

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

Approved by the Board of Directors on 29 May 2024¹

NORTH MACEDONIA

MEPSO - TRANSMISSION GRID STRENGTHENING

[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.

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	2
ABBREVIATIONS / CURRENCY CONVERSIONS.....	3
PRESIDENT’S RECOMMENDATION	4
BOARD DECISION SHEET	5
ADDITIONAL SUMMARY TERMS FACTSHEET.....	6
INVESTMENT PROPOSAL SUMMARY.....	8
1. STRATEGIC FIT AND KEY ISSUES.....	8
1.1 STRATEGIC CONTEXT.....	8
1.2 TRANSITION IMPACT	10
1.3 ADDITIONALITY.....	12
1.4 SOUND BANKING - KEY RISKS	13
2. MEASURING / MONITORING SUCCESS.....	14
3. KEY PARTIES	16
3.1 BORROWER.....	16
4. MARKET CONTEXT	17
5. FINANCIAL / ECONOMIC ANALYSIS	18
5.1 HISTORICAL FINANCIALS.....	18
5.2 FINANCIAL PROJECTIONS	18
5.3 SENSITIVITY ANALYSIS	18
5.4 PROJECTED PROFITABILITY FOR THE BANK.....	18
6. OTHER KEY CONSIDERATIONS.....	18
6.1 ENVIRONMENT	18
6.2 INTEGRITY.....	20
ANNEXES TO OPERATION REPORT.....	21
ANNEX 1 - TRANSITION IMPACT SCORING CHART	22
ANNEX 2 – SHAREHOLDING STRUCTURE.....	23
ANNEX 3 – GREEN ASSESSMENTS	24
ANNEX 4 – HISTORICAL FINANCIALS.....	25
ANNEX 5 - PROJECT IMPLEMENTATION	26

ABBREVIATIONS / CURRENCY CONVERSIONS

CAPEX	Capital Expenditure
CBA	Cost Benefit Analysis
CF	Cash Flow
CHP	Combined Heat and Power
COVID	Coronavirus disease
CO2	Carbon dioxide
DSCR	Debt Service Coverage Ratio
E&S	Environmental and Social
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EBRD	European Bank for Reconstruction and Development
ENTSO-E	European Network of Transmission System Operators
EPC	Engineering, procurement, and construction
ESAP	Environmental and Social Action Plan
ERC	Regulatory Authority of the Republic of North Macedonia
EUR	Euro
EURIBOR	European Interbank Offered Rate
FiT	Feed-in Tariff
GDP	Gross Domestic Product
GW	Gigawatt
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
MW	Megawatt
ND	Net Debt
RAB	Regulated Asset Base
RE	Renewable Energy
RES	Renewable Energy Sources
TC	Technical Cooperation
USD	United States Dollar
WBIF	Wester Balkan Investment Framework

PRESIDENT'S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of the Macedonian Transmission System Operator AD (“MEPSO”, the “Borrower” or the “Company”), a 100% state-owned joint-stock company incorporated in the Republic of North Macedonia, are submitted for consideration by the Board of Directors.

The facility will consist of a senior unsecured loan to MEPSO, in the amount of up to EUR 26.4 million. The operation will enable the Company to further strengthen the transmission network in the southeast region of North Macedonia, by targeting (i) the construction of a 400/110kV substation near Miletkovo, (ii) the development of a new connection as well as the rehabilitation of the existing 110kV transmission lines and substations in and between Miletkovo, Valando and Strumica and (iii) develop a training centre for high voltage grid operators and other sectoral specialists (the “Project”).

The Project’s transition impact stem from *green* and *inclusive* qualities. The operation aims to deliver climate energy efficiency benefits by targeting a decrease in electricity transmission losses. It will also enable the connection of up to 1,170 MW of additional renewable energy sources in the country, which is currently not possible due to limited capacity of the local transmission grid. The Project will promote human capital development by supporting MEPSO in setting up a training centre in the southwest region. This centre will not only target its grids operators, but also other sectoral workers affected by the green energy transition.

The Project will also benefit from grant funding provided by the Western Balkans Investment Fund (“WBIF”), totalling EUR 7.6 million and EUR 0.5 million from the Climate Investment Funds (“CIF”). Along with Bank’s financing, total project cost will amount to EUR 34.5 million.

I am satisfied that the operation is consistent with the Bank’s Strategy for North Macedonia, the Energy Sector Strategy, the Equality of Opportunity Strategy 2021-2025, the Strategy for the Promotion of Gender Equality, 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

MEPSO - TRANSMISSION GRID STRENGTHENING – DTM 54625	
Transaction / Board Decision	Board approval ² is sought for a senior unsecured loan of up to EUR 26.4 million in favour of the Macedonian Transmission System Operator (“MEPSO”, the “Company” or the “Borrower”), a state-owned joint stock company incorporated in North Macedonia. The loan proceeds will be used to finance the construction of (i) 400/110kV substation near Miletkovo, and (ii) new connection and rehabilitation of the existing 110kV transmission lines and substations in and between Miletkovo, Valando and Strumica. The operation will also benefit from (i) EUR 7.6 million investment grant from Western Balkan Investment Framework (“WBIF”) and (ii) EUR 0.5 million grant from the Climate Investment Funds (“CIF”) to develop a training centre for high voltage grid operators and other sectoral specialists, bringing the total project cost to EUR 34.5 million.
Client	MEPSO is a regulated transmission system operator, fully owned by the Government of North Macedonia. [REDACTED]
Main Elements of the Proposal	<p>Transition impact: <i>Green</i> quality: the Project is 100% GET compliant, delivering energy savings through investments in the grid targeting the decrease in electricity transmission losses and enabling connection for up to 1,170 MW new renewable energy sources; <i>Inclusive</i> quality: the Bank will support MEPSO in setting up a training centre in the Southwest region dedicated to upskilling its grid operators and reskilling other sectoral workers affected by the green energy transition.</p> <p>Additionality: The Borrower would not be able to source the required financing without the Bank on similar terms and conditions.</p> <p>Standard-setting- Gender SMART Tag: MEPSO will support an outreach campaign to attract females towards a career in the energy sector.</p> <p>Sound banking: The Borrower has a good track record of compliance with financial covenants on its borrowings. Separately, WBIF and CIF grant funding, supported by the Bank, will reduce the investment’s impact on the transmission tariff and further ensure the smooth implementation of the Project.</p>
Key Risks	<p>Regulatory risk: The Bank has a long-standing dialogue with the Energy Regulatory Commission (“ERC”) and the Macedonian government. MEPSO is fully state-owned, which strengthens its ability to operate within the regulatory framework.</p> <p>Cost overruns: The Borrower has acquired extensive experience in the operation of the electricity transmission infrastructure and investments in the grid. The Borrower will engage a project implementation consultant which will support the procurement and construction phase of the Project.</p>
Strategic Fit Summary	The Project is aligned with the Bank’s Strategy for North Macedonia, the Energy Sector Strategy, the Equality of Opportunity Strategy 2021-2025, the Strategy for the Promotion of Gender Equality, and with the Agreement Establishing the Bank.

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

ADDITIONAL SUMMARY TERMS FACTSHEET

Client	MEPSO is a regulated transmission system operator, fully owned by the government of North Macedonia. It was incorporated as an independent Transmission System Operator (“TSO”) in 2005, when the old vertically integrated state-owned utility ESM was unbundled into four companies.
EBRD Transaction	Senior unsecured loan of up to EUR 26.4 million in favour of MEPSO. The loan proceeds will be used to finance the construction of (i) 400/110kV substation (“SS”) near Miletkovo, and (ii) new connection and rehabilitation of the existing 110kV overhead transmission lines (“OHTL”) and substations in and between Miletkovo, Valando and Strumica. The Project will also benefit from EUR 7.6 million investment grant from the WBIF and EUR 0.5 million grant from the CIF to develop a training centre for high voltage grid operators and other sectoral specialists. Total project cost will be EUR 34.5 million.
Existing Exposure	<ul style="list-style-type: none"> • Total debt amount EUR 37 million (North Macedonia-Albania Transmission Phase I – signed in December 2015) [REDACTED]. • Total debt amount EUR 25 million (Rehabilitation and Control Project – signed in December 2013) [REDACTED].
Maturity / Exit / Repayment	The loan assumes tenor of 15 years [REDACTED].
Potential AMI eligible financing	n/a
Use of Proceeds - Description	<p>The loan proceeds will be used to finance:</p> <ul style="list-style-type: none"> • construction of a new 400/110 kV SS near Miletkovo and reconstruction of SS 110/35/10 kV Valandovo; • construct new OHTL connection from SS Miletkovo to SS Valandovo and reconstruction of the existing 110kV OHTL between SS Valandovo, SS Strumica 1 and SS Strumica 2;
Investment Plan	[REDACTED]
Financing Plan	[REDACTED]
Key Parties Involved	<ul style="list-style-type: none"> • MEPSO • EU Instrument for Pre-Accession (“IPA”) funds under the Western Balkans Investment Framework (“WBIF”) • Climate Investment Funds (“CIF”)
Conditions to subscription / disbursement	<p>[REDACTED]</p> <p>Confirmation from ESD that ESAP actions are being implemented</p>
Key Covenants	[REDACTED]
Security / Guarantees	n/a – corporate unsecured loan
Other material agreements	[REDACTED]
Associated Donor Funded TC and Blended Concessional Finance	<p>The Project benefits from a diversified pool of grant funding, as follows:</p> <ul style="list-style-type: none"> • EUR 7.6 million provided by the WBIF (WB-IG08-MKD-ENE-02), consisting of: <ul style="list-style-type: none"> – EUR 4.9 million investment grant – EUR 1.2 million technical assistance for PIU Consultant including project preparation, procurement support, control and monitoring. – EUR 1.5 million technical assistance for Supervision Engineer for substations, transmission lines and training Centre works. • Total costs of EUR 0.5 million for MEPSO training centre will be financed by a grant from CIF, o/w c. EUR 280k for CAPEX and c. EUR 220k TA.

	<ul style="list-style-type: none">• At project development phase, the Project also benefitted by a WBIF technical assistance (WB21-MKD-ENE-03) composed of:<ul style="list-style-type: none">– EUR 0.78 million TA to fund the Feasibility Study and ESIA, completed in February 2023.– EUR 0.5 million TA to fund the preparation of the preliminary design, technical specification and tender documentation for the Project (ongoing).
--	--

[REDACTED]

INVESTMENT PROPOSAL SUMMARY

1. STRATEGIC FIT AND KEY ISSUES

1.1 STRATEGIC CONTEXT

Energy sector transition

Power generation mix of North Macedonia relies heavily on inefficient and outdated coal-fired generation, accounting for approximately 50% of the total. Conventional hydropower generation represents around 20% of electricity production (depending to fluctuation of hydrological conditions). Consequently, the significant dependence on coal poses major social, security and economic challenges. This is particular significant as North Macedonia has pledged to align with the European Union's decarbonisation path towards a carbon neutral economy by 2050. As a signatory to the Sofia Declaration on the Green Agenda for the Western Balkans, the country faces the imperative to address these challenges in transitioning towards more sustainable energy sources.

To overcome these challenges, the Macedonian energy sector is now embarking upon a fundamental transformation, ending its reliance on lignite by 2030 and replacing this with renewable energy and a small fleet of significantly less carbon intensive gas generating units. This is the most rapid and ambitious coal phase-out plan in the Western Balkan region.

The country's National Energy Climate Plan ("NECP") aims to achieve a net reduction in greenhouse gas ("GHG") emissions by 82% by 2030 and 90% by 2040 compared to 1990 through: (i) decommissioning of all 0.7 GW of lignite-fired generation capacity by 2030, (ii) 1.7 GW of new renewable generation capacity by 2030 and (iii) investment in associated grid, storage and gas infrastructure investments to ensure energy security. These commitments are also reflected in EBRD's Loan agreement with ESM (SOE for electricity generation), for the Energy Crises Liquidity Support project, the recently signed Regional Gasification Project with Nomagas and the embedded Action Plan for restructuring of ESM and the Macedonian energy sector.

Building on the NECP, on 13 June 2023, North Macedonia adopted the Just Transition Roadmap (supported by the EU and EBRD). This focusses on ensuring that the green economy transition benefits are shared, while protecting vulnerable people, regions, and communities from falling behind. The roadmap, has four pathways, including 1) private sector investments and start-up economy, 2) green and smart infrastructure, 3) clean energy, and 4) skills development.

Project benefits and MEPSO's critical role in the energy transition

MEPSO as the transmission grid operator, plays a central role in the energy transition. It simultaneously enables rollout of new renewables to the grid while ensuring security of the energy system.

One of MEPSO's key concern is the energy security of supply due to the intermittency of renewables. Transition to renewables will require careful grid planning and upgrades. MEPSO has already received over 8GW of RE connection requests. However, with the availability of operational reserves for frequency control (FCR, aFRR, mFRR) and possibilities to increase the reserves in the short-term, the entire system can currently integrate 1.5GW of renewables.

In addition to the decreasing transmission losses (14.5 GWh loss reduction) and CO₂ reduction (8,158 t/year), the Project will allow potential connection of up to 1,170 MW of additional RES in the country.

This is currently not possible due to limited capacity of the local transmission grid, which can only support 100 MW of RES to the existing old substations in Valandovo, Strumica 2 and Strumica 1. MEPSO already has requested for connection of over 800 MW in the Southeast region, most of which are wind power plants and are now planned to be connected to the new 400kV substation in Miletkovo. Therefore, the Project is expected to have significant contribution to the decarbonisation of the energy sector of North Macedonia.

The EBRD was instrumental for the development of the Project from the very beginning, supporting MEPSO as a lead IFI for WBIF technical assistance grant for a feasibility study, ESIA and preliminary design (WB21-MKD-ENE-03). Following the financial and environment viability of the Project was assessed and confirmed, the EBRD supported, as lead IFI, the application for a WBIF investment grant.

The Project will also promote human capital development by supporting MEPSO in establishing a training centre in the coal-affected Southwest region. The centre will target grid operators but also other sectoral workers affected by the green energy transition.

Given the urgency of the green energy transition associate with an ambitious timeline, which requires immediate necessary grid upgrades and sufficient energy storage capacities in advance of coal-fired power plant retirement and renewable energy deployment, the associated Technical Cooperation (TC) to this project will assist MEPSO in developing a detailed Grid Master Plan. The TC as well will update MEPSO's 10-year network development plan, including absorption capacity for renewables, voltage support, and reactive power management, and help prepare a robust grid investment plan with smart technologies to avoid transition delays and enable a smooth transition.

EBRD's holistic support of the energy sector in North Macedonia

As mentioned, North Macedonia has adopted its enhanced National Determined Contributions ("NDC") and is the first country in the Western Balkan to adopt a National Energy and Climate Plan ("NECP") in 2022, which is now being updated, with the support of the EU (draft expected by end of 2024), and fundamental decarbonisation ambitions are expected to be re-confirmed. Building on this, on 13 June 2023, North Macedonia adopted the Just Transition Roadmap (supported by the EU and EBRD), following which, the CIF selected North Macedonia as the Accelerating Coal Transition ("ACT") Programme pilot country.

In March 2024, the CIF approved USD 85 million concessional funding with an Investment Plan ("IP"), estimated at EUR 680 million for the coal affected regions. This is implemented in collaboration with relevant CIF partner multilateral development banks (MDBs), namely, EBRD (lead), World Bank (WB), and International Finance Corporation (IFC). The training centre of MEPSO was identified as a priority project in the IP and this Project will be the first to benefit from grant funding of the CIF's ACT program for North Macedonia.

The EBRD has also helped to develop and promote at COP 28 an in-country platform for North Macedonia to mobilise donor funding and private sector financing to accelerate just energy transition (the "Platform"). Joint Declaration for the Platform was signed on 3 December 2023 between the government of North Macedonia, the EBRD as lead IFI, and other partner institutions, including EIB, KfW, World Bank, IFC, CIF, CEB and CDP. The Platform has an objective to invest EUR 3 billion by 2030, to: (a) support coal phase out; (b) ensure deployment of 1.7GW of renewable energy, (c) support associated grid and storage investments and enable energy security, and (d) ensure just transition for coal-reliant and vulnerable communities.

In addition to the above, EBRD's holistic support remains central to the green transition of the energy sector in North Macedonia. The Bank has financed the first 40MW large scale solar PV plants with ESM (SOE for power generation) on the coal mines next to the TPP Oslomej and TPP Bitola and showcased a sustainable solution for transition from coal. The Bank is considering project financing of two large scale private PV plants with 240 MW installed capacity combined. EBRD has already provided technical assistance in 2019 to establish an auctioning scheme for 35MW solar PV on public land and 27MW solar PV on private land and further supported ESM and the government to run a Public Private Partnership tender for a 100MW solar PV at the Oslomej coal mine. The auction was successful and two large scale PV plants (50MW each) are already under construction and expected to connect to the grid in 2024. More recently, the EBRD supported the establishment of a new RES Association which aims to facilitate the dialogue between all stakeholders in the energy sector toward proliferation of new RES.

The EBRD has been a key partner of MEPSO, financing several critical projects. These include the interconnections with Bulgaria (completed), the interconnection with Albania (ongoing project) and the rehabilitation of most of the voltage grid (close to completion). The strong cooperation with MEPSO also extends to support a Corporate Governance Action Plan, capacity building of the procurement function, and recently the development of a Grid master plan.

The Project is aligned with the Bank's Strategy for the Republic of North Macedonia , that promotes decarbonisation efforts including increased renewable energy capacity. It is also consistent with the Energy Sector Strategy , the Equality of Opportunity Strategy 2021-2025 , the Strategy for the Promotion of Gender Equality and with the Agreement Establishing the Bank.

1.2 TRANSITION IMPACT

Primary Quality: Green

Obj. No.	Objective	Details
1.1	<i>The percentage of EBRD use of proceeds that supports a green economy transition and therefore qualifies as GET finance exceeds 50%.</i>	The percentage of EBRD proceeds that supports a green economy transition is 100%, and therefore qualifies as GET finance. The Project is instrumental to reduce congestions in the country's electrical system and enable the connection of up to 1,170 MW of new RES generation capacity.
1.2	<i>The project results in energy savings that exceed 0.1% of annual national energy consumption, so significantly contributes to improved energy efficiency.</i>	The implementation of the project will decrease the transmission losses. The anticipated decrease in network losses of 14.5 GWh/year corresponds to 0.17% annual national electricity consumption.

Secondary Quality: Inclusive

Obj. No.	Objective	Details
2.1	<i>EMPLOYABILITY: The Project broadens access to market-relevant skills and training</i>	The Project will enhance access to market-relevant skills and employment opportunities for energy specialists by strengthening the capacity of MEPSO to promote upskilling and reskilling solutions for the energy sector in the country and the region. Over the next five years, the initiative

	<i>opportunities, boosting the supply of human capital with demonstrably high need and outstanding effectiveness.</i>	<p>will benefit at least 250 workers, with course(s) focused on practical technical skills. This will be nationally accredited by the Ministry of Education and Science (“MoES”), in line with the new Retraining Strategy that is being developed by MoES with EBRD’s support.</p> <p>MEPSO’s actions to develop job-relevant technical skills will be key in addressing local skills deficiencies and contribute to the energy transition agenda. The focus will be on enhancing green and digital skills, including for instance, the ability of managing the grid with a higher level of renewable energy integration and cybersecurity knowledge for operators of digital energy systems.</p>
2.2	<i>EMPLOYABILITY: The Project delivers inclusive business policies, practices or standards at the client level with verifiable commitment within 4 or more distinct behavioural change areas</i>	<p>The Project delivers business practices that promote human capital development with commitments along the following four behavioural change areas:</p> <ol style="list-style-type: none"> 1. <i>Establishing a dedicated in-house training facility.</i> MEPSO will set up a new cutting-edge training centre in Ohrid in the coal-dependent Southwest region, repurposing a space on its own grounds. 2. <i>Making sizeable investment in training infrastructure, equipment or hardware (including ed-tech).</i> MEPSO plans to make investment in and training equipment (e.g. demonstration sub-station and energy platform simulators) [REDACTED]. 3. <i>Creating formal partnership(s) with local education providers.</i> In establishing the training offer of the centre, MEPSO will collaborate with local technical colleges and universities to develop industry-relevant curricula with partners, such as the Faculty of Electrical Engineering and Information Technologies of the Ss. Cyril and Methodius University in Skopje (MEPSO has already consulted their Faculty of Civic Engineering for the feasibility study on the rehabilitation of the Ohrid facility into a training centre). 4. <i>Focusing on lifelong learning practices.</i> The centre will target the upskilling of MEPSO’s personnel, and other energy sector workers, including substation operators and technicians (i.e. TVET graduates) who work in dispatching centres and handle electrical controls, as well as specialists and engineers who work with complex energy platforms (i.e. SCADA -Supervisory Control and Data Acquisition- platforms) and relay protection devices. MEPSO plans to monitor the effectiveness of these training programmes through participants’ feedback, skill assessments of employees, and improved performance results at actual operations. Based on this, it will establish the working modalities for implementing a feedback loop for the recurrent update of the curricula to address the evaluation results and adapt to evolving technologies.
2.3	<i>EMPLOYABILITY: The Project encompasses sizeable impact on a policy, regional or sectoral scale with measurable large-scale outcomes.</i>	<p>MEPSO will engage in the national Just Transition policy dialogue led by the Bank to reach a sizable scale at the sectoral level. As MEPSO will receive support (i.e. a capex grant) from the Accelerating Coal Transition Programme, the centre will aim to contribute to the professional development of the whole energy sector of North Macedonia. This commitment is reflected in the Government’s Investment Plan as part of the PowerHub initiative, where the establishment of the centre and the scale up of its activities are identified as a priority. To this end, the range of training programmes delivered by the centre will be reviewed to integrate retraining courses for coal industry workers, especially (ex-) operators of lignite-fired power plants, affected by the green energy transition.</p>

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).	This is a new transaction with the same client (MEPSO) in the same country (North Macedonia), therefore a trigger is identified. MEPSO is long-standing client of the Bank and the collaboration is positive. The Company relies on EBRD to secure adequate long-term financing on a non-sovereign basis given the limited size and appetite of the local financing sector for such investments.

Additionality sources	Evidence of additionality sources
Financing Structure <ul style="list-style-type: none"> - EBRD offers a tenor, which is longer than available to the client in the market on reasonable terms and conditions. 	<p>Proposed 15 year tenor and [REDACTED] grace period are not available in the market.</p> <p>The Company would not be able to source the required financing without the Bank because long-term finance for non-sovereign operations is not readily available to this sector in North Macedonia. Longer tenor provides the client with comfort and confidence to undertake this investment programme, encouraging the much needed investments in the transmission grid operated by the Borrower, particularly important in light of the country's current limited grid capacity for introduction of new intermittent RES and decarbonising of the energy sector.</p>
Standard-setting <ul style="list-style-type: none"> - Client seeks/makes use of EBRD expertise on best international procurement standards. - Client seeks/makes use of EBRD expertise on higher environmental standards, above 'business as usual' (e.g. adoption of emissions standards, climate-related ISO standards etc.) - Gender SMART Tag. Client seeks/makes use of EBRD expertise on gender standards and/or equal opportunities action plans 	<p>The Company will benefit from the Bank's expertise and guidance with regards to implementing Bank's procurement rules for public sector operations. Furthermore, a PIU consultant will be responsible for the overall project implementation in all phases.</p> <p>The Company will need to adhere to the Bank's environmental and social policies, and protocols drafted during the design period.</p> <p>MEPSO will also improve awareness of equal opportunities in the energy field in North Macedonia by introducing a new outreach programme to attract more females towards to this traditionally male-dominated sector, through the organisation of a series of career guidance event(s) in collaboration with the local technical colleges and universities that will soon be among its partners. The training courses of the centre will also be designed with a gender lens and a gender-responsive marketing campaign will be developed to ensure that the upskilling programmes involve a significant share of women – of at least 35 percent in country where the national sectoral average is of 25 percent.</p>

- Client seeks/makes use of EBRD expertise on corporate governance improvements, including for climate risk management.	A Corporate Governance Action Plan, supported by the Bank as part of the previous project, will further improve the Company's practices and operations, ultimately building and maintaining trust with the stakeholders.
---	--

1.4 SOUND BANKING - KEY RISKS

Risks	Probability / Effect	Comments
Regulatory risk	High / Low	<p>MEPSO operates in a regulated industry and the ERC sets the transmission tariff for MEPSO based on return of the Return Asset Based methodology (RAB), passed through costs and recognised transmission losses. [REDACTED].</p> <p><u>Mitigation</u></p> <ul style="list-style-type: none"> The Bank has a long-standing dialogue with the ERC and the Macedonian government. MEPSO is fully state-owned, which strengthens its ability to operate within the regulatory framework. Transmission and market operator tariffs were progressively increased between 2020 and 2022 due to energy crisis and stabilised / reduce in the last 2 years as the macro energy environment normalized [REDACTED]. The Project is one of the top priorities of the government of North Macedonia and it is included within the National Ten Year Network Development Plan for the development of the transmission system (2022-2031) as critical to secure higher renewables integration in the southeast region of the country.
Implementation Risk	High/ Medium	<p>Risks include cost overruns, delays in procurement and failure to achieve expected technical outcomes</p> <p><u>Mitigation</u></p> <ul style="list-style-type: none"> The current estimates of contracts under the Project are based on a Feasibility study and Preliminary Design conducted by the IPF consultants funded by the WBIF technical assistance grant. The contractors will be selected through open tendering in accordance with the Bank's procurement rules for public sector operations. The Bank's Procurement Specialist and a PIU Consultant will provide necessary support for the procurement and implementation of the Project. [REDACTED]. There are no foreseen delays. The envisaged type of contract is FIDIC Yellow Book. [REDACTED]
Foreign Exchange Risk	Low / Low	<p>Project financing is to be provided and repaid in EUR, whilst TSO tariffs are paid in MKD. In case of significant currency devaluation, this might lead to a reduction in repayment capability.</p> <p><u>Mitigation</u></p> <ul style="list-style-type: none"> The Macedonian Denar (MKD) is pegged to the EUR and fluctuates against the EUR in a very narrow corridor (between 61.5 and 61.7

		MKD per EUR, or 0.3% corridor). The revenues and operating expenses are in MKD
Counterparty Creditworthiness	Medium / Low	<p>Financing for the Project is to be provided with no sovereign guarantee and no recourse to the state budget. Loan will be fully repaid from the operating cash flows of MEPSO.</p> <p><u>Mitigation</u></p> <ul style="list-style-type: none"> MEPSO is a regulated transmission company, 100% state-owned, and, as such, should be subject to low volatility and be able to tolerate an increase in leverage without excessive risk. [REDACTED]The WBIF grant will reduce the Company's financial burden, and limit the exposure and the impact on the transmission tariff. <p><i>Please refer to section 5.1 for details on the Company's historical financials</i></p>

2. MEASURING / MONITORING SUCCESS

TI indicator(s), primary Quality: Green

Obj. No.	Monitoring indicator	Details	Baseline	Target	Due date
1.1	Primary energy saved (GJ/year)	The implementation of the project will decrease the transmission losses by c. 14.5 GWh/year corresponds to 52,200 GJ.	0	52,220	[REDACTED]
1.2	CO2e emissions reduced (tonnes/year)	Based on the anticipated level of transmission loss reduction, the Project will bring a reduction in CO2 emission of c. 8,158 t/year	0	8,158	[REDACTED]

TI indicator(s), secondary Quality: Inclusive

Obj. No.	Monitoring indicator	Details	Baseline	Target	Due date
2.1	Practices of the relevant stakeholder improved (skills development)	MEPSO will set up a new training centre in the coal-dependent Southwest region	No	Yes	[REDACTED]
2.2	Partnership between private sector and education providers established or strengthened	MEPSO will collaborate with local technical colleges and universities to develop industry-relevant curricula	No	Yes	[REDACTED]

2.3	Tailored training programme developed and implemented	With the Bank's support, MEPSO will develop/update a nationally accredited training programme	No	Yes	[REDACTED]
2.4	Training programmes implemented beyond EBRD direct support	The initiative will target the upskilling of MEPSO's personnel and other sectoral workers with a continuous learning approach	No	Yes	[REDACTED]
2.5	Practices of the relevant stakeholder improved (others)	MEPSO will make significant investment in training equipment, including for a demonstration sub-station	No	Yes	[REDACTED]
2.6	Policy engagement platform is operational	As part of the launch of ACT's PowerHub initiative, MEPSO will serve as an hub for the professional development of the whole energy sector by integrating in this initiative retraining courses for coal industry workers affected by the green energy transition.	No	Yes	[REDACTED]
2.7	Number of individuals enhancing their skills as a result of training	At least 250 workers will improve their skills as a result of the initiative, in its first years of implementation	0	250	[REDACTED]

Additional Indicators

Indicator type	Monitoring indicator	Details	Baseline	Target	Due date
Gender SMART: Advisory & Policy Indicators	Practices of the relevant stakeholder improved (equal opportunity practices of the client)	MEPSO will introduce a new outreach programme to attract females towards to the traditionally male-dominated energy sector.	No	Yes	[REDACTED]
Gender SMART: Advisory & Policy Indicators	Number of women enhancing their skills as a result of training	The training initiative will integrate a gender lens throughout to ensure that upskilling opportunities are available to women	0	88	[REDACTED]
Advisory & Policy Indicators	Practices of the relevant stakeholder improved (operational)	MEPSO will develop a grid masterplan that facilitates the full coal phase-out by 2030, and integration of at least 1.7GW of renewables within this	No	Yes	[REDACTED]

		time period, with a further ramp-up in line with TYNDP timelines, and accounting for connection request projections under different scenarios			
Advisory & Policy Indicators	Improved quality of infrastructure	Number of energy infrastructure systems and assets that have been upgraded, otherwise strengthened or relocated for enhanced resilience or reduced exposure to extreme climate events (direct impacts) and their consequences (e.g. peak demand of electricity for cooling systems during heatwaves	No	Yes	[REDACTED]
Advisory & Policy Indicators	Number of employees of client, sex-disaggregated	Number of direct FTE jobs supported and/or sustained disaggregated by sex, age, disability, type of job (green, construction, operations and maintenance, within MSMEs or organisations), and country/region where possible and relevant.	0	237	[REDACTED]

3. KEY PARTIES

3.1 BORROWER

MEPSO is the 100% state-owned electricity transmission system operator, thought the Ministry of Transport. It was incorporated as an independent TSO in 2005, when the old vertically integrated state-owned utility ESM was unbundled into 4 major companies. The Company has over 550 employees and has three licenses from the ERC for: a) electricity transmission; b) electricity market organisation and control; and c) power system control. MEPSO earns revenues from an electricity transmission tariff set by the ERC based on return on the regulated asset base (“RAB”) and operating expenses. It also earns a market fee to cover the purchase of electricity generating by preferential producers using renewable

energy sources (“RES”), for system/balancing services and for allocation of cross-border capacities. MEPSO is responsible for procuring electricity on the open market to meet transmission losses.

MEPSO’s business activity is consisted of: (i) transmission of electricity; (ii) management of the electric power system by dispatching electricity throughout the country, as well as balancing the power system; (iii) organisation and management of the Macedonian electricity market through the 100% subsidiary National energy market operator (“MEMO”); and (iv) supply of electricity to wholesale tariff consumers. MEPSO is responsible for transmission from the Macedonian border to large industrial customers or to the low voltage grid of EVN AD Macedonia, the privatised national distribution operator.

MEPSO manages the country’s electricity transmission network, consisting of transmission lines spanning 2200 km, five 400/110 kV substations, 52 substations of 110/x kV, plants, facilities and assets for transmission of electricity and for managing the electricity transmission system.

The Macedonian TSO interconnects with the systems of Bulgaria, Greece, Serbia and Kosovo through 400 kV lines. A 400 kV interconnection with Albania is under construction and is expected to be completed by 2026.

Please refer to section 5.1 for more information on the historical financials of the Borrower.

4. MARKET CONTEXT

The Macedonian economy suffered from the negative impacts of the energy crisis (i.e. from soaring energy prices) by having unprecedentedly high levels of inflation (9.4% in 2023 and 14.2% in 2022 vs. 3.2% in 2021 and 1.2% in 2020), disproportionately eroding real income especially given the country’s dependence on energy imports. Despite the severe energy crises, the government of North Macedonia has sustained reforms in the energy sector and is implementing demand and supply side measures to decarbonise and meet 2030 NDC targets. These reforms are assured and covenanted with the action plan for the liquidity loan for ESM which included, amendments to the Energy Law, change of the electricity supply tariff methodology, gas sector unbundling, commencing market coupling process with Bulgaria and Greece, a decarbonisation strategy for ESM, investments in 1.7GW renewable energy by ESM and the Private sector and adoption of the updated NECP (aligned with the Paris Agreement).

North Macedonia is a net importer and significant share of domestic electricity is produced by the state-owned generation capacity of ESM. Electricity imports amount to approximately 30% of the total domestic electricity consumption and are mostly required to meet peak winter demand. The transmission system is well interconnected with the neighbouring countries (only the construction of the interconnection with Albania is to be finalised).

The country has made considerable progress towards meeting its Energy Community Treaty obligations with the new Energy Law, which was adopted in May 2018 and fully, unbundled (generation, transmission and distribution are separated), liberalized the market and incorporated the Third Energy Package. The new law has put in place the legal framework to support competition in electricity supply and generation and ERC sets the tariffs only for transmission and distribution. New amendments to the Energy Law were introduced for regulation for wholesale energy market integrity and transparency (REMIT), capacity allocation and congestion management (CACM), and cybersecurity provisions.

The Ministry of Economy (“MoE”) is assigned with the primary responsibility over the energy sector in the Country. The Deputy Prime Minister for economic affairs is responsible for the overall energy strategy and is closely overseeing all public investments in the energy sector.

North Macedonia published Strategy for Energy Development until 2040, adopted the NDC and the Long Term Strategy (“LTS”), which outline the overall energy sector decarbonisation, modernisation and transformation in line with EU energy trends. The NECP was adopted on 31 May 2022, and envisages a 82% net reduction of GHG by 2030 to be achieved through the gradual decommissioning of the country’s TPP fleet whilst simultaneously by adding 1.7GW to the energy mix by 2030.

North Macedonia has one operational 36 MW wind power plant owned by ESM and 124 MW under development (14 MW by ESM and all other private). The renewable energy sector is further represented by approximately 148 MW small hydro power plants, 551 MW PV plants operational in 2023 (including the 10 MW PV plant owned by ESM) and 242 MW PV plants tendered, mostly with Bank support.

5. FINANCIAL / ECONOMIC ANALYSIS

5.1 HISTORICAL FINANCIALS

[REDACTED]

5.2 FINANCIAL PROJECTIONS

[REDACTED]

5.3 SENSITIVITY ANALYSIS

[REDACTED]

5.4 PROJECTED PROFITABILITY FOR THE BANK

[REDACTED]

6. OTHER KEY CONSIDERATIONS

6.1 ENVIRONMENT

Categorised B (2019 ESP). Environmental and social (“E&S”) due diligence (“ESDD”) was conducted by an independent consultant for the two Project’s components, i.e., component 1 - Construction of a new 400/110 kV substation near Miletkovo located in Gevgelija Municipality with its connection to the existing 400 kV and 110 kV transmission network; and component 2 - new connection and rehabilitation of the existing 110kV transmission lines and substations in and between Miletkovo, Valandovo and Strumica Municipalities. The independent assessment included a company audit and assessment of E&S project risks and impacts in line with EBRD's E&S Policy and Performance Requirements (“PRs”). Additionally, an E&S assessment of the associated facility related to the project, i.e. the development of a training centre for high voltage grid operators, which would include refurbishment of the existing facility of the client, procurement of equipment and development of the training curriculum was carried out by ESD, and included the review of the associated renovation CAPEX and assessment of the location and surrounding area with regards to any sensitive receptors.

The ESDD findings showed that the Company has a set of E&S procedures in place for mitigation of the E&S risks during the Project's implementation and operation. These have been developed as part of the external certification for the ISO 9001 (quality management), ISO 14001 (environmental management), ISO 45001 (health and safety management) as well as ISO 50001 (energy management), including an Environment Protection Policy. ESDD has identified areas for improvement required to structure the Project to align with the Bank's 2019 PRs and good international practice. These have been included in an Environmental and Social Action Plan ("ESAP"). The ESAP has been agreed with the Client.

National permitting procedures will need to be adhered to and a set of permits obtained in line with ESAP. A project-specific Construction Environmental and Social Management Plan ("CESMP") is to be developed in line with ESAP, based on the Framework ESMP which has been prepared for the project as part of the ESDD. The client will need to set requirements in the tender documentation for the construction contractor and third-party supervision to appoint environmental, social and health and safety specialists as part of their teams. Operational impacts will be managed by the client within existing Environmental and Social Management System and procedures in place. The client fully complies with the North Macedonian Labour Law, and the company's HR provisions and procedures are in line with local requirements and comply with PR 2. The contractors will need to implement an internal grievance mechanism for workers to fully comply with PR2. Pollution risks during construction will be managed by a Pollution Prevention and Control Plan and Soil Management and Erosion Control Plan, while construction noise will be managed by a Noise Management Plan, as stipulated in the ESAP. Construction - Waste Management Plan as part of the CESMP will be developed and implemented by the appointed Contractor(s) to ensure all construction and demolition waste is properly managed according to Macedonian law and EU waste management requirements. Climate resilience measures need to be incorporated into the Project design documentation to reduce vulnerability to future climate change and hazards. ESAP stipulates development and implementation of several management plans to mitigate health and safety impact during construction phase.

It is expected that project will result in land acquisition. A Land Acquisition and Resettlement Framework ("LARF") has been prepared as part of the ESDD in line with PR5, including measures for closing gaps with PR5. ESAP stipulates preparation of a Land Acquisition and Resettlement Plan (LARP) based on the Framework, which will be developed once the exact nature and scope of land acquisition become known, to ensure full compliance with PR5. The Sub-Project 1 is not located in Natura 2000 site or locally protected areas; however, the wider geographical area of River Vardar corresponds to known bird migratory route. Regarding the Sub-Project 2, existing 110 kV transmission line passes through one locally protected area - Park of Nature Cham Chiflik in 0.5 km long section, and one internationally recognised site – Important Plant Area Belasica (IPA) in 2.8 km long section. Therefore, optimisation of the position of the transmission line has been done as part of the ESDD to fully avoid impacts to protected area Park of Nature Cham Chiflik, as well as the use of a power underground cable is selected for the section in Strumica, to reduce overall length through IPA from 2.8 km to 1.6 km. In line with requirements of PR6, the ESAP stipulates the following measures: (i) development of a Bird Protection Plan at corporate level; (ii) installation of bird diverters; (iii) seasonal restrictions of vegetation clearance from April to June; (iv) prohibition of works in sensitive area near River Vardar; and (v) preparation of a Biodiversity Action Plan. Impacts to known cultural heritage sites in the wider area of the project are avoided as part of the route selection and optimisation process, in line with mitigation hierarchy of EBRD's E&S Policy. No impacts on the known cultural heritage are expected and chance finds will be managed through a Chance Find Procedure, as stipulated by ESAP.

Interested stakeholders have been consulted during ESDD through individual or group meetings. The Stakeholder Engagement Plan ("SEP") has been prepared for the Project and includes a grievance mechanism to address complaints of external stakeholders, in line with the ESAP. Both SEP and Non-Technical Summary will be publicly disclosed in English and local language. The Bank will monitor the implementation of the Project through review of annual monitoring reports and visits as required.

6.2 INTEGRITY

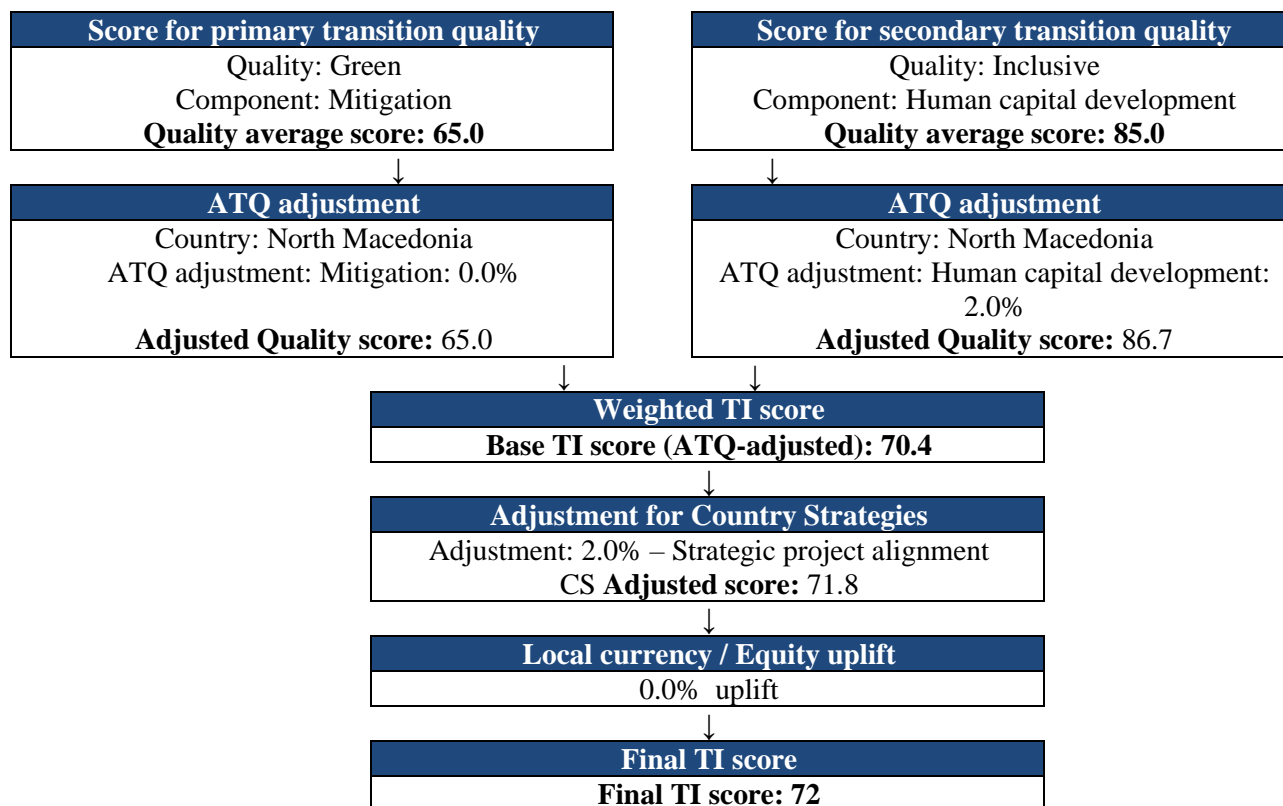
Integrity due diligence was undertaken on the Borrower, senior management and members of the board of directors.

[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

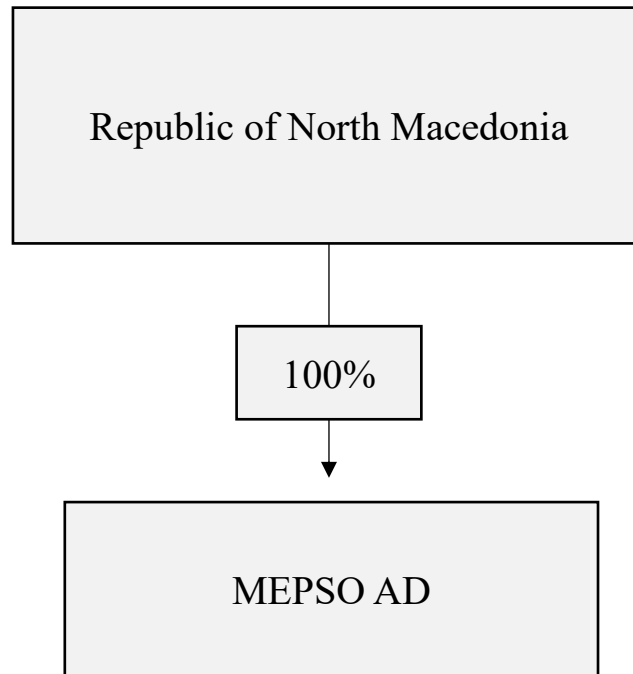
ANNEX 1	TRANSITION IMPACT SCORING CHART
ANNEX 2	SHAREHOLDING STRUCTURE
ANNEX 3	GREEN ASSESSMENTS
ANNEX 4	HISTORICAL FINANCIALS
ANNEX 5	PROCUREMENT

ANNEX 1 - TRANSITION IMPACT SCORING CHART



ANNEX 2 – SHAREHOLDING STRUCTURE

MEPSO AD – the Electricity Transmission System Operator of North Macedonia - is a public utility company, fully owned (100%) by the Republic of North Macedonia.



ANNEX 3 – GREEN ASSESSMENTS

Introduction

Use of proceeds to support MEPSO's strengthening of the transmission network in the southeast region of North Macedonia consisting of: (i) new 400/110kV substation near Miletkovo and (ii) new connection and rehabilitation of the existing 110kV transmission lines and substations in and between Miletkovo, Valando and Strumica. A Paris Alignment and GET assessment have been conducted: the project is Paris Aligned and 100% GET.

Paris alignment assessment (Direct Finance)

Alignment with the mitigation goals of Paris Agreement: general screening

- The project/economic activity is included in the 'aligned list'.
- Regarding project/economic activity(ies), 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.

Alignment with the adaptation goals of Paris Agreement

- Evaluation of the physical climate risk and vulnerability context:

Project screening indicates that the project faces potentially material climate risks. Specifically, extreme heat event and mass movement. This project is unlikely to undermine climate resilience of the system in which it operates.

- Definition of climate resilience measures:

The project is developed under the Western Balkan Investment Framework (|PRJ-MKD-ENE-018) and has been designed with support from the EU. A Feasibility Study has recommendations that includes design, construction and operation. The detailed design is now to begin as part of the scope of works of the construction contract and will be prepared by the Contractor. This will include specific actions on climate resilience to design the Project by incorporating applicable climate design parameters to reduce vulnerability to climate projections, climate hazards and relevant vulnerability trends, as defined in E&S Assessment Reports developed for this project (Action 3.2 WB21-MKD-ENE-03 North Macedonia, Strengthening the Transmission Network in the Southeast Region of North Macedonia - Component 1, Environmental and Social Action Plan November 2022). As such, the detailed design will include considerations of both extreme heat events and extreme mass movement events. Monitoring the implementation of project activities will ensure that they are carried out in accordance with the national, WBFI-EU's and EBRD's environmental and social standards, and protocols (ESIA, ESAP, etc.) drafted during the design period.

GET attribution

The project is 100% GET.

ANNEX 4 – HISTORICAL FINANCIALS

[REDACTED]

ANNEX 5 - PROJECT IMPLEMENTATION

Procurement classification – *Public sub-Sovereign*

[REDACTED]

This is a well-known client to the Bank; thus, the risk assessment was determined based on the experience gained during the implementation of the North Macedonia – Albania Transmission Phase I Project and Rehabilitation and Control Project (BDS13-095). The client has demonstrated relevant experience in procuring goods and works contracts under IFI financing projects using diverse set of rules. They have also scaled up their knowledge on EBRD Procurement Policies and Rules (PP&R) for the public sector operations as well as their capacity to conduct the procurement and supervision tasks required as demonstrated during the implementation of the previously mentioned projects. The Client also presents adequate knowledge but limited capacity in dealing with technical issues regarding the procurement process as well as the implementation of the envisaged contracts. In order to mitigate the capacity risk, the Project will be supported with a grant funded PIU consultant and Supervision consultant to aid in the project smooth implementation. Those TC contracts will be fully funded via a WBIF TA grant.

Contracts risk assessment – Moderate

The scope of the project envisages the construction of (i) 400/110kV substation (“SS”) near Miletkovo, (ii) new connection and rehabilitation of the existing 110kV overhead transmission lines (“OHTL”) and substations in and between Miletkovo, Valando and Strumica, and (iii) develop a training centre for high voltage grid operators and other sectoral specialists.

The scope and nature of the contract is not new to the Client however its considerable size may be a challenge in terms of control, monitor and reporting. The main risk is represented by the competitive international market which often leads to a price war among the companies with several third EU country companies practicing price dumping. This may affect the implementation schedule of the works contracts, as contractors spend more time finding cheap suppliers and subcontractors on the expense of delaying the works schedule under the contracts. The situation is well known to the client, and they will take appropriate measures to mitigate the risk with the support of the consultancy designers financed via IPF10 and PIU consultant as well as supervision engineer.

Project implementation arrangements:

MEPSO will be responsible for the implementation of the project, including carrying out the procurement process and contracting. MEPSO is well managed and employs a team of capable experienced professionals dedicated to previous EBRD financed projects that are retained for this new project. The Project will be implemented by MEPSO mainly through its already nominated Project Implementation Unit (PIU) team that oversees the on-going projects financed by EBRD with the support of other MEPSO’s technical, financial and legal departments. Experts from various organizational units within the Company will support the nominated PIU to ensure the required expertise will be involved including project coordinator, environmental, civil, and electrical and mechanical engineers, financial, economic and procurement.

The experienced MEPSO team will be supported by the two donor-funded Implementation Consultants: i) Technical Assistance Supervision Engineer (FIDIC engineer) and ii) PIU support Consultant to mitigate potential procurement and implementation risks. The Consultants will assist the client in all

aspects of procurement and the implementation of the Project in accordance with the Bank's policies and support MEPSO in meeting requirements of various financing documents.

Procurement arrangements:

Works contract will be financed by the proceeds of the Bank's loan, WBIF investment grant funds as well as MEPSO contributions. The contract will be procured following the Bank's PP&R and will be subject to prior review by the Bank.

The works contract will be procured using multistage open tendering method using the Bank's latest works standard procurement documents templates. The preliminary designs and studies are prepared by the IPF10 consultant, but the final design will be conducted by the awarded contractor through the envisaged contract. The same IPF10 consultant will also support the client with the preparation of Tender Documents for the works contract. The works contract will be a design-build type of contract following FIDIC Yellow Book.

The consultancy contracts will be procured following the provisions of the Bank's PP&R Section 5 (Procurement of Consultant Services). The consultancy contracts for technical supervision support consultancy and the PIU consultancy assignments will be financed by WBIF TA grant funds. The supervision consultancy assignment and the PIU consultancy assignment will be procured following two-stage open competitive selection. Additionally, there will be a technical cooperation contract for the consultancy services covering technical assistance for the training centre. This contract will be procured following single stage selection process and it is envisaged to be financed by CIF.

Additional information:

The contracts will be tendered via the EBRD Client e-Procurement Portal (ECEPP).
[REDACTED].