

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

Approved by the Board of Directors on 25 June 2024¹

MONTENEGRO

HOSPITALS ENERGY EFFICIENCY PROJECT

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

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

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

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

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ABBREVIATIONS

AC	Air conditioning
ACM	Asbestos Containing Materials
BEMS	Building Energy Management System
CCoM	Clinical Centre of Montenegro
CO ₂ e	Carbon dioxide equivalent
EA	Energy Audit
EE	Energy Efficiency
EEAP	Energy Efficiency Action Plans
EPC	Energy Passport Certificate
ESAP	Environmental and Social Action Plan
ESMP	Environmental and Social Management Plan
EU	European Union
EUR	Euro
FIRR	Financial Internal Rate of Return
FS	Feasibility Study
GBVH	Gender Based Violence and Harassment
GDP	Gross Domestic Product
GET	Green Economy Transition
GHG	Greenhouse Gasses
GoM	Government of Montenegro
GTS	EBRD Green Technology Selector
HVAC	Heating, Ventilation and Air-Conditioning
IFI	International Financial Institution
IMF	International Monetary Fund
IRR	Internal Rate of Return
MDB	Multilateral Development Bank
MoF	Ministry of Finance
MoH	Ministry of Health
NECP	National Energy and Climate Plan
OHS	Occupational Health and Safety
PA	Paris Alignment
PIA	Project Implementation Adviser
PIU	Project Implementation Unit
PP&R	EBRD Procurement Policies and Rules
PSD	Project Summary Document
PV	Photovoltaic
RE	Renewable Energy
REEP	Regional Energy Efficiency Programme for the Western Balkans
SCRM	Supply Chain Risk Management
SSF	Shareholders Special Fund
TC	Technical Cooperation
ToR	Terms of Reference
TPP	Thermal Power Plant
VAT	Value Added Tax
WB	Western Balkans

PRESIDENT'S RECOMMENDATION

This recommendation and the attached Report concerning an operation in favour of Montenegro (the “Borrower”), are submitted for consideration by the Board of Directors.

The facility will consist of a sovereign loan to Montenegro in the amount of up to EUR 12 million for the benefit of the Ministry of Health (“MoH”) to finance implementation of energy efficiency measures and, renewable energy technology (solar photovoltaic) in three public hospital buildings: (i) the Clinical Centre in Podgorica; (ii) a hospital in Cetinje; and (iii) a hospital in Bijelo Polje, which will lead to improvement of their energy performance (the “Project”). The Project is expected to be co-financed with an investment grant [REDACTED] from the European Union (“EU”) through the Regional Energy Efficiency Programme for the Western Balkans (“REEP”).

The Project will improve the energy performance and environmental sustainability of the selected hospitals, improve damaged structures and air quality, as well as enhance comfort level, which are very important for buildings of this nature. The expected transition impact of the Project stems primarily from the *Green* transition quality as 100% of the use of proceeds will contribute to energy efficiency improvements in public buildings, resulting in significant reduction of greenhouse gases (“GHG”) emissions.

Technical cooperation support has been provided by REEP, the EBRD Shareholder Special Fund (“SSF”) and Austrian Drive Fund for project preparation and implementation.

I am satisfied that the operation is consistent with the Bank’s Strategy for Montenegro 2021-2026, the Green Economy Transition (GET) approach 2021-2025, the Municipal and Environmental Infrastructure Sector Strategy, 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

MONTENEGRO – HOSPITALS ENERGY EFFICIENCY PROJECT - DTM 54452	
Transaction / Board Decision	Board approval ² is sought for a sovereign loan in the amount of up to EUR 12 million in favour of Montenegro (the “Borrower”) for the benefit of the Ministry of Health (“MoH” or the “Client”), to finance implementation of energy efficiency (“EE”) and renewable energy (“RE”) measures in three hospital buildings in Podgorica, Bijelo Polje and Cetinje in Montenegro (the “Project”). The Project will be co-financed with an investment grant from REEP [REDACTED].
Client	MoH as the beneficiary of the loan has overall responsibility for the healthcare policy, strategic decisions in Montenegro’s health system, maintenance and (re)construction of public hospital buildings and capital investments. In 2023, MoH together with the State Health Insurance Fund had an operational budget of EUR 391 million or 16% of the total country’s expenditures. The Budget Law for 2024 provides for EUR 430 million for the public health system operations.
Main Elements of the Proposal	<p><u>Transition impact</u></p> <p>Primary Quality – Green/GET Direct Track: The Project introduces high quality, innovative EE/RE technologies in public hospitals, resulting in over 50% of primary energy savings compared to the baseline energy consumption and ca. 4.6k tonnes of reduced CO₂e annually.</p> <p><u>Additionality</u></p> <p>Financing Structure: Commercial long-term financing for public infrastructure investments is not yet available in Montenegro, while commercial banks are reaching their internal sovereign limits. Moreover, Montenegro has limited access to international capital markets.</p> <p>Standard setting: The Project includes energy audits. Procurement will be carried out in accordance with the EBRD Procurement Policies and Rules.</p> <p><u>Sound banking</u></p> <p>The transaction is a sovereign loan.</p>
Key Risks	<p>Political stability: The Project is strongly supported by the government and is expected to continue to be widely supported going forward due to its recognised public benefit.</p> <p>Macroeconomic risk: Montenegro’s economy showed resilience and grew by 6.1% and 6.0% in 2022 and 2023, respectively, while inflation is slowly stabilizing. Solid GDP growth above 3.0% is expected in 2024 and 2025.</p> <p>Implementation risk: The Project will be implemented by the MoH [REDACTED]. The risk is mitigated by the appointment of an international consultant, acceptable to the Bank, to assist the Company with project preparation, design, procurement, implementation and works supervision services for the Project.</p>
Strategic Fit Summary	The Project is consistent with the Bank’s Strategy for Montenegro 2021-2026 and the Green Economy Transition (GET) approach 2021-2025 which identifies green buildings as key themes to accelerate decarbonisation and reduce energy consumption in the public building sector. The Project is also consistent with the Municipal and Environmental Infrastructure Sector Strategy and the Strategy for the Promotion of the Gender Equality 2021-2025.

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

ADDITIONAL SUMMARY TERMS FACTSHEET

EBRD Transaction	Up to EUR 12 million sovereign loan to Montenegro, for the benefit of the MoH for EE/RE investments in three public hospitals.
Existing Exposure	The Bank's total sovereign portfolio in Montenegro as of 20 March 2024 was EUR 192 million, out of which operating assets were EUR 105 million. This includes sovereign loans of EUR 34.6 million under the Local Roads Reconstruction Project (DTM 43060, DTM 48169 and DTM 51798), EUR 26.2 million under the Main Roads Reconstruction project (DTM 49075), while the remaining exposure relates to sovereign guaranteed loans.
Maturity / Repayment	Tenor of 15 years [REDACTED].
Potential AMI eligible financing	None.
Use of Proceeds - Description	The loan proceeds will finance implementation of RE/EE measures in three public hospitals. These measures include fuel switch from air polluting heavy fuel oil (Podgorica) and light fuel oil (Cetinje and Bijelo Polje) to electricity for heating and cooling produced by heat pumps, upgrading to a centralised HVAC system (replacing old AC split systems and radiators with fan coils) and installing efficient lighting systems and solar PV systems to cover part of the local electricity consumption by RE, building energy management system ("BEMS"), insulation of the building envelope and some general infrastructure improvements.
Investment Plan	[REDACTED]
Financing Plan	[REDACTED]
Key Parties Involved	MoF; MoH.
Conditions precedent to effectiveness	[REDACTED]
Conditions to subscription / disbursement	[REDACTED]
Key Covenants	<ul style="list-style-type: none"> – Compliance with EBRD PP&Rs; – Implementation of the Environmental and Social Action Plan ("ESAP") and GPMP [REDACTED]
Security / Guarantees	Sovereign loan
Other material agreements	<ul style="list-style-type: none"> – REEP Investment Grant Agreement; – Grant agreements for TCs;
Associated Donor Funded TC and Blended Concessional Finance	<p>A. Technical Cooperation (TC)</p> <p>Pre-signing:</p> <p>TC1: Feasibility Study ("FS").</p> <ol style="list-style-type: none"> 1. Energy audit ("EA") in selected hospital buildings to identify energy and resource efficiency investments and prepare FS for investments proposed. 2. Funding source: Austrian DRIVE Fund. 3. Amount/currency and funding status: EUR 49,630; <i>Completed</i>. <p>TC2: Procurement Support for the selection of the PIU Consultant.</p> <ol style="list-style-type: none"> 1. Support with the selection of the PIU Consultant, including preparation of Request for Proposal documentation, procurement support and contracting support. 2. Funding source: EBRD Shareholder Special Fund ("SSF"). 3. Amount/currency and funding status: EUR 24,900; <i>Confirmed</i>.

	<p>Post-signing:</p> <p>TC3: Project implementation support and EA of the buildings - preparation of preliminary and detailed design, ESAP implementation, technical specifications for preparation of tenders for EE measures in the buildings, works supervision.</p> <ol style="list-style-type: none"> 1. The overall objective is to facilitate the timely and effective implementation of the Project by providing assistance to the Client including preparation of preliminary and detailed designs, technical specifications for tender documents, procurement support for the works contract and works supervision, as well as support in ESAP implementation and annual E&S reporting of the Client. 2. Funding source: REEP Plus Replenishment II [REDACTED] and EBRD SSF [REDACTED]. 3. Amount/currency and funding status: EUR 1 million; <i>Confirmed</i>. <p>B. Blended Concessional Finance</p> <ol style="list-style-type: none"> 1. Type of concessional finance: Investment Grant. 2. The use of concessional finance is necessary to facilitate the much-needed financing of the EE improvement in public owned hospitals. 3. Funding source: REEP Plus Replenishment II 4. Amount/currency and funding status: [REDACTED] <i>To be approved</i>. <p>Reimbursement: The above assignments are non-reimbursable transactional TCs required to evaluate the investments and assist the Client during project implementation.</p> <p>Client contributions: The Client will be responsible for paying all VAT and other indirect taxes that are applied to the donor-funded TC assignment where they are the contracting party as a parallel cost sharing contribution to the project (VAT is levied at 21% in Montenegro). The Client will also provide in-kind support in the form of office space, communication connections, etc., for the consultants to work [REDACTED].</p>
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[REDACTED]

INVESTMENT PROPOSAL SUMMARY

1. STRATEGIC FIT AND KEY ISSUES

1.1 STRATEGIC CONTEXT

The building sector is one of the largest energy consumers in Europe and responsible for more than one third of the EU's emissions. Renovation of both public and private buildings is an essential measure in this context and has been singled out in the European Green Deal as a key initiative to drive energy efficiency in the sector and deliver on climate objectives. In this context and to accelerate the pace of renovations in the union, the European Commission launched “the renovation wave strategy” in October 2020 which aims to double renovation rates in the next ten years and to ensure renovations lead to higher energy and resource efficiency. In the Western Balkans, this initiative has been prioritised as part of the Economic Investment Plan (EIP) 2021-2027 where the European Green deal is one of the six priorities targeted.

Montenegro has transposed energy performance regulation since 2019, however it is still in the process of adopting and enforcing secondary regulation implementing these laws [REDACTED]. Energy performance in buildings is lagging behind in Montenegro and renovation rates far below EU-average. In the public sector, decades of under investments led to significant deterioration of the public building stock in terms of energy performance and thermal comfort.

The Project will contribute to accelerating EE renovations of main hospital buildings in the country, rehabilitating damaged structures and improving comfort levels and air quality which are critical for buildings of this purpose. The investment programme includes the installation of HVAC systems, solar photovoltaic systems, BEMS, upgrade of the lighting system, insulation of the building envelope and some general infrastructure improvements (*see more details in Annex 1*).

The selected hospital buildings were built during 1970-1980 and they are well below standards in terms of EE, thermal comfort and contamination prevention. The Project will contribute to the reduction of GHG emissions by 62% and primary energy consumption by over 50% compared to the baseline energy consumption, yielding electricity and heating savings. Additionally, achievement of higher standards of heating, cooling and ventilation will result in improved thermal comfort for the users of the three hospitals. The Project is in line with Bank's Strategy for Montenegro 2021-2026, which identify as Bank's strategic priority to further support Montenegro's green economy transition through cleaner energy and more sustainable municipal services, including enhancement of climate resilience, improved EE performance and service delivery of public buildings and increase of RE capacities. The Project is fully consistent with (i) the Municipal and Environmental Infrastructure Sector Strategy, by supporting energy efficiency in buildings.

The Project is in line with the Bank's GET Approach 2021-2025, as implementing new RE/EE technologies in buildings will reduce the demand for carbon-intensive electricity and fossil fuels, and thereby reduce GHG emissions in the country. The Project is aligned with the goals of the Paris Agreement (“PA”).

The Project is also in line with the Strategy for the Promotion of the Gender Equality 2021-2025 which recognises gender-based violence and harassment (“GBVH”) as an obstacle for women’s equal participation in the economy and public life. The Women, Business and the Law 2024³ (“WBL”) report published by the World Bank Group assesses the supportive frameworks in Montenegro at a score of 50.8 out of 100.0 which is lower than the Europe and Central Asia regional average score (51.3). Violence against women remains a problem in many developing countries and the perpetrators often go unpunished. According to WBL, one of the lowest scores for Montenegro is on the indicator measuring supportive frameworks affecting women's safety. Supporting clients to introduce measures to eliminate the risk of GBVH significantly improves equality of opportunity for women and young girls.

1.2 TRANSITION IMPACT

The table below sets out the TI objectives and details of the Project.

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 60%</i>	The Project will promote EE by introducing new technologies in three public hospitals which is expected to have a strong demonstration effect in the country. The Project is expected to reach over 50% primary energy savings compared to baseline energy consumption (up to 17,515 MWh/year or 63,056 GJ/year) and 4.6k tonnes of avoided CO _{2e} emissions annually. The percentage of EBRD proceeds qualifying as GET is 100%.

Delivery risks: The main delivery risk relates to political instability and potential changes of counterparts in the relevant ministries [REDACTED]. These risks are mitigated by the Government’s commitment to enhancing EE in public buildings and the Bank’s ongoing policy dialogue with the Montenegrin Government. In addition, the Client will be supported by TC-funded project implementation and works supervision consultants to facilitate effective implementation of the Project.

1.3 ADDITIONALITY

Identified triggers*
<i>No triggers identified</i>
Additionality sources
Financing Structure <ul style="list-style-type: none"> The Bank provides long-term financing, which is not readily available in Montenegro from local or international commercial banks. The proposed tenor and grace period are above the market average, and are necessary to structure the Project given its use of proceeds. Public sector: EBRD investment is needed to close the funding gap. At the same time, EBRD does not crowd out other sources, such as from IFIs, government, commercial banks and/or complements them.
Standard-setting: helping projects and clients achieve higher standards <ul style="list-style-type: none"> The Bank’s experience in financing similar projects, existing long-term relationship with the Government and on-going policy dialogue on sector reform process is highly appreciated by Montenegrin side. The Client will also comply with the Bank’s environmental and social policies.
Standard setting: <ul style="list-style-type: none"> Client seeks/makes use of EBRD expertise on best international procurement standards. The Project includes a TC to assist the Company’s with procurement capacity building and procurement process in line with the Bank’s PP&R.
Standard-setting: helping projects and clients achieve higher standards

³<https://wbl.worldbank.org/content/dam/documents/wbl/2024/pilot/WBL24-2-0-Montenegro.pdf>

- Client seeks/makes use of EBRD expertise on **higher inclusion** (e.g. adherence to labour standards which goes beyond the provisions set in PR2 of the environmental and social policy, development of sign comprehensive and institutional corporate social responsibility programmes), **gender standards and/or equal opportunities action plans**.
- The Project will achieve higher energy efficiency standards, that are expected to go beyond national requirements.
- **Gender SMART:** Client seeks/makes use of EBRD expertise for the adoption of gender standards and/or equal opportunities action plans (e.g. improving women's access to safe transport and/or women-led businesses participation in the client supply chain); the Client will contribute to the prevention of GBVH by engaging in an outward campaign targeting their patients and raise awareness about GBVH and encourage reporting rates. Considering over 50,000 patients stay in the hospital buildings that will benefit from this Project annually, the effects of such campaign will be significant. In addition hospital staff will be supported to recognize cases of GBVH and respond adequately by supporting the victim.

1.4 SOUND BANKING - KEY RISKS

Risks	Probability / Effect	Comments
Sovereign Risk	Low / High	Montenegro maintains a stable economic outlook with a history of meeting obligations. S&P upgraded its B credit rating to positive in March 2024, while Moody's affirmed its B1 credit rating with a stable outlook in Sept 2023. Despite manageable debt sustainability risks, government debt peaked at 107% of GDP in 2020, decreasing to 72% by end-2022. IMF projects a further decline to around 62% by end-2023, gradually rising to 77% by 2028 due to fiscal impacts of the 'Europe Now' reform package. Political stability, post-election, and commitment to EU accession mitigate transition risks. Montenegro's resilient economy grew by 6.1% in 2022 and maintained 6% growth in 2023, driven by robust household consumption and tourism, partly reflecting the substantial inflows of Russian and Ukrainian immigrants. Projected growth for 2024 is 3.7% due to moderation of tourism growth after a record season in 2023.
Implementation Risk	Medium / Medium	The Project will be implemented by the MoH [REDACTED]. The Client will be supported by international consultants during design preparation, procurement and implementation, including works supervision, which mitigates the implementation risk. [REDACTED].
Performance risk	Medium / Low	[REDACTED] Project implementation support consultants will monitor and verify the energy savings for each building.

1. MEASURING / MONITORING SUCCESS

Transition Impact Monitoring Indicators

<i>Overall objectives of the project</i>	<i>Monitoring benchmarks</i>	<i>Implementation timing</i>
- Enhancement of the sector of energy efficiency in three hospital buildings - Improved energy performance of three hospital buildings	- Successful project implementation - Project completion within the timeline and the budget	- [REDACTED]

Primary Quality: Green

<i>Obj. No.</i>	<i>Monitoring indicator</i>	<i>Details</i>	<i>Baseline</i>	<i>Target</i>	<i>Due date</i>
1.1	<i>CO₂ emissions reduced (tonnes/year)</i>	The Project is expected to reduce 4.6k tonnes of CO ₂ e emissions annually.	0	4,604	[REDACTED]
1.2	<i>Renewable energy - electricity produced (MWh/year)</i>	The Project will enable installation of PV panels, which will produce 1,000 MWh per year.	0	1,000	[REDACTED]

<i>Obj. No.</i>	<i>Monitoring indicator</i>	<i>Details</i>	<i>Baseline</i>	<i>Target</i>	<i>Due date</i>
1.3	Primary energy saved (GJ/year)	The Project is expected to contribute to over 50% primary energy savings compared to baseline energy consumption (up to 17,515 MWh/year or 63,056 GJ/year) annually.	0	63,056	[REDACTED]

Additional Indicators

Indicator type	Monitoring indicator	Details	Baseline	Target	Due date
Advisory & Policy Indicators	Practices of the relevant stakeholder improved (addressing violence, harassment and bullying risks) [Covenanted]	The Ministry will organise a campaign to raise awareness and contribute to prevention of violence and harassment. Staff will be supported to recognize and respond to such cases.	No	Yes	[REDACTED]

3. KEY PARTIES

3.1 BORROWER

The Borrower is Montenegro represented by the MoF. In September 2023, Moody's confirmed Montenegro's long-term sovereign credit rating at 'B1', outlook stable. Having downgraded Montenegro's long-term sovereign credit rating in March 2021 to 'B' from 'B+', S&P confirmed this rating in March 2024, revising the country outlook on the long-term sovereign credit ratings to positive from stable.

Montenegro is one of the smallest countries in Europe with a total area of approximately 13,800 km² and population slightly over 600,000 inhabitants, and open economy strongly dependent on tourism. The country's service sector, contributing to almost 60% of GDP and employing 73% of workers, has seen steady growth, averaging below 3% annually over the past decade. The 2020 pandemic-induced contraction led to an 85% decline in foreign tourist arrivals, resulting in a 15.2% GDP drop. However, the economy rebounded strongly in 2021 and 2022, with 12.4% and 6.1% growth, respectively. Growth was maintained at a similar level of 6% in 2023 on the back of household consumption expansion which was driven by the large increase in arrivals from abroad, partly reflecting the substantial inflows of Russian and Ukrainian immigrants.

3.2 CLIENT

The Client is MoH, which has overall responsibility for the healthcare policy, strategic decisions in health system, maintenance and (re)construction of public hospital buildings and capital investments. In 2023, MoH together with the State Health Insurance Fund had an operational budget of EUR 391 million or 16% of the total country's expenditures. The Budget Law for 2024 provides EUR 430 million for regular operations of the public health system. Since 2022, the health system of Montenegro is fully funded from state budget (no contributions paid by employed persons or employers).

The Ministry comprises seven directorates, and employ 103 people, excluding the personnel in hospitals and healthcare centres. Health care for citizens in Montenegro is provided at three levels:

- primary (18 health care centres), which should cover 80-85% of health care needs, and remains the priority in the development of the health system. The primary health care also includes the Institute for Public Health, the network of emergency services, the Blood Transfusion Institute, and the Pharmacies of Montenegro “Montefarm”;
- secondary (7 general and 3 special hospitals), where the health care is provided by specialist outpatient clinics and hospital wards; and
- tertiary (Clinical Centre of Montenegro (“CCoM”).

The health care service delivery is also made via the Health Insurance Fund, which is engaged in the implementation of health policy related to health insurance, and the Institute for Medicines and Medical Devices of Montenegro (CInMED), responsible for the implementation of pharmaceutical policy; both set up and regulated by the MoH.

Montenegro has improved access to essential health services in the recent years with coverage now close to 100% of the population, however it lags behind the EU average on hospitals bed per 100 000 population, though the average bed occupancy ratio was historically below the EU average. The Project helps to cover some efficiency gains targeted by MoH, optimising the average length of stay, rationalising hospital services and making greater use of outpatient services or day care (for CCoM).

4. MARKET CONTEXT

Energy and EE Context

As of end-2021, the country’s electricity mix consisted of: (1) hydropower plants 65.6% (705 MW); (2) Thermal Power Plant (“TPP”) Pljevlja 20.9% (225 MW); (3) wind power plant 10.4% (118 MW), and (4) solar power plants to 3%. (32 MW)⁴. In 2021, the electrical energy production of 4,044 GWh was mainly generated by TPP (37.7%), followed by renewable energy sources (mainly hydro) with 62.3%.⁵ There is a general dependency on coal for energy production and consumption in the country, while the production from hydro sources is very seasonal. Montenegro has significant potential for RE sources deployment with total RE capacity of 825 MW. The use of wind energy in Montenegro has been receiving an increasing interest from investors, and several medium-sized wind farms are planned. Energy demand is increasing in all energy consumption sectors (except industrial) due to intensive economic activities in tourism and construction.

The energy sector mainly produces electricity and heat, while contributing significantly to GHG emissions (74.6% of total GHG emissions in 2019, or 2,702 Gg CO₂), followed by transport sector (22%). Montenegro’s base year 1990 total GHG emissions amounted to 5,292.40 Gg CO₂e. In 2019, total emissions have been reduced by 31.5% compared to the base year, but the reduction target of 55% by 2030 is very ambitious.

Regulatory Context

The Energy Development Strategy of Montenegro 2030 represents the main strategic document for energy and energy efficiency. According to the Energy Efficiency Directive, Montenegro should adopt three-year Energy Efficiency Action Plans (“EEAPs”). Since 2010, Montenegro

⁴ Montenegro Energy and Water Regulatory Agency of Montenegro, Energy Sector Report Montenegro 2023

⁵ Ibid

has adopted four EEAPs, with the last one expired by end-2022, while the new one has not been adopted due to government changes. The plan is to cancel the adoption of future EEAPs and that EE policy is planned under the National Energy and Climate Plan (“NECP”), which should represent a comprehensive planning document in the energy area. NECP should be adopted in 2024 by the Government of Montenegro (“GoM”).

EE in the building sector

Buildings are the largest energy consumer in Montenegro, accounting for more than 40% of the final energy consumption, mainly for the purpose of electricity (76.3%) followed by extra-light fuel oil (9%) and fuelwood (8.8%). The healthcare sector consumes in average 50.5 GWh of energy per year (i.e. 6% of total energy consumption in Montenegro), mainly for electricity purposes (63%). It is to be noted that most of the buildings in the healthcare sector are old – almost half of them were built during 1970s and 1980s and a quarter during 1990s. It is evident that the building sector in Montenegro has strong EE potential which is estimated at 706 GWh of energy savings per year which would reduce the energy expenditures by EUR 63 million and energy consumption by 30-45%.⁶

In December 2019, the GoM adopted a plan for the reconstruction of public buildings (2020-2022) to fulfil the objectives of the mandatory reconstruction of administrative buildings. The focus was the buildings with the most unfavourable energy performance. Notable results were achieved through the implementation of dedicated projects financed from loans provided by different IFIs/MDBs. One of the most significant examples relates to Additional Financing of Montenegro Energy Efficiency Project (2009-2018) for 25 retrofitted public buildings which resulted in energy consumption savings of 45%. This is expected to avoid 60,750 tonnes of CO₂ emissions over the lifetime of the project.

5. FINANCIAL / ECONOMIC ANALYSIS

5.1 PROJECT FINANCIAL AND ECONOMIC ANALYSIS

[REDACTED]

5.2 MACROECONOMIC OUTLOOK

[REDACTED]

5.3 SENSITIVITY ANALYSIS

[REDACTED]

5.4 PROJECTED PROFITABILITY FOR THE BANK

[REDACTED]

⁶ Energy Community Secretariat, 2021, EE in Buildings in the Contracting Parties of the Energy Community

6. OTHER KEY CONSIDERATIONS

6.1 ENVIRONMENT

Categorised B in line with 2019 ESP. The Project will produce many environmental and social (“E&S”) benefits from improved energy efficiency of the existing hospital buildings and use renewable energy sources, including reduced energy usage and GHG emissions reduction, better lighting and insulation, improved resilience to climate-related impacts, improved indoor air quality and overall comfort of the hospital buildings for patients.

Environmental and social due diligence (“ESDD”) comprised of an E&S audit and assessment of priority investments carried out by independent consultants, including asbestos containing materials (“ACM”) review and a high-level life and fire safety assessment for the project sites. It has identified that the Client’s E&S management systems and internal E&S capacity to implement successfully the EE improvements at the hospitals as well as their labour and contractor management practices will require further improvement.

The Project will undergo national approval process for the scope of works of each of the three hospitals EE improvements after the main design is complete and will be required to obtain the necessary construction and environmental permits, approvals and authorisations. The Project will not require any additional land acquisition and all construction works will be taking place within the footprint of the existing sites. The Project will not have impacts on any sensitive areas or protected sites. All three hospitals plan to continue providing health services during construction works, and no interruption of hospital services is expected. The patients/staff will be relocated safely and temporarily within the existing hospital facilities for the limited time of the construction works. Since the affected people will be vulnerable hospital patients, GBVH risks have also been considered, and the Client will take necessary measures to avoid any potential risks for vulnerable people.

Potential E&S impacts and risks will be commonly associated with the construction phase, including dust and noise generation, increased traffic and nuisance. The main receptors of these impacts will be hospital users. ESDD identified the need to improve storage and disposal of hazardous and non-hazardous wastes on hospital sites, including old fluorescent lights and PCB transformer oils. Some concerns on limited asbestos presence in the ventilation ducts have been identified for Bijelo Polje site. For that an ACM management plan will need to be developed and implemented prior to start of the construction works and any ACMs will need to be removed and disposed of by competent contractors. The Client will also need to develop and implement an emergency preparedness and response procedure for the hospital sites. The renewable energy will be generated from distributed solar PV panels installed primarily on hospital roofs and the cumulative capacity for the three sites will be below 5MW. As this is a small solar component, the risks of the supply chain will be managed through the procurement process and additional requirements for the Client and the contractors in the ESAP.

ESDD confirmed that any impacts and risks are temporary, site-specific and can be effectively avoided, reduced or remedied through the implementation of mitigation measures outlined in the Project's environmental and social management plan (“ESMP”) and ESAP. A PIU will be established by the MoH and hospital representatives, and a PIU support consultant will be engaged to provide expertise in tendering procedures, E&S monitoring and overall Project reporting. The contractor will be required to develop and implement a Construction ESMP, which includes a construction waste management plan, occupational health and safety (“OHS”)

plan, and traffic management plan. Hospitals will also need to implement the corrective measures identified in the Life and Fire Safety Assessment, and Bijelo Polje site will also require implementation of the ACM management plan. This will address identified deficiencies in the current infrastructure and procedures, with a primary focus on prioritising the safety of all hospital occupants. A comprehensive stakeholder engagement plan (“SEP”), including a grievance mechanism, has been developed for the project and will need to be fully implemented.

An ESAP has been developed and agreed with the Client to address these issues and support implementation of the project and management of the environment, health and safety aspects of the hospitals in line with the Bank’s Performance Requirements. ESD will monitor the Project through annual environmental and social reports provided by the Client and site visits, if deemed necessary.

6.2 INTEGRITY

In conjunction with OCCO, internal integrity due diligence has been undertaken on the Clinical Centre in Podgorica and the general hospitals in Cetinje and Bijelo Polje, their management, as well as on the Minister of Finance and Minister of Health together with the State Secretary, given the sovereign structure of the Project. [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.

6.3 OTHER CONSIDERATIONS

Concessional Finance: The Project will be supported with [REDACTED] investment grant by EU REEP, which comprises 14.4% of total investment. The investment grant enhances project economics and enables an EE investment with higher standards than normally taken into consideration for EE investments in publicly owned buildings in the country. The use of concessional finance is economically justified by significant energy savings, unpriced environmental externalities and demonstration effects. Without the support of the investment grant, the Project may not proceed due to the share in energy savings being insufficient to cover the repayment of the loan. The Project is expected to catalyse further investments in public buildings in the country.

ANNEXES TO OPERATION REPORT

- ANNEX 1** Project Description
- ANNEX 2** Green Assessments
- ANNEX 3** Project Implementation

ANNEX 1. PROJECT DESCRIPTION

The Project will help implement EE and RE measures in three hospital buildings in Montenegro as follows:

1. Clinical Centre of Montenegro in Podgorica – 23,278 m², which is the largest and most important hospital in Montenegro,
2. Hospital in Bijelo Polje – 15,000 m², and
3. Hospital in Cetinje – 4,194 m².

Hospitals are managed by the MoH. According to the FS prepared for the Project, total gross area of the buildings included in the investment programme is 37,655 m² and the total estimated investment cost is approximately EUR 13.88 million. The specific investment cost is therefore EUR 358.4 /m² gross area and the specific cost savings are EUR 52.1 /m²year.

The proposed measures comply with relevant national regulations and with the targeted EE improvements (at least 30%) or GHG emissions reduction satisfy grant eligibility under REEP. The external due diligence (GET assessment based on the FS and EAs) estimated that the total end use energy savings after the implementation of EE/RE measures in the buildings included in the investment programme will be in the order of 14,929 MWh/year, while the primary energy savings are estimated in the order of 17,515 MWh/year (63,056 GJ/year). The estimated specific end use energy savings are 396.5 kWh/m²year and the specific primary energy savings are 465 kWh/m²year. The estimated primary energy savings are in the order of over 50% compared to the baseline energy consumption. The Project also includes the installation of on-site solar PV with a total capacity of 0.77MW. The estimated annual CO₂e reduction is ca 4.6k tonnes/year and the cumulative CO₂e savings per total investment cost over the lifetime of the Project (20 years period) is c. 6.2 kg/EUR of total investment cost. Heavy fuel air-polluting boilers (in Podgorica), light fuel boilers (in Cetinje and Bijelo Polje), and inefficient/unsanitary cooling split systems will be replaced by modern heat pumps and centralized heating/cooling systems (with fan coils). This will decrease air pollution from existing boiler houses and ensure the maintenance of healthy/sanitary, controlled environmental conditions in all three hospitals. Removing external air conditioning split system units from the façade will enhance the visual aesthetics of the hospitals.

The Project's impact extends beyond hospital buildings, disseminating the benefits of EE/RE to the broader population and highlighting EE potential in public infrastructure. Vulnerability to physical climate risks in hospital buildings has been assessed, with integrated risk mitigation measures. The Project operates with a 100% GET ratio, as all proceeds will be allocated to energy efficiency and renewable energy investments.

Apart from the direct energy – related benefits accrued from the implementation of EE/RE measures, there are also non-direct important benefits. These indirect benefits are:

- Direct employment impact for the implementation of EE/RE measures engaging mainly local and regional construction companies. Based on a survey on employment effects of EE investments in the building sector, the direct employment impact for EE/RE measures in buildings is on average 19 Full Time Equivalent per million EUR of investment.
- The upgraded HVAC systems will enhance hygiene and comfort, leading to fewer hospitalization days for inpatients. By optimizing temperature and ventilation through automation, indoor air quality will improve, reducing healthcare-associated infections and further decreasing hospitalization costs.

ANNEX 2. GREEN ASSESSMENTS

SUMMARY

- The Project is a sovereign loan of up to EUR 12 million in favour of the Government of Montenegro for the benefit of the Ministry of Health, to finance the implementation of energy efficiency and renewable energy measures in three hospital buildings in Podgorica, Bijelo Polje and Cetinje in Montenegro.
- The Project is determined **aligned with both mitigation and adaptation goals of the Paris Agreement.**
- The Project is attributed 100% **GET.**

[REDACTED]

PARIS ALIGNMENT ASSESSMENT

For Direct finance projects

Alignment with the mitigation goals of Paris Agreement - General screening

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

- The projects activity is included in the 'MDBs' aligned list' under the category Buildings
- 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 (the project delivers material primary energy savings of over 50% and complies with the national regulation consistent with EU framework).

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. All material physical climate risks have been addressed.

Step 1: The screening performed under Step 1 indicates that the project faces potentially material physical climate risks, specifically: **extreme heat** in Podgorica, Bijelo Polje and Cetinje; **increased water stress** in Podgorica and Cetinje; **fluvial flood** in Podgorica; **landslide** in Bijelo Polje; and **pluvial flood** in Cetinje.

Step 2: During the due diligence phase these risks were further assessed, and the results summarised below.

- **Extreme heat:** hospital designs (including fully temperature controlled heating and cooling systems) are able to cope with projected temperature increase. Cooling systems include HVAC systems and envelope insulation for all buildings (apart the Cetinje hospital where insulation was installed recently). Global datasets suggest that maximum daily temperatures, projected up to 2040 under both optimistic and pessimistic climate projections (SSP1-2.6, SSP3-7.0, SSP5-8.5), range between 35-40 C. Further, the Bank requires the detailed design specifications to take into account the projected temperature increase, the development of an emergency response procedure in case of extreme heat events, and adequate training of the hospitals' technical staff to ensure proper operations and maintenance of the new equipment. Conclusion: the project adequately mitigates heat risk.
- **Increased water stress:** According to global datasets, the absolute water stress projections (under both optimistic and pessimistic climate change scenarios) up to 2050 for relevant catchments for all hospitals are either low or low-medium, therefore, unlikely to lead to water

restriction in the hospitals or undermine project viability. The project is not associated with any additional water consumption, it is, therefore, unlikely to increase local water stress. Conclusion: risk is not material.

- **Fluvial flood:** the Podgorica hospital has not been affected by flooding for ~50 years (as it was constructed in 1975), even though there have been extreme rainfall/flooding events in the region during this time period (e.g., in 2009, 2010 and 2012). This provides strong evidence that the site is not exposed to flood risk. Additionally, the hospital is situated 230 meters away from the Moraca River, with a substantial 21-meter elevation difference, minimising the risk of fluvial flooding, as shown also in the modelling presented in the external due diligence report. Conclusion: the project is not exposed to fluvial flood.
- **Landslide:** the Bijelo Polje hospital and the surrounding area are not in a landslide prone area. The hospital has not been affected by landslides for ~70 years (as it was constructed in 1953), even though there have been extreme rainfall/flooding events in the region during this time period (e.g., in 2009, 2010 and 2012). This historic evidence provides tangible evidence that the location is not landslide prone. Further, alternative available datasets, namely the NASA Landslide Viewer software and the Municipal Protection and Rescue Plan from Landslides⁷, suggest that the site is not located within the landslide risk zone. Altogether, this provides strong evidence that the site is not exposed to landslides risk. Conclusion: the project is not exposed to landslide risk.
- **Pluvial flood:** the risk of pluvial flooding is unlikely due to the presence of separate sewage/stormwater drainage systems at the location of Cetinje hospital, the lack of historical flooding incidents, and the recent upgrade to the stormwater infrastructure. To further mitigate the risk, the Bank requires Hospital staff to monitor the performance of the stormwater drainage system and facilitate the prompt intervention of the local utility (responsible for its maintenance) should any malfunction occur. Conclusion: the risk is assessed as low and the project requirements further mitigate it.

Step 3: The Project is unlikely to have an impact on the climate resilience of the wider system in which it operates.

GET ATTRIBUTION

The Project is attributed 100% GET. This share has been calculated in line with the GET guidance for energy efficiency renovations in buildings outside of EU.

The estimated expected impacts of the transaction, compared to the baseline of the three hospitals, are: primary energy savings of 63,056 GJ/year (54%)⁸; Scope 1 emissions reduction of approx. 4.8k tCO₂e/year (86%); and reduction of 86% in air pollutants (SO_x, NO_x, PM_{2.5}, PM₁₀, CO) thanks to the shift from fossil fuel-based boilers to heat pumps. Due to increased electricity consumption, Scope 2 emissions show a slight increase, however the substantial Scope 1 reduction makes the overall GHG impact (Scopes 1+2) extremely positive, with a net reduction 4.6k tCO₂e/year (62%). The project also entails the installation of 0.77MW on-site solar PV, which is expected to generate around 1000 MWh/year, reducing the electricity demand from the grid. Additionally, the project will result in considerable improvements of internal thermal comfort, with a direct impact on users' health.

⁷ Adopted in August 2022 and updated in December 2023; available at: <https://www.bijelopolje.co.me/index.php/jsn-pagebuilder4-menu-text/lokalna-uprava/projekti/strateski-planovi/plan-zastite-od-klizista-i-odrona>.

ANNEX 3. PROJECT IMPLEMENTATION

Procurement classification – *Public [sovereign]*

[REDACTED]. The Client is the MoH [REDACTED]. This is its first project with EBRD.

The MoH will establish the PIU to implement the Project. [REDACTED] [T]he PIU will be supported by a PIU support consultant, appointed competitively in accordance with the EBRD Procurement Policies and Rules (“PP&R”).

The PIU will be selected by the MoH with the assistance of a procurement consultant, directly contracted from the EBRD Framework.

Contracts risk assessment – High/Moderate

The contract proposed to be co-financed from the Bank’s loan and EU REEP investment grant is detailed in the attached Procurement Plan. The support of an experienced consultant will ensure that technical specifications, employer’s requirements and tender documents are suitable for open tendering and aligned with the Bank’s PP&R.

The nature of the works contract is generally considered of medium complexity, and has a high/medium degree of implementation risk. The risk will be mitigated by the appointment of an implementation consultant what will support the Client along the entire project cycle.

Project implementation arrangements:

The implementation agency will be the MoH, which has overall responsibility for the healthcare policy in Montenegro, strategic decisions in the health system, maintenance and (re)construction of public hospital buildings and capital investments.

The PIU will be established by the MoH and will be supported by an international consultant. This will address the risks and ensure smooth project implementation. The Client will be assisted by a procurement expert in the selection, procurement and contracting of the PIU consultant.

The PIU consultant will assist the PIU in all aspects of implementation and in meeting the requirements of the Bank’s Financing Documents. In particular, the consultant will provide support in the areas of preparation of preliminary and detailed design, preparation of tender documents (including technical specifications), and works supervision.

Procurement arrangements:

It is envisaged one works contract for reconstruction, rehabilitation or refurbishment of the buildings to improve their energy efficiency. The contract will be co-financed by the proceeds of the Bank’s loan and EU REEP investment grant. The works contract will be procurement following open tendering procedures in accordance with the requirements of the Bank’s PP&R for public sector operations. The tender documents for the procurement of works will be based on the latest version of the Bank’s standard procurement documents for procurement of works.

The Project also envisages two technical cooperation contracts: (i) A procurement expert, which will be selected through direct contracting, given the value of the assignment; and (ii) A PIU implementation consultant, which will be selected through competitive selection procedure.

The contracts will be tendered via the EBRD Client E-Procurement Portal (ECEPP), and will be subject to prior review. [REDACTED].