRANSITION IMPACT

The table below sets out the TI Objectives and details of the project.

Primary Quality: Resilient

Obj. No.	Objective	Details
1.1	The sub-operation supports the	The implementation of the Project will enhance
	Resilient quality of the FW through Energy security	Ukraine's energy security by financing the construction of distributed flexible generation capacities. The

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).

Project aims to enhance the resilience of integrated power system of Ukraine amidst continuing military attacks on the energy infrastructure and enable the Company to contribute to an uninterrupted electricity supply across Ukraine.

The municipality hosting the Project units will benefit from the excess heat generated during electricity production. This heat will be supplied to municipal district heating operators, supporting households, businesses and social infrastructure.

Secondary Quality: Well-Governed

	Secondary Quality: Well-Governed		
Obj. No.	Objective	Details	
2.1	The sub-operation contributes to the Well-Governed quality of the FW on two independent but mutually reinforcing tracks: (i) supporting the development and implementation of specific improvements across [REDACTED] Corporate Climate Governance (CCG),	(i) Through EBRD's engagement, the Company will commit to the development, adoption and timely implementation of Corporate Climate and Sustainability Governance improvements, which will support the implementation of at least two benchmarked improvements for each of the three targeted dimensions of CCG. Namely, the Company will implement changes to the following dimensions:	
	and (ii) improvements in the Company Charter, and EBRD's monitoring (non- participatory) of the process of CEO appointment [REDACTED].	Governance and accountability: the Company will commit to enhance the Board's and Management's knowledge in sustainability-related issues with focus on climate through training and appoint a senior officer in charge of (a) sustainability strategy development, (b) managing sustainability and climate-related risk management and reporting and (c) ensuring clear accountability and reporting lines.	
		Strategy: The Company will commit to develop a sustainability strategy with focus on climate with short, medium and long term targets that will be aligned with the Company's specific business strategy and financial planning. The Company will carry out a double materiality assessment, including the development of a stakeholder engagement plan.	
		Risk management and processes: The Company will commit to run diagnostic of climate risks [REDACTED] which will allow the Company to better anticipate and prepare against climate risks. More generally, the Company will commit to develop a methodology for identification and	

assessment of climate-related risks (both transition and physical) and opportunities based on scenario analysis and climate stress tests. The Company will commit to design and deliver a comprehensive training/ capacity building programme covering climate- and sustainability-related performance.

<u>Reporting</u>: The Company will commit to publicly disclose some of the CCG improvements as part of its sustainability reporting.

- (ii) In addition, the EBRD will:
- 1) <u>Continue policy dialogue with the Company to improve its Charter</u> to help insulate key operational decisions (such as CEO appointment and dismissal) from undue political influence by the Company shareholders.
- 2) Monitor (in a non-participatory manner) the Company's merit-based recruitment of a new CEO – a process to be led by the Company's supervisory board – in line with latest legislation and standards on governance of Ukrainian SOEs. This will levels contribute to maintaining high transparency and accountability in the Company's corporate governance practices. Hiring of highly qualified executive leadership is key to advancing reforms, improving operational operational resilience, and aligning the Company with applicable domestic and international practices. As required by the supervisory board, EBRD may provide a technical assistance grant to engage a professional executive search services firm with a recognised track record and reputation to facilitate the selection process.

Execution Risk: Delivery of the corporate governance improvements may be exposed to some execution risk where cooperation with the Company is required but cannot be realistically locked in. This notably applies to EBRD's ability to monitor the Ukrnafta CEO recruitment process, which depends on sound and timely exchanges of information with the Company. To mitigate, EBRD will maintain regular check-ins with the Company's supervisory board to ensure continuous and timely information exchange and visibility on processes.

2.2. The client will implement [REDACTED] improvements for each targeted dimension of CCG.

Each of the proposed CCG improvements will go beyond the relevant legal and regulatory requirements in Ukraine. By developing these practices, the Company will create a positive

demonstration effect, acting as a catalyst for broader industry adoption and driving momentum towards a low-carbon, sustainable economy. The benchmarks for the suggested impact actions are as follows: Governance and accountability: (a) develop a sustainability and climate-related oversight; (b) appoint a senior officer in charge of managing climate-related risks and reporting; (c) ensure clear accountability and reporting lines. Strategy: (a) develop a sustainability strategy and climate transition action plan in line with emerging international standards; (b) develop and implement GHG emission reporting methodology as part of the strategy. Risk management and processes: (a) perform a diagnostic of climate risks [REDACTED]; (b) develop a methodology for identification and assessment of climate-related risks; (c) design and deliver a comprehensive training / capacity building programme covering climateand sustainability-related performance in line with emerging international reporting standards and industry best practices. Reporting: The Company will publicly disclose some of the CCG improvements as part of its sustainability

Tertiary Quality: Inclusive

<u>reruary</u>	ry Quanty: Inclusive		
Obj. No.	Objective	Details	
3.1	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; human capital development or preservation; and access to employment and training.	The Project will help safeguard access to electricity and heating in the context of elevated risks to people's livelihoods due to Russia's ongoing full-scale aggression in Ukraine. The Project, in particular, will help reduce war-related disruptions of electricity and heating supply to people's homes and workplaces and reduce the hours of power outages, enabling people to carry out their economic activities and, as such, maintain their livelihoods. Through the EBRD's engagement, the Company will also introduce new working practices to its accounting	

reporting.

department, improving the quality of work and access to new skills for its local team [REDACTED], accredited in line with local norms. The new initiative will introduce modern accounting processes and technologies streamlining this function of the Company's work while delivering new training and career opportunities. The initiative is developed in line with Ukrnafta's human capital recovery priorities in the
context of labour market challenges imposed by the Russia's ongoing war of aggression in Ukraine.

[REDACTED]

1.3 ADDITIONALITY

Identified triggers	Description
No triggers identified	N/A

Additionality sources	Evidence of additionality sources
Financing Structure	- EBRD is offering financing, which is not
- EBRD offers financing that is not	available in the market due to the ongoing war
available in the market from	and high level of risk and uncertainty in
commercial sources on reasonable	Ukraine.
terms and conditions, e.g. a longer	- EBRD financing will be supplemented by
grace period. Such financing is	grants with donors relying on country and
necessary to structure the Project.	sector expertise of the Bank.
- EBRD offers a tenor , which is longer	- EBRD is offering 10-year tenor for the Project,
than available to the client in the	which is longer than is available in the market
market on reasonable terms and	in the current war environment.
conditions.	
 Crisis response: EBRD financing 	
effectively bridges a financing gap	
due to adverse market conditions.	
Risk mitigation:	The Bank has been the first IFI to begin financing
	Ukrainian clients following the Russian invasion
- EBRD provides comfort to clients	in February 2022 and continues to play a leading
and investors, financial or strategic,	role in supporting the energy sector of Ukraine
by mitigating non-financial risks,	during the war. Following the recent capital
such as country, regulatory, project,	increase, the Bank is now able [REDACTED]
economic cycle, or political risks.	to provide additional financing to SOEs and
- EBRD's ability to absorb risk in a	positioning it to play a central role in country's
certain country/region, where other	resilience and recovery. The Bank's active role in
IFIs/commercial financiers	the sector has been also to promote coordination of
reached their limit exposure.	joint efforts among Ukraine's financing partners
	and international donors aimed at strengthening
	energy security of the country and attracting
	investors in the industry.
Standard-setting: helping projects and	EBRD funding and application of Bank's PPRs
clients achieve higher standards	will ensure wider market outreach, particularly in
- Client seeks/makes use of EBRD	the current high-risk environment.
expertise on best international	

	procurement practices and	EBRD funding of the TC for the development of
	standards.	the ESG strategy will support the Borrower to
-	Client seeks/makes use of EBRD	develop and implement ESG strategy.
	expertise on higher environmental	
	standards, above 'business as usual'	
	(e.g. adoption of emissions standards,	
	climate-related ISO standards etc.).	

1.4 SOUND BANKING - KEY RISKS

Risks	Probability	Comments
	/ Effect	
Risks related to	the Borrowei	
[REDACTED	[REDACT	[REDACTED]
]	ED]	
[REDACTED	[REDACT	[REDACTED]
]	ED]	
[REDACTED	[REDACT	[REDACTED]
]	ED]	
[REDACTED	[REDACT	[REDACTED]
]	ED]	
External		
risks		
[REDACTED	[REDACT	[REDACTED]
]	ED]	

2. MEASURING / MONITORING SUCCESS

Primary Quality: Resilient

Obj. No.	FW monitoring indicator	Corresponding SO monitoring indicator	Details	Baseline	Target	Due date
1.1	Infrastructure Services Sustained and Expanded	Net increase in energy infrastructure usage and/or capacity	The Project will result in construction of approximately up to 250 MW of new flexible distributed power generation capacities.	0	250 MW	[REDA CTED]

Secondary Quality: Well-Governed

Obj. No.	FW monitoring indicator	Corresponding SO monitoring indicator	Details	Baseline	Target	Due date
2.1.	Economic governance in target sector and clients improved	[1] investee firm improving standards. [TC]	Sustainability / climate business practices improved: governance and accountability: The Company will define and adopt sustainability / climate- related governance and	No	Yes	[REDA CTED]

2.2.	Economic governance in	[1] investee firm improving	accountability improvements, including the following actions: - Sustainability / climate-related topics included in the agenda of the Board meetings regularly, - [REDACTED] dedicated sustainability / climate-related training/workshop delivered to the Board and Management [REDACTED], - Appointment of a member of the senior management to be responsible for climate and sustainability-related matters. Recognised climate and sustainability	No	Yes	[REDA CTED]
	target sector and clients improved	standards. [TC]	framework adopted: The Company will develop and submit to the Bank the sustainability strategy and climate transition action plan, with reference to their current practices and a comprehensive plan of actions to improve the practices on climate related issues. In addition, the Company will disclose publicly the key CCG-related improvements.			CIED
2.3.	Economic governance in target sector and clients improved	[1] investee firm improving standards. [TC]	Climate business practices improved: risk management: The Company will develop a methodology for identification and assessment of climate-related risks (transition and physical) and opportunities, based on scenario analysis and	No	Yes	[REDA CTED]

			climate stress tests [REDACTED].			
2.4	Economic governance in target sector and clients improved	[1] investee firm improving standards.	Standards of merit- based <u>CEO</u> <u>appointment</u> process improved.	No	Yes	[REDA CTED]
2.5	Economic governance in target sector and clients improved	[1] investee firm agreeing to business advisory recommendation s	The Company's Charter revised at least once to better align with latest applicable legislation and best international corporate governance standards.	No	Yes	[REDA CTED]

Tertiary Quality: Inclusive

Obj.	FW	Corresponding	D.4.2.	D	T	Desa de (
No.	monitoring indicator	SO monitoring indicator	Details	Baseline	Target	Due date
3.1	Municipal infrastructure services sustained and expanded	Expanded or maintained access of vital products or services.	The Project will help safeguard access to electricity and heating in the context of the elevated risks to people's livelihoods due to Russia's ongoing full-scale aggression on Ukraine.		Yes	[REDAC TED]
3.2	11	Practices of relevant stakeholder improved (job quality).	The Company will introduce new working practices to its accounting department, improving the quality of work and access to new skills [REDACTED].		Yes	[REDAC TED]
3.3	employment	Tailored training programme developed and implemented.	The Company will deliver a new training programme on modern accounting processes and technologies streamlining this function of its work in line with new staff training and career opportunities.		Yes	[REDAC TED]

3. KEY PARTIES

3.1 BORROWER / INVESTEE COMPANY

The Public Joint Stock Company "Ukrnafta" (the "Company" or "PJSC Ukrnafta") is the Ukraine's largest oil and gas producer [REDACTED]. Its principal activities are exploration, development, production,

processing and distribution of crude oil, condensate, natural gas and petroleum products. It owns and operates three gas-processing plants, 490 petrol filling stations [REDACTED]

3.2 GUARANTOR

The Ukrainian economy grew by 2.9% in 2024 (2023: 5.5%), marking a partial recovery from a sharp fall at the start of the war in 2022. Many sectors demonstrated resilience, with businesses adapting to difficult conditions; the newly operational Black Sea corridor has facilitated the first recovery in exports after years of contraction. However, growth momentum remains limited amidst the ongoing war and uncertain outlook of peace agreement.

Inflation reaccelerated in late 2024, reaching 15.1% by April 2025. This was driven by increased electricity prices, adjustments to regulated utility tariffs, strong wage growth and a 10% depreciation of the hryvnia following the end of the exchange rate peg in October 2023. In response, the National Bank of Ukraine raised the policy rate by 250 basis points to 15.5% to curb inflationary pressures. Whilst inflation remains high in the first half of 2025, it is expected to moderate to single digits by year-end.

[REDACTED]

Ukraine is currently rated as "RD" by Fitch (affirmed on 23 May 2025), "SD-" by Standard & Poor's (affirmed on 28 February 2025) and "Ca" by Moody's (affirmed on 30 May 2025). The ratings from S&P and Fitch reflect the impact of the recent restructuring of the country's international bonds.

4. MARKET CONTEXT

• 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.

[REDACTED]

- Gas-powered power producers are envisaged to structure their offtake in line with the market practice, through sale at prices determined by supply and demand balance on competitive market segments. Electricity market prices remain high in Ukraine, which mitigates the merchant offtake risk. Average monthly prices on day-ahead market (DAM) have been steadily growing, reaching record 139 EUR/MWh in February 2025 (+75% YoY). This increase has been driven by the significant deficit of electricity supply, which, for summer months of 2024, was aggravated by scheduled repairs of blocks of nuclear power plants and further shelling of power assets. The sector Regulator increased price caps starting from June 1, 2024, which has contributed to increase of DAM prices. Imports added up to 4,437 GWh over 2024, due to massive attacks on and destruction of power assets over the year. Starting from 2026, DAM/IDM prices are projected to slightly stabilise in the medium term, considering the IPS deficit holds but shrinks, given the restoration of some of the existing and construction of new distributed generation capacities during 2024-2025. Besides, due to significant loss of thermal power generation, the share of cheaper production sources is going to increase, namely solar and nuclear power. In the longer term the price growth is expected to follow the trends on the ENTSO-E markets given Ukraine's gradual integration into them.
- Pursuant to the MoU signed between the Bank and the Government of Ukraine on 5 June 2024, the following projects were signed over the past six months and are currently being implemented: Ukrnafta: EUR 80m loan for construction of gas to power distributed power generation, Ukrzaliznytsia: EUR 180m loan for construction of distributed power generation, NAK Naftogaz: EUR 270m loan for emergency procurement of gas over two heating seasons (2025-2027).
- The competitive landscape for petroleum products changed entirely after the war started. Fuel traders in
 Ukraine ceased importing petroleum products from Russia and Belarus and had to substitute them by EU
 products, which created additional difficulties with logistics and led to temporary increase in demand and

prices for petroleum products. Before the invasion only one of Ukraine's six refineries, Kremenchuk, which had a processing capacity of 370,000 b/d was operating. However, this facility was damaged by Russian missiles in 2022, which affected availability of its production capacities. In 2024, Poland, Romania, Moldova, Lithuania, Hungary and Greece remained the main exporters of petroleum products and LPG to Ukraine.

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

Category A (2024), high risk due to country, sector and size. Investments are for installation works of a co-generation plant with the total capacity of up to 250 MWe, which is above the 300 MW thermal threshold for A category projects under the Bank's ESP [REDACTED]. The equipment has been donated by the Government of Sweden and the Project will be implemented [REDACTED]. A limited ESIA consisting of Non-Technical Summary (NTS), Stakeholder Engagement Plan (SEP) and Environmental and Social Action Plan (ESAP) was disclosed on 8 May 2025.

The Project was subject to the Bank's limited E&S due diligence due to the war constraints, security risks and thus will require a derogation as outlined below. The limited disclosure reflects the Bank's approach to ESDD in Ukraine, aligned with Ukraine's wartime regulations.

There is a statutory limitation in Ukraine on the disclosure of geographical locations, other sensitive information, and stakeholder engagement due to the ongoing war. Co-generation facilities are also exempt from the Ukrainian EIA legislation. Given the above, we seek a derogation from the Bank's ESP 2024 and the Bank's ESRs (Environmental & Social Requirements), in addition to shortening the disclosure period from 120 to 60 days.

The Project necessitates Board approval for a technical and a procedural derogation from the Bank's Environmental and Social Policy (ESP). This is due to the time and degree of information we can access and verify associated with the ongoing war. Therefore, the project's E&S impacts would not be fully assessed, disclosed, or meaningfully consulted at the time of the Board consideration. A similar derogation in respect of the content and timing of disclosure has been sought under the Directive on Access to Information 2024.

Notwithstanding the above constrains the Bank has undertaken an independent risk based environmental and social due diligence and assessment, inclusive of a full ESIA scoping study and a preliminary E&S impact assessment based on available data and assumptions for 4 alternatives scenarios. This is summarized in the Non-Technical Summary (NTS) for the project. The Bank's ESD has confirmed that the project will not have major adverse impacts on environmental and social receptors during construction and operations and meet BAT (Best Available Technology) requirements under EU regulations. Through the implementation of the Bank's ESAP, the Company will meet the Bank's requirements in the future. A full ESIA will be undertaken by September 2025, based on detailed Technical Due Diligence (currently underway), and presented to the Bank. Additionally, an independent environmental and social audit will be conducted on the Project site and on corporate Environmental, Social, and Governance management systems within 12 months of martial law lifting in Ukraine, with the results communicated to the Board.

Socio-economic and demographic data has been reviewed during ESIA scoping by an independent consultant who has confirmed that the project is located in an industrial zone with no sensitive social receptors in immediate vicinity. Project construction will be implemented under special Security Plan and all industry-specific health and safety standards, including traffic management and construction engineering supervision. Land is state-owned (by municipality) that also operates the heating plant. Some land and livelihood impacts are expected depending on OHTL and gas pipeline connection points. Cadastral data outside project area is currently not available due to martial law, however, full assessment and compliance with ESR5 will be achieved as agreed with the Company and included into the ESAP. Project-specific Stakeholder Engagement Plan (SEP) and grievance mechanism have been developed and adopted by the Company, containing precautionary approach to meet national requirements and to protect safety of stakeholders without compromising the purpose of consultation, which will take place at the project level via bilateral and targeted engagements and safe information sharing. Additional public consultation and full ESIA disclosure will be carried out and updates to SEP and public consultation summary will be made once the Martial Law is lifted.

Through the implementation of the Bank's ESAP, the Company will meet the Bank's requirements in the future. A full ESIA will be undertaken by September 2025, based on detailed Technical Due Diligence (currently underway), and presented to the Bank. Additionally, an independent environmental and social audit will be conducted on the Project site and on corporate Environmental, Social, and Governance management systems within 12 months of martial law lifting in Ukraine, with the results communicated to the Board.

An independent consultant will be appointed by the Bank to undertake additional studies and monitor the implementation of the ESAP. The Bank will also work with the Company on developing best ESG management practices and a TC will be developed to help with the implementation of a double materiality assessment to help with internal monitoring and assurance programs.

6.2 INTEGRITY

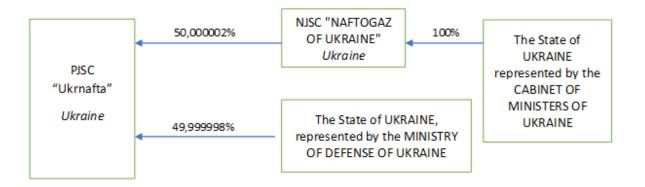
In conjunction with OCCO, updated integrity due diligence was undertaken on the Company, its shareholders, senior management and other relevant parties. [REDACTED]

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	PROJECT IMPLEMENTATION
ANNEX 3	GREEN ASSESSMENT SUMMARY
ANNEX 4	HISTORICAL FINANCIAL STATEMENTS

ANNEX 1 – SHAREHOLDING STRUCTURE



ANNEX 2 – PROJECT IMPLEMENTATION

Procurement classification – Public (Sovereign)

[REDACTED] The capacity of the Company to implement the Project was assessed by the PIA. The Borrower has strong in-house procurement, technical, financial and legal expertise, which will be available to the PIU during procurement and implementation. While the available procurement and technical staff are assessed as sufficiently qualified in their respective professional fields, the lack of experience of international tendering, in particular multi-stage procedures, represents a moderate risk to efficient implementation of the proposed investments, and the Company will need to be supported to implement procurement in accordance with Bank's procedures. To mitigate this risk an experienced procurement support consultant will be engaged to guide the Company through procurement process and supervise contract implementation.

Contracts risk assessment High

The planned EPC works contract is considered complex. [REDACTED]. The preliminary designs are being developed by the due diligence consultant³, based on the technical data provided by Siemens. There is a risk of delays with obtaining approval from local authorities, which is expected to be mitigated by wider efforts of the Government and other SOEs implementing the national power generation localisation strategy via optimisation of related design approval, licensing and other processes. The scope of the future works contract will include development of the detailed design, supply of the balance of the plant, installation and commissioning, and execution of related works on-site.

The Bank-engaged advance procurement consultant will ensure balanced risk allocation is incorporated in the employer's requirements and contract conditions. The Project Implementation Consultant will supervise the works and ensure any contractual issues that may arise are addressed in a professional and timely manner and in accordance with the contract conditions. The support of experienced consultants will also ensure that contractors' responsibilities for design requirements, including ESHS requirements and actions included in the ESAP, are clearly defined in the procurement documents.

Project implementation arrangements

A dedicated PIU is established to be supported by in-house procurement, technical, financial and environmental departments. The PIU will have an overall responsibility for the implementation of the Project. The PIU will be supported by an experienced procurement consultant to guide through procurement processes, as well as the loan-funded Project Implementation Support consultant to assist the PIU and the Company with all aspects of implementing the Project and reporting in accordance with Bank's policies and procedures.

There are no outstanding land acquisition issues, as the new facility will be built at the site allocated for Company's use for the purposes of Project construction.

Considering the limited possibility of site visits by own staff, the Bank is planning to engage a Lender's Technical Monitoring consultant with the focus on the contract implementation phase.

Procurement arrangements

The Project is classified as public sector for procurement purposes. With the exception of the Procurement Support consultant, the works and consultancy services financed from the Bank's loan will be procured through open competitive tendering in accordance with Section III, Articles 1, 2, and 3 of the PPR. All contracts will be subject to prior review by the Bank. No derogations or exemptions from PPR are envisaged at this point. The Procurement Support consultant will be engaged by the Bank.

³ Final report expected in August 2025.

[REDACTED]

ANNEX 3 – GREEN ASSESSMENT SUMMARY

SUMMARY

- The Project provides emergency gas-based electricity to the national power grid in Ukraine and heat to the local users (combined cycle cogeneration). Although emissions intensive, this is the only technically available option for the urgent provision of energy within a short timeframe for Ukraine. Other solutions would require more years to come on stream. To note, the Project has no technical, regulatory, commercial or legal constraint to prevent reducing its use over time when other cleaner solutions will become available.
- The Project is determined aligned with both mitigation and adaptation goals of the Paris Agreement.
- The Project is attributed **0% GET.**
- [REDACTED]

PARIS ALIGNMENT ASSESSMENT For Direct finance projects

- 1. 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 project is
 in a high emitting sector, with annual GHG emissions expected to be over 500,000 tCO2e/yr
 once it starts operating at full load and high utilisation rates. An assessment for mitigation
 has been conducted, including a review of the NDC, low carbon pathway, economic and
 carbon lock in assessment. Full details in the following section. Furthermore:
 - The projects activity is not included in the 'MDBs' aligned list'.
 - There are no activities included in the 'non-aligned list'.
 - Applicable additional or specific conditions associated with the 'aligned' project/economic activity have been met. A carbon lock-in and an economic assessment were carried out.
- 2. Alignment with the mitigation goals of Paris Agreement Specific assessment The project is classed as high emitting and has undergone a specific screening to check that the Project is aligned with the Paris Agreement. The relevant considerations are set out below:
 - a) NDC review. NDCs and LTSs and other related policy plans

Ukraine's latest submitted <u>NDC</u> (2021) commits the country to an economy-wide net domestic reduction of 65% in GHG emissions by 2030 (vs. 1990), which includes the energy sector. The NDC does not excludes new gas-based electricity generation capacity and points at completing structural changes and the liberalisation of the gas and electricity markets. Ukraine's NDC also refers to the 'construction of up to 2 GW of peak and semipeak shunting heat generation' as an area where the Government needs support. Moreover, the approved and adopted <u>National Energy and Climate Plan 2025-2030</u> (NECP, 2024) is consistent with the EU's energy regulation (energy acquis), under Ukraine's legally binding commitments as a contracting party to the Energy Community Treaty. The national plan was supported by Europe's Energy Community Secretariat. The NECP commits Ukraine to, inter alia, an economy-wide net domestic reduction of 65 % in GHG emissions by 2030

(vs. 1990 levels, in alignment with its NDC), a minimum 27% share of renewable energy sources in gross final energy consumption and coal phase out by 2035. The NECP also estimates to install 1,250 MW of highly flexible capacity with quick start-up capability by 2030 to maximise renewable electricity production and minimise curtailment. Ukraine has also publicly announced a Net Zero 2050 for the energy sector and a Net Zero 2060 commitment for the whole economy.

The Project, which contributes towards Ukraine's urgent electricity and heat needs, has characteristics of high manoeuvrability and flexibility to directly support the above balancing services – in fact, to the best of the knowledge of the team, it is the first large-scale of the NECP "highly flexible installations" under development since the beginning of the war. It also replaces (mostly coal based) thermal generation capacity damaged by the war and avoids local investment in diesel-based solutions. The Project is consistent with Ukraine's climate ambitions.

Table 1. Estimate of total consumption (installed capacity, gross electricity production), expected from each renewable energy source in Ukraine, to achieve mandatory indicative targets for 2030 and indicative intermediate trajectory for achieving the share of energy from renewable sources in electricity generation for 2021-2030

Electricity generation by source	202	20	200	21	202	22	202	23	202	24	202	25	202	26	202	27	20:	28	202	9	20.	30
, our co	MW	GW · h	MW	GW · h	MW	GW · h	MW	GW · h	MW	GW · 1												
Hydropower plants:	4 824	6 002	4 850	9 135	4 852	6 910	4 864	6 935	4 876	6 964	4 887	6 987	4 898	7 010	4 910	7 035	4 922	7 060	4 928	7 085	4 935	7 100
capacity over 10MW	4 708	5 793	4 730	8 868	4 730	6 680	4 740	6 700	4 750	6 720	4 760	6 740	4 770	6 760	4 780	6 780	4 790	6 800	4 795	6 820	4 800	6 830
capacity up to 10 MW	116	209	120	267	122	230	124	235	126	244	127	247	128	250	130	255	132	260	133	265	135	270
Geothermal energy											4	20	8	40	12	60	16	80	18	90	20	100
Photoelectric plants, including	6 872	5 969	7 586	7 581	7 813	8 200	8 360	9 200	8 971	10,200	9 355	11,100	9 550	11,600	9 821	12,000	10,725	13,200	11 122	13,800	11,788	14,700
producers	6 093	5 236	6 381	6 430	6 443	6 830	6 545	7 330	6 681	7 750	6 833	8 200	6984	8520	7 179	8 830	7 435	9 220	7 688	9 610	7 976	10,050
consumers, including energy cooperatives and private households	779	733	1 205	1 151	1 370	1 370	1 816	1 870	2 290	2 450	2 522	2 900	2567	3 080	2 642	3 170	3 289	3 980	3434	4 190	3 811	4 650
Wind power plants, including	1 314	3 271	1 535	3 804	2 520	6 400	2 920	7 800	3 320	8 900	3 667	9 900	4 120	11,200 -	4 470	12,400 -	4 820	13,500 -	5 120	14,500 -	5 420	15,800
onshore	1 314	3 271	1 535	3 804	2 520	6 400	2 920	7 800	3 320	8 900	3667	9 900	4120	11,200	4470	12,400	4720	13 150	4 920	13,799	5 120	14,749
marine (offshore)																	100	350	200	701	300	1 051
Biomass, including	210	755	274	941	349	1200	499	2100	651	2680	794	3280	934	3860	1074	4540	1209	5200	1344	5870	1448	6530
solid	107	284	150	388	192	500	209	800	345	1310	479	1820	609	2310	717	2740	831	3200	951	3680	1030	4120
biogas	103	471	124	553	157	700	290	1300	306	1370	315	1410	324	1450	357	1600	378	1700	393	1790	418	1910
biomethane on installations that use natural gas												50		100		200		300		400		500
Highly flexible installations with possibility of fast launch							300		500		700		850		950		1050		1150		1250	
Energy storage installations			1		100		200		300		380		440		490		540		590		640	
Total (from RES)	13,220	15,997	14,245	21,461	15,535	22,710	16,643	26,035	17,817	28,744	18,706	31,287	19,510	33,710	20,287	36,035	21,692	39,040	22,533	41,345	23,611	44,230

Source: National Energy and Climate Plan of Ukraine 2025-2030 (2024)

b) Low-Carbon Pathways (LCP) review. Consistency with LCPs and other credible benchmarks

The NECP already highlights the decarbonisation roadmap for the electricity sector (see section above). Additionally, the <u>Clean Energy Roadmap: From Reconstruction to Decarbonization in Ukraine</u> developed in 2023 and presented to the international community at COP28, shows how Ukraine can decarbonise the energy sector to net zero by 2050, including the role of different fuels and technologies. As presented in Figure 1, in a net zero transition scenario, unabated natural gas continues to play a role out to 2035 for electricity generation. 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. For the heating sector, the roadmap shows unabated gas continuing to play a role in a net zero transition during the 2030s (see figure 2). As such, the Project's flexible and relatively small-scale natural gas-based heat and power generation is deemed aligned with Ukraine's net zero pathway.

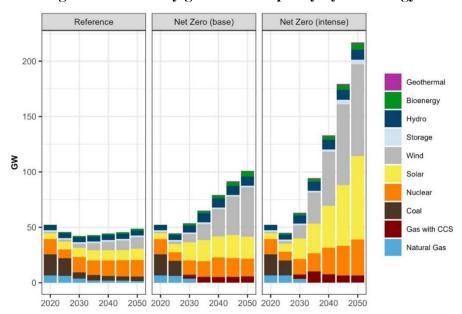


Figure 1. Electricity generation capacity by technology

Source: Clean energy roadmap: From reconstruction to decarbonisation in Ukraine (2023)

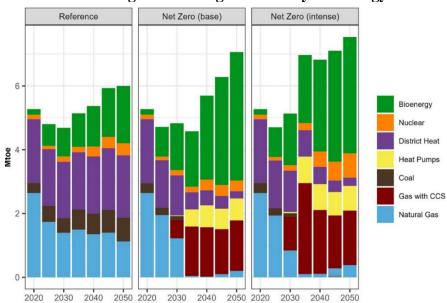


Figure 2. Heat generation by technology

2020 2030 2040 2050 2020 2030 2040 2050 2020 2030 2040 2050 Source:

Clean energy roadmap: From reconstruction to decarbonisation in Ukraine
(2023)

c) Carbon lock-in test

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 assessed as <u>low</u> for the following reasons:

- Readiness for low-carbon molecules or carbon capture. The project can reasonably operate for the short term and be compatible with low carbon solution as and when these can be developed. Retrofits in the 2030s can allow the assets to a) fully switch to clean hydrogen or b) install carbon capture technologies. The economic assessment costs these options; see next section.
- Limited technology lifetime and utilisation. The Project has high-efficiency and high flexibility with ample ability to reduce its annual utilisation over the anticipated technical life. Installed capacity is of relative limited scale in comparison with proper baseload CCGTs (600-1,000MW). The Project is able to run at low utilisation rates and act as a peaking/balancing asset during its operational lifetime, especially as renewables penetration grows in the long term.
- No long-term commercial arrangements. The Project does not have any take-or-pay contracts or other long-term purchase power agreements (PPA) for the sale of electricity and purchase of natural gas. It will sell electricity directly to the Ukrainian electricity market via merchant sales. Heat is supplied to the local companies to distribute through municipal heating networks (the Project would not be able to run on heat-only mode).
- Unfavourable mid and long-term market environment for gas generation. Market dynamics of the energy system in Ukraine are unlikely to favour continued operation when lower-carbon replacements are economically preferable. Further expected declines in renewables LCOE (levelised cost of electricity) will increase the competitive pressure on non-renewable generation, leading to a low incentive to

- keep operating the Project in the long term, beyond grid services if required. Renewables (combined with energy storage) are expected to make up the significant share of electricity generation in the long term, especially as Ukraine has already transitioned to market-based pricing of wholesale and retail energy markets.
- Stringent regulatory conditions for gas-based power generation over the medium to long term. 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. The country is a contracting party to the Energy Community Treaty, thus having legally binding commitments to adopt core EU energy legislation (EU energy acquis). The assets will also be exposed to the competitive pressure of other energy sources for demand over time, particularly if Ukraine aligns with the EU ETS.be exposed to the competitive pressure of other energy sources for demand over time, particularly if Ukraine aligns with the EU ETS.
- Short term solution as a result of on-going adverse circumstances. The financing of the Project is a fast response to the emergency situation to meet immediate energy needs, given Ukraine's depleted capacity. The current provision of electricity and heat, particularly to cover peak demand, is severely insufficient due to damaged thermal generation assets and consequent growing reliance on few small and inefficient diesel-based generators. There are no credible low carbon alternatives with compatible deployment timescales that can meet these needs.

Uncertainties

- Availability and cost-competitiveness of green hydrogen and CCS. Currently, there are no well developed and published hydrogen plans or investment commitments.
- Speed of renewables' LCOE decline and comparison versus gas generation.
- Grid absorption capacity (for renewables uptake).
- Slower than anticipated RE build out.
- Gas price evolution.
- Future changes in commercial model (i.e. from merchant to PPA).
- Accession to the EU (if and when).
- Changes in national legislation and/or plans showing less decarbonisation ambition.

Mitigants

- KPIs on renewables and emissions are reflected in the already adopted NECP:
 - > economy-wide objective to reduce 65% of GHG emissions by 2030 (vs. 1990);
 - > share of renewable sources in total final energy consumption of at least 27% by 2030.
- The EU formally opened accession negotiations with Ukraine in June 2024.
- Ukraine is a contracting party to the Energy Community Treaty, meaning that the country has adopted the treaty and is bound by its terms, including adopting, implementing, and enforcing EU energy, environmental, competition, and renewables rules.

d) Economic assessment incorporating a shadow carbon price

The Project is in line with the eligibility criteria of the ESS partial derogation memo approved by the Board of Directors in July 2024 ("Partial Derogation"), for gas-fired electricity and heat generation projects in Ukraine, except for the size, which exceeds the limit of 50 MW per unit, and project category (Category A). An *extension* of the Partial Derogation is requested, disapplying the requirement to "demonstrate strong ambition to accelerate the low-carbon transition" and to carry an economic viability test. Nonetheless, an independent economic assessment was conducted to compare the Project with both a baseline (absence of the Project) and a low-carbon alternative (investment in renewables

only), utilising shadow carbon prices. The results of the assessment give comfort on the requirement. It should be however noted that the constantly deteriorating conditions of the energy infrastructure in the country along with the high uncertainty on the short/mid-term uptake of investments affect several assumptions underlying the assessment. The analysis builds on the information available at the time of approval, noting that technical studies for the project preparation are still ongoing.

The analysis was outsourced to an external independent engineering consultancy and compares the following scenarios:

- <u>Baseline</u>: in absence of any investment, electricity is supplied through the grid by the existing domestic fleet while heat is provided by the existing heat-only boilers available on-site. Conservatively, it is assumed that the existing installations can fully cover the heat and power demand over the whole period of analysis, disregarding the impact of the war damages on the availability of the energy infrastructure, which would instead more realistically lead to partial unmet demand (with further economic impacts, quantifiable through the Value of Lost Load "VoLL").
- The Project: once the Project is fully operational, it replaces heat and power supply of the baseline. Grid may still provide any energy balance needs, in particular in later years when the Project starts reducing its utilisation rate. The plant will not go through any modification during its operational lifetime.
- The Project with hydrogen retrofit: this case contemplates a retrofit in 2035 of the Project to switch from natural gas to clean hydrogen in order to reduce its carbon footprint.
- The Project with carbon capture retrofit: this case contemplates a retrofit in 2035 to introduce CCS (carbon capture and storage) equipment within the Project in order to reduce its carbon footprint.
- A green investment alternative: this counterfactual explores a scenario whereby investment is channelled towards renewable electricity capacity (wind) combined with additional grid reinforcement and storage, while industrial heat pumps are introduced to provide heat to the local users. This capacity is assumed to come on stream in 2030 to optimistically account for the time required for planning, approving, financing and implementing such investments.

The model used for the analysis matches annual electricity and heat supply across all scenarios, taking into account capital expenditures, fuel and other operating costs, including emissions costs and system needs. Natural gas and electricity prices are based on mid-term projections provided by NJSC Naftogaz (as of November 2024). Clean hydrogen prices are taken from available market reports. CO₂ prices are introduced in accordance with NGFS ('orderly transition') scenarios, as stipulated in EBRD's Paris alignment methodology.

[REDACTED]

Results indicate that the Project presents a lower capex and higher cost savings on a NPV basis versus the counterfactuals (both in absolute terms and per MWh), making it the most cost competitive investment option today, also considering its accelerated decarbonisation role in the early years and the gradual transition to cleaner sources later on.

Unmet demand in the baseline (due to the ongoing severe supply disruptions in the national grid) and the green alternative (due to the supply delay while renewables are being built) should, ideally, be costed at VoLL as it provides a fair metric to quantify the economic value of electricity supply interruptions. A bespoke analysis for Ukraine is not available at present, therefore available figures for neighbouring countries in Europe (such as Poland and Romania) can act as useful comparisons. Relevant studies, including pan-European analytical work by ACER, indicate VoLLs broadly ranging from 3-6 EUR/kWh for residential consumers to 10-30 EUR/kWh for industrial sectors (potentially higher in critical sectors like IT, manufacturing and healthcare). While Ukraine's GDP per capita might be currently lower, supply reliability is far more uncertain, which raises willingness to pay among both households and corporate users. Furthermore, due to war-related disruptions, the perceived value of uninterrupted supply increases, especially for industry. This would justify using higher VoLLs than neighbouring countries. [REDACTED]

Despite the limitations of the data available and assumptions on the evolution of the local circumstances, the economic assessment shows that the Project is a competitive option as a transition technology, as it rapidly delivers reliable and lower-cost energy (heat, steam and electricity) in comparison to the baseline, as well as the green alternative. While renewables are the go-to technology for the mid/long term, the Project helps supporting both the immediate reconstruction and green transition of the sector. The option of whether to invest additional resources for a retrofit in the mid-2030s to continue operating the Project at high load factors, or rather to reduce its utilisation over time (e.g. to provide reserve capacity and related services only) should be taken by the Company closer to that time in light of technical, commercial and regulatory drivers.

3. 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.

4. Specific requirements assessment for highly selective investments in fossil-fuel projects, in accordance with EBRD's Energy Sector Strategy 2024-2028

Crit	eria	Assessment
]	Be aligned with the goals of the Paris Agreement per the EBRD's Paris Agreement alignment methodology.	Aligned. Paris Agreement alignment methodology requires a) NDC review (NDCs and LTSs and other related policy plans, b) LCP review (consistency with LCPs and other credible benchmarks), c) Carbon lock-in tests and d) Economic viability assessment. See 2a) – d).
	Be consistent with NDCs and LTSs;	Confirmed. Consistent on the basis of Paris alignment determination. See 2a) & 2b).
1	Demonstrate that they have a low risk of carbon lock-in and therefore do not lead to carbon lock-in;	Confirmed. Consistent on the basis of Paris alignment determination. See 2c).
6	For projects with significant emissions, be subject to an economic viability test	Confirmed. See economic viability assessment results on 2d).

	incorporating a shadow carbon	
	price;	
•	Be located in a policy context that demonstrates commitment to the goals of the Paris Agreement, and be consistent with this policy context	Confirmed. Satisfied on the basis that Ukraine has repeatedly confirmed its commitment to economy-wide net domestic reduction in GHG emissions and its Net Zero ambition. See 2a) & 2b).
•	Be aligned with a credible low- carbon pathway, either at a national or sectoral level, per the EBRD's Paris Agreement alignment methodology;	Aligned. Satisfied on the basis of consistency of a relatively small volume of short-lived gas generation with Ukraine's NDC and NECP, where certain high flexible capacity with quick start-up capability still plays a role to maximise renewable electricity production and minimise curtailment. See 2b).
•	Not displace renewable sources or low emissions alternatives;	Confirmed. The assessment confirmed the absence of any specific Project characteristic, including long-term purchase power agreements, that would prioritise this Project versus a cleaner alternative when it becomes available.
•	Be consistent with the Bank's Environmental and Social Policy (including requirements for using best available techniques); and	Consistent. The Project meets Best Available Techniques (BAT). The plant will be designed in compliance with EU large combustion plans BAT conclusions. The turbines have modern Dry-Low-Emission burners that will meet EU emissions standards. To note, notwithstanding these technical considerations, the Project is subject to a derogation from the Environmental and Social Policy.
•	Demonstrate that they would not lead to stranded assets and therefore be subject to a thorough assessment of climate-financial risks.	The Project is sovereign guaranteed. Physical climate risk and Carbon transition risks have been confirmed at 2 (no further assessment required). Nonetheless, the undertaken economic assessment confirms the competitiveness of the Project under NGFS net-zero carbon prices, as well as the ability to effectively change its operating regime (or to get retrofitted) over the years in order to respond to changing market dynamics and regulatory contexts.

GREEN FINANCE ATTRIBUTION

The Project is attributed 0% green finance.

[REDACTED]

ANNEX 4 – HISTORICAL FINANCIAL STATEMENTS

[REDACTED]