Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 04/05/2024 | Report No: ESRSA03414

I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P500560	Investment Project Financing (IPF)	STEEM	2024
Operation Name	Sustainable Transition through Energy Efficiency in Moldova (STEEM)		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Moldova	Moldova	EUROPE AND CENTRAL ASIA	Energy & Extractives
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Republic of Moldova	Moldova Project Implementation Unit (MPIU), Ministry of Energy	08-Apr-2024	30-May-2024
Estimated Decision Review Date	Total Project Cost		
26-Mar-2024	54,500,000.00		

Proposed Development Objective

To enhance energy efficiency in existing public buildings and the district heating sector in Moldova and provide immediate and effective response to an eligible crisis or emergency.

B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

[Description imported from the PAD Data Sheet in the Portal providing information about the key aspects and components/sub-components of the project]

The Project will support interventions under the following components: Component 1 – EE investments in public buildings: (a) Sub-component 1.1. EE renovation in education buildings. This sub-component will finance the retrofit of public buildings focusing on educational facilities, which will include: (i) standard energy efficient retrofit measures, such as thermal insulating of wall and roof, replacing windows and doors, renovation of internal heating system, and replacement of lighting using well-proven technologies and equipment for energy efficiency improvements in end-use

application, and (ii) installation of heat pumps, solar thermal collectors and rooftop solar PV if technically feasible and economically viable. Beneficiary and sub-project eligibility criteria: Beneficiary eligibility criteria for subcomponent 1.1, which will be used at the screening stage, include: (i) full ownership by a governmental agency and primary used for public services; (ii) preliminary confirmed structural soundness of the buildings (in terms of structural durability and safety of the construction); stability of the building, no seismic and construction damages; (iii) secured prospective use of the facility, and absence of plans for closure or downsizing or privatization; (iv) no other users occupying the building or parts; and (v) the building has been constructed between 1950 and 2013, as it is expected that relatively new buildings have lower demand for retrofit. Subproject eligibility criteria, which will be confirmed after completion of the energy audit of each subproject, include: (i) the energy audits confirm at least 20 percent energy savings after renovation compared to real consumption and normative demand baseline, an economic payback period of less than ten years, and (ii) no significant capital repairs or mayor renovation over the last five years, to avoid renewed EE intervention for buildings with already better energy performance. In addition, buildings which may trigger ESS5 (land acquisition) will not be eligible for funding. (b) Sub-component 1.2. District heating upgrades. This sub-component will finance improvements in the heat supply by central district heating (DH) in education facilities and public administration, including the buildings selected under sub-component 1.1. Public buildings will be enhanced through installation of individual DH substations at building level and DH network upgrades using well proven technologies and equipment. The implementation of about 350-400 individual heat substations (IHS) will be implemented under the supervision of the public utility Termoelectrica. DH network up-grades comprise minor DH distribution pipeline replacement (few hundred meters, including valves) from the old central DH heating point to the new building-based HIS. (c) Sub-component 1.3. Initial operationalization of sustainable financing mechanism for EE. The sub-component will support on-going Government's efforts to operationalize a USAID-led SuperESCO scheme, including an initial pilot phase through 2026 by financing: (i) operating costs and marketing activities of the mechanism, and (ii) energy audits, detailed designs and technical specifications, technical reviews, construction supervision, energy performance certificates and other technical studies. Disbursements for this sub-component will be subject to the legal establishment of a sustainable mechanism in terms and conditions acceptable to the Bank. This mechanism will initially support public buildings but could potentially be used for residential and industrial or commercial buildings in coordination with other mechanism under development. In the medium- to long-term it is expected to contribute to leverage private financing for EE. Component 2 – Implementation support and technical assistance. This component will include: (i) MEPIU staff and operational costs; (ii) capacity building for staff at Ministry of Energy (MoE), National Center for Sustainable Energy (CNED), Termoelectrica SA (TE) and MEPIU; (iii) supply and installation of Energy information system at CNED EEA; (iv) Detailed energy audits in education buildings selected in sub-component 1.1.(v) other technical assistance, study tours and workshops. This component is expected to contribute to the creation of new incentives for EE and increase private sector participation in EE projects and helping Moldova to reach scale in EE investments in a sustainable manner. Component 3 – Contingent emergency response component. This component would have zero allocation of financing to allow for rapid reallocation of proceeds of uncommitted financing in the event of an eligible crisis or emergency. For the CERC to be activated, and financing to be provided, the Government of Moldova will need to (a) submit a request letter for CERC activation and the evidence required to determine the eligibility of the emergency, as defined in the CERC manual; (b) have an Emergency Action Plan, including the emergency expenditures to be financed; and (c) meet the environmental and social requirements as agreed in the Emergency Action Plan and related environmental and social instruments.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

[Description of key features relevant to the operation's environmental and social risks and opportunities (e.g., whether the project is nationwide or regional in scope, urban/rural, in an FCV context, presence of Indigenous Peoples or other minorities, involves associated facilities, high-biodiversity settings, etc.) – Max. character limit 10,000]

The Project will support energy efficiency and district heating upgrades in public buildings, specifically educational facilities and public administration buildings. The project will be implemented nationwide and exact locations will depend on selection of buildings through a technical energy auditing process.

The project takes place within the context of Moldova's high poverty rates and soaring energy and food prices experienced by the population in 2021, as a result of impacts stemming from its proximity to the Russian invasion of Ukraine. The project also takes place within the context of Moldova's efforts to harmonize its energy policy with the EU focusing on strengthening energy security, improving compliance with EU directives, increasing electricity generation capacity and promoting energy efficiency and renewable energy. By encouraging investment in renewables, Moldova could reduce its reliance on imported natural gas while maximizing the consumption of domestic energy resources. Despite the large potential for wind and solar power, its deployment has been very modest to date, with only 120 MW of installed capacity as at the beginning of 2022. Bioenergy use is mostly of firewood in inefficient boilers and stoves and might induce deforestation. Forests cover about 11-12 percent of Moldova's land area.

Educational and multi-family buildings are the building categories with the highest achievable energy savings per unit of investment. While most of the energy consumption of buildings stem from the residential sector (80 percent), the Government has decided to initially prioritized interventions in public buildings to strengthen the capacities of market operators, (e.g. contractors, auditors) and showcase the benefits of EE improvements to the population, e.g. in schools, that can create a virtuous circle of growth and demand from other sectors.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

[Description of Borrower's capacity (i.e., prior performance under the Safeguard Policies or ESF, experience applying E&S policies of IFIs, Environmental and social unit/staff already in place) and willingness to manage risks and impacts and of provisions planned or required to have capabilities in place, along with the needs for enhanced support to the Borrower – Max. character limit 10,000]

The Project will rely on the same implementing entity and similar implementation arrangements as the two on-going World Bank-funded projects: Second District Heating Efficiency Improvement Project (P172668) and Power System Development Project (P160829). The Ministry of Finance (MoF), as the Borrower of the World Bank loan, will enter into an Implementation agreement with the Ministry of Energy, the central administration authority responsible for the project, which will delegate day-to-day implementation to its Moldova Energy Projects Implementation Unit (MEPIU). The MEPIU will hold fiduciary, environmental and social responsibilities vis-à-vis the World Bank. The National Center for Sustainable Energy (NCSE) will support the MEPIU in all technical aspects related to sub-component 1.1 and 1.3, sub-component 1.2 will be implemented under the supervision of the public utility, Termoelectrica. The NCSE and Termoelectrica staff will have close collaboration with the MEPIU during all procurement processes of respective sub-components and monitoring of works.

MEPIU has experience implementing the two-above mentioned projects under the World Bank's Environmental an Social Framework (DHEIP2 P172668 and and Power System Development Project P160829). The MEPIU includes 12 in-house staff including an environmental engineer and a social specialist that are fully engaged on these projects. The

MEPIU will recruit an additional ESHS specialist for the project to add capacity to implement the project, while maximizing synergies with current staff engaged with on-going projects.

Termoelectrica SA, the key energy utility provider will be required to hire staff to manage and implement any environmental and social (E&S) risk management measures required for subprojects under the operation. Termoelectrica SA has been ISO 140001 compliant since 2020, has an environmental department and a labor department and has experience with stakeholder engagement and grievance redress using its own in-house systems.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) Moderate

A.1 Environmental Risk Rating Moderate

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The environmental risk is considered Moderate. The project is not expected to have significant adverse environmental risks and/or impacts. On the contrary, given its overall green and energy efficiency footprint, it will likely result in positive impacts in the long run in terms of energy conservation and reduction of GHG emissions and air pollution. However, there are several short-term risks, mostly related to small-scale civil works on already existing facilities (schools, central government buildings, public administration buildings) under Component 1, but these are expected to be predictable, temporary, low in magnitude, and site specific without likelihood of impacts beyond the actual footprint of the project, reversible, and manageable in a predictable manner through the implementation of cost-effective mitigation measures in line with the national laws as well as the use of the World Bank Environmental & Social Standards (ESS), Environmental, Health, and Safety Guidelines (EHSG) and Good International Industrial Practices (GIIP). The main environmental risks associated with small scale energy efficiency (EE) civil works will be related to (a) impacts on ground and surface water, soil, and air contamination (dust and noise); (b) inadequate waste management including hazardous waste (potentially of asbestos containing material) during construction works; (b) occupational health and safety of workers; (c) community health and safety of residential population, staff and students as well as visitors during construction works; (d) disruption of regular activities as a result of construction works; (e) traffic disruption in residential areas (depending upon specific location), transport and traffic safety at construction sites; (f) old electrical appliances; etc. The activities proposed under Sub-component 1.2 include the upgrades of district heating networks in education facilities and public administration which will also generate moderate environmental risks and impacts such as soil and air pollution; generation of noise and construction wastes, labor safety, etc.

A.2 Social Risk Rating Moderate

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The social risk are classified as moderate, and are primarily related to Component 1. Social risks associated with energy efficiency upgrades in educational facilities and public administration buildings are small scale, and contained within site boundaries Extension and rehabilitation of existing pipelines for district heating upgrades will take place

within existing rights of way in urban or peri urban neighborhoods in Chisinau, and do not require land acquisition. The increased energy efficiency and the improved district heating services are expected to have positive socio-economic outcomes for the general population and better indoor air quality for building users. Social risks or tensions may arise if information about the building/school selection process is not adequately disclosed and consulted, and is perceived as unfair or lacking transparency, and later, if works schedules are not adequately communicated to building users, including teachers, parents and students. Limited potential adverse social impacts during works include service disruptions and access restrictions, particularly for vulnerable groups; and temporary traffic disturbances. Works will mainly take place in buildings by small groups of qualified technicians for installing thermal insulation, high-quality energy efficient windows, and advanced equipment. Risks of inadequate labor and working conditions for the workforce and occupational health and safety risks for workers will be adequately managed through labor management procedures consistent with national law and World Bank ESS2. Given size and nature of works and work crews in supervised environments, the risk of sexual exploitation and abuse/sexual harassment (SEA/SH) associated with the Program's activities is assessed as low. However preventative measures are required given works in possible proximity to children in schools and will include labor codes of conduct and a grievance mechanism with measures for referral to specialized service providers. Forced labor in the global supply chain is an indirect risk associated with the solar panels and components procured and deployed for renewable energy generation. Applicable provisions and Forced Labor Performance Declarations will be included in procurement documentation to mitigate this risk.

[Summary of key factors contributing to risk rating. This attribute is only for the internal version of the download document and not a part of the disclosable version – Max. character limit 8,000]

B. Environment and Social Standards (ESS) that Apply to the Activities Being Considered

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts Relevant

[Explanation - Max. character limit 10,000]

Sub -component 1.1 of the Project will support civil and mechanical works in public buildings (educational facilities and public administration buildings), including typical building-level energy efficiency measures such as insulation of walls and roof ceiling, replacement of windows and exterior doors, the replacement of coal- and biomass-fired boilers with cleaner, more efficient heating technologies, and the installation of solar collectors for sanitary hot water and rooftop solar photovoltaics (PV) within existing building footprint . Component 1.2 will finance improvements in the heat supply by central district heating (DH) in education facilities and public administration buildings in Chisinau, including the buildings selected under sub-component 1.1. Public buildings will be enhanced through installation of 350-400 individual DH substations at building level, and DH network upgrades using well proven technologies and equipment. Upgrades of district heating systems may require excavation works to access and rehabilitate or extend underground district heating pipes, within existing rights of way. Therefore, some environmental and social adverse impacts and risks associated with small scale civil and mechanical works may arise , Environmental and social impacts from these activities should be typical for construction works of this scale, e.g., noise emission, dust emission, wastewater, construction waste, and risks to workers (occupational health and safety and labor conditions). Limited

potential adverse social impacts during works include service disruptions and access restrictions, particularly for vulnerable groups; temporary traffic disturbances; cultural heritage provisions for working in culturally important/heritage buildings. If the potential risks and adverse impacts are identified timely and all mitigation measures are applied adequately these should be small in magnitude, predictable and temporary, and as such, easily manageable. Given that the building selection and specific recommended energy efficiency measures will be based on professional energy audits, and not determined with certainty yet, the Project will adopt a framework approach. An Environmental and Social Management Framework (ESMF) is prepared for the Project, and will be implemented in order to identify adverse environmental and social impacts and risks and manage them properly, specify legislative and regulatory framework, procedures and institutional responsibilities and provide an outline for site-specific Environmental and Social Assessments(ESA) or management plans to be developed for each specific site. Considering the large number of subprojects, the ESMF will contain relevant measures (ESMP Checklist format) for different activities based on the identified risks. The ESMF also includes a clearly defined procedures for screening, preparation, review, and consultation and addressed responsibility roles. The site-specific ESMPs/ESMP Checklists will be prepared, approved, disclosed prior to the commencement of any civil works and will be part of public calls. The PIU will be responsible for all documents; Contractor's plans, and overall ESMF including, Labor Management Procedures (LMP) and Stakeholder Engagement Plan (SEP) and their implementation. The project will not finance any sub-projects categorized as substantial or high environmental and social risk. The first five ESMP checklists for works covering all types of education/public buildings and district heating facilities will require prior review and WB approval, while every site-specific ESMP will be subject to prior WB approval. The ESMF also sets forth a screening mechanism to ensure that substantial or high-risk activities, are not financed under the Project. Given that the Project will be country wide implemented, the ESMF includes very clear and concrete eligibility criteria, screening environmental and social procedures, and based on the screenings' findings it will be further decided what instrument should be used for relevant sub-project activity (for interventions on buildings), and monitoring provisions. The ESMF also includes provisions for the avoidance of any sensitive environments or protected areas, guidance for pollution prevention and environmentally sound resource use under ESS3, and any guidance on cultural heritage or chance finds as stipulated under ESS8. The ESMF will be updated in the event that the CERC Component 3 is activated. The ESMF (that includes Labor Management Procedures (LMP)), and Stakeholder Engagement Plan (SEP) have been prepared, disclosed, consulted and adopted, prior to Appraisal. An Environment and Social Commitment Plan (ESCP) has been also prepared, disclosed and adopted, to describe the timing and responsibilities for commitments mentioned above.

ESS10 - Stakeholder Engagement and Information Disclosure Relevant

[Explanation - Max. character limit 10,000]

The project has prepared, consulted and disclosed a Stakeholder Engagement Plan (SEP) by Appraisal. The SEP identifies the Project Affected Parties, comprising, among others, the project beneficiaries of students, teachers and support staff in selected public education buildings, parents represented by Parent's councils, that may be affected temporarily by access, or other construction related impacts. District heating upgrades may similarly affect members of the public who use the buildings or are impacted by works. Vulnerable children and their families (e.g. poor or refugee households; illiterate parents), elderly people and people with disabilities, may be disproportionately affected by these temporary impacts, or may face barriers in accessing information and engaging in the project. The SEP summarizes engagements with various stakeholders for previous, similar investments that have informed project design of STEEM. The SEP and ESMF have been disclosed and consulted with stakeholders prior to project appraisal,

providing information about the project's identified environmental and social impacts and mitigation measures, and information about the building selection process and criteria. The SEP identifies the needs of project stakeholders and sets out a plan for stakeholder engagement and information disclosure throughout project implementation, using a variety of methods. The SEP specifies the institutional roles and responsibilities, timeline, and budget for conducting the stakeholder engagement. The PIU has experience with operationalizing grievance mechanisms consistent with ESS10, for other World-Bank supported projects. The SEP describes a grievance mechanism that has been adapted to the project and will be established and implemented, consistent with ESS10, including procedures and capacity to handle and refer complaints associated with SEA/SH to qualified national service providers.

ESS2 - Labor and Working Conditions Relevant

[Explanation - Max. character limit 10,000]

The project has prepared LMP (within the ESMF) that will be applied throughout project implementation. The LMP estimates the number and characteristics of workers, assesses the labor risks, and sets out the mitigation measures consistent with ESS2 and national law. The Project is expected to involve a limited number of direct and contracted workers. The direct workers (about 25-30 persons) will be MEPIU's employees, including the consultants and specialist contracted from EEA/NCSE and TE, dedicated to this project. Contracted workers are estimated at 500-800 persons, with about 10 persons per site, with further sequencing and timing still to be determined. The labor and construction materials are expected to be sourced locally, and work camps or significant labor influx is not expected. Subprojects are not expected to involve significant risks to labor and working conditions. There are limited risks of informality in the work force and the risk will be managed through requirements for clear written contracts and remuneration between the Contractors and the employees through written labor contracts. Workers under 18 are not permitted to be employed and contractors are required to verify age of all workers. Occupational health and safety risks are assessed at moderate, mainly for the contracted workers across various sites, and are related to their exposure to physical, chemical and biological hazards during the small -scale construction and mechanical installation activities, including use of heavy equipment, trip and fall hazards, exposure to noise and dust, falling objects, exposure to hazardous materials and exposure to electrical hazards from the use of tools and machinery; electrical works; exposure to chemicals (as paints, solvents, lubricants, and fuels); excavations hazards; lifting of heavy structures; exposure to construction airborne agents (dust, silica and asbestos); Welding hazards (fumes, burns and radiation). Contractors engaged for civil works will be required to prepare OHS plans and Traffic Management Plans for site works as part of the Contractor's ESMP. including (a) assessment of risks including work accidents, hazardous substances, risks associated with the location; risks related to site camps etc.; (b) measures to ensure safe working around construction machinery; (c) measures to ensure safe working at heights; (d) measures to ensure safe handling of hazardous materials; (e) personal protection equipment to be provided, including type and number; (f) location, facilities and layout of site camps; (g) first aid provisions on site; and (h) accident and emergency procedures including location of relevant health facilities (i) training for workers. The project will institute a Code of Conduct for project workers prior to hiring workers as per the ESCP. The LMP sets out the grievance mechanism for workers that is adopted by the project. Forced labor in the global supply chain is a risk in the procurement and use of solar panels and components and will be managed through applicable provisions in procurement documentation.

ESS3 - Resource Efficiency and Pollution Prevention and Management Relevant

[Explanation - Max. character limit 10,000]

This Standard is relevant, as it is expected that a certain amount of waste will be generated as a result of the reconstruction and rehabilitation work under Component 1. If it is estimated that hazardous waste could occur during these works, this needs to be addressed in a manner prescribed for the management of this type of waste. For the majority of the works, the scale of waste is expected to be small, so provisions of proper waste management will be included into the relevant ESMP/ESMP checklist, with information on estimated volumes of various types of waste (waste management, wastewater, communal, hazardous waste), arrangements for their temporary storage, transport and final disposal, and clearances/permits for waste disposal obtained from relevant national authorities and adequate mitigation and rehabilitation practices, as appropriate. Guidance for re-use or recycling of some types of waste and hand-over to secondary users will be included where feasible. Project activities will also contribute to improved Chisinau city's heating infrastructure and assets, strengthen market linkages and enhance Termoelectrica institutional capacity which would contribute to better resource efficiency. The ESMF includes sections on pollution prevention and management aspects associated with all proposed civil works for EE and district heating, and direct impacts of construction, including air, water, noise, waste pollution. Mitigation and monitoring measures will be further elaborated in detail in site-specific ES management plans where required by applicable national regulations, ESS3 and the ESF's mitigation hierarchy, WBG's EHS General, sector-specific guidelines, and GIIP.

ESS4 - Community Health and Safety Relevant

[Explanation - Max. character limit 10,000]

The Project's activities pose temporary, moderate, site-specific risk of adverse impacts on the health and safety of beneficiaries and other project affected parties (students, staff, teachers and parents) during retrofitting and renovation of buildings. Potential threats to people and communities may be posed by uncovered or non-barricaded or not signposted excavated sites, trenches, open holes, open electric cables, etc. Other potential risks include exposure to asbestos-containing materials during the replacement of old-heating systems and construction-related nuisances such as dust, noise and traffic. Refurbishment of district heating networks of pipes is likely to involve some temporary disruption to traffic and road access. All mitigation measures required for ensuring health and safety, including on SEA/SH, of individuals and communities residing in and around sites where activities will take place will be included into ESMF, and contract of works and made mandatory for adherence by works contractors.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Not Currently Relevant

[Explanation - Max. character limit 10,000]

There is no anticipated requirement for land acquisition and no physical or economic displacement associated with the energy efficiency measures. Rehabilitation to public buildings, do not require land acquisition. Replacement of old pipes with new pre-insulated ones for the rehabilitation of district heating networks takes place on existing public land with minor easements and will be screened and redesigned to avoid impacts involving physical or economic displacement. Rehabilitation works may require minor, temporary, and mostly insitu, relocation of building inhabitants during the rehabilitation period. Any buildings or works that would require land acquisition, and thus trigger ESS5 will not be eligible for financing under the project.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources Not Currently Relevant

[Explanation - Max. character limit 10,000]

This standard is not relevant because the project will support works in the already existing buildings within urban and peri-urban areas, thus, no impact on biodiversity and living natural resources is envisaged.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities Not Currently Relevant

[Explanation - Max. character limit 10,000]

No indigenous peoples who meet the criteria described under this standard reside in the territory of Moldova.

ESS8 - Cultural Heritage Not Currently Relevant

[Explanation - Max. character limit 10,000]

The Project is unlikely to pose an impact on known tangible built, or intangible cultural heritage since the expected civil works will be conducted within already existing buildings footprint. Buildings recognized as valuable from an architectural, aesthetic, spiritual or socio-cultural perspective are not expected to be included in refurbishment. Buildings will be screened to both identify any protected buildings and for potential impacts on and access to buildings, sites and practices. The Moldovan Ministry of Culture will be consulted as part of the screening process as well as other relevant stakeholders. The ESMF will have procedures in case of buildings falling under cultural registry lists of the country are included. The procedures will be in line with national requirements and requirements of this Standard. The ESMF contains Chance Find Procedures for all earth-moving sub-projects (e.g. rehabilitation of district heating networks).. Sub-project sites will prepare an be elaborated cultural heritage management plan, as needed based on screening, for the buildings of special concern/preservation status.

ESS9 - Financial Intermediaries Not Currently Relevant

[Explanation - Max. character limit 10,000]

This standard is not relevant.

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways No

OP 7.60 Operations in Disputed Areas No

B.3 Other Salient Features

Use of Borrower Framework No

[Explanation including areas where "Use of Borrower Framework" is being considered - Max. character limit 10,000]

The Borrower's framework will not be used for the project. However, the proposed operation will comply with relevant national legal and regulatory requirements.

Use of Common Approach No

[Explanation including list of possible financing partners – Max. character limit 4,000]

No financing partners identified

B.4 Summary of Assessment of Environmental and Social Risks and Impacts

[Description provided will not be disclosed but will flow as a one time flow to the Appraisal Stage PID and PAD – Max. character limit 10,000]

The environmental risk of the project is assessed as Moderate. Overall, the project is likely to generate some environmental impacts related to the energy efficiency (EE) investments, but also to bring positive impacts in terms of energy conservation and reduction of GHG emissions and air pollution. The environmental impacts related to the project activities are expected to be predictable, temporary, low in magnitude, and site specific without likelihood of impacts beyond the actual footprint of the project, reversible, and manageable in a predictable manner through the implementation of cost-effective mitigation measures in line with the national laws as well as the use of the World Bank Environmental & Social Standards (ESS), Environmental, Health, and Safety Guidelines (EHSG) and Good International Industrial Practices (GIIP). However, considering the project description and the planned activities primarily associated with small-scale EE civil works, key environmental issues will be related to (a) waste management including hazardous waste (potentially of asbestos containing material) during construction works; (b) occupational health and safety of workers; (c) community health and safety of residential population, staff and personnel as well as visitors during construction works; (d) disruption of regular activities as a result of construction noise pollution; (e) traffic disruption in residential areas (depending upon specific location), transport and traffic safety at construction sites; (f) old electrical appliances; etc. Additionally, activities proposed under Sub-component 1.2 include the rehabilitation of district heating networks which will also generate moderate environmental risks and impacts such as soil and air pollution; generation of noise and construction wastes, labor safety, etc.

The social risks are classified as moderate. Social risks associated with energy efficiency upgrades under Component 1.1 in educational facilities and public administration buildings are small scale, and contained within site boundaries Extension and rehabilitation of existing pipelines for district heating upgrades under Component 1.2 will take place within existing rights of way in urban or peri urban neighborhoods in Chisinau, and do not require land acquisition. The increased energy efficiency and the improved district heating services are expected to have positive socio-economic outcomes for the general population and better indoor air quality for building users. Social risks and tensions associated with these activities may arise from inadequate information disclosure about the building/school selection process. Limited potential adverse social impacts during works include service disruptions and access restrictions, particularly for vulnerable groups; temporary traffic disturbances; cultural heritage provisions for working in culturally important/heritage buildings. Works will mainly take place in buildings by small crews of qualified technicians for installing thermal insulation, high-quality energy efficient windows, and advanced equipment. Labor risks of inadequate labor and working conditions for the workforce and occupational health and safety risks for workers will be adequately managed through labor management procedures and contractual obligations consistent with national law and World Bank ESS2. Given size and nature of works, and work crews in supervised environments, the risk of sexual exploitation

and abuse/sexual harassment (SEA/SH) associated with the Program's activities is assessed as low. However preventative measures are required given works in possible proximity to children in schools and will include labor codes of conduct and a grievance mechanism with measures for referral to specialized service providers. Forced labor in the global supply chain is an indirect risk associated with the solar panels and components procured and deployed for renewable energy generation. Applicable provisions and Forced Labor Performance Declarations will be included in procurement documentation to mitigate this risk.

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

[Description of expectations in terms of documents to be prepared to assess and manage the project's environmental and social risks and by when (i.e., prior to Effectiveness, or during implementation), highlighted features of ESA documents, other project documents where environmental and social measures are to be included, and the related due diligence process planned to be carried out by the World Bank, including sources of information for the due diligence - Max. character limit 10,000]

The following E&S documents will be prepared by the Borrower by appraisal: Environmental and Social Management Framework (ESMF) containing Labour Management Procedures (LMP), Stakeholder Engagement Plan (SEP), , and Environmental and Social Commitment Plan (ESCP).

Since sub-projects sites and details are not yet known, the identified risks and impacts will be addressed in ESMF. The ESMF will provide selection and screening criteria to be applied for the identification of sub-project sites and will identify typical environmental and social risks likely to occur during the project implementation, specify legislative and regulatory framework, consider procedures and institutional responsibilities. Considering the large number of subprojects, the ESMF will contain generic mitigations and monitoring plan (ESMP Checklist format) for different activities like based on the identified risks. All Technical Assistance (TA) activities under the project conducted for subprojects preparation and for developing feasibility/technical studies for priority EE investment projects and biomass energy generation assessment will be based on TORs prepared in line with the WB's ESF. The ESMF will provide monitoring requirements as well as roles and responsibilities for ensuring effective implementation of the ESMF requirements throughout the project lifecycle.

The PIU has prepared an SEP by Appraisal which will identify potential project-affected and other interested parties and will outline measures for engagement with these stakeholders. The SEP will be prepared based on preliminary consultations with stakeholders. The SEP will specify the institutional roles and responsibilities, timeline, and budget for conducting the stakeholder engagement. The PIU will establish a project-level GM and maintain it throughout project implementation dedicating sufficient resources, and staff time to GM management. The GM will be revised to update provisions for appropriate procedures and capacity to handle complaints associated with SEA/SH including referral to specialist national service providers. The SEP including the GM will be publicly disclosed, revised, and updated.

The project has prepared LMP (within the ESMF) that will be applied throughout project implementation. The LMP estimates the number and characteristics of workers, assesses the labor risks, and sets out the mitigation measures consistent with ESS2 and national law. Key aspects of the LMP pertaining to contracted workers, such as Occupational

Health and Safety (OHS), adequate working conditions, terms of contract, and a functioning grievance and redress mechanism for workers, will be included in Contractors' ESMP. The project will institute a Code of Conduct for project workers. to prevent and manage incidents of SEA/SH.

III. CONTACT POINT

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V. APPROVAL

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