



## ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

### SCALING UP RESIDENTIAL CLEAN ENERGY (SURCE) PROJECT (P176770)

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## ABBREVIATIONS

AERS	Energy Agency of the Republic of Serbia
CGD	Central Grievance Desk
CFD	Central Feedback Desk
CFU	Central Fiduciary Unit
CREP	Central Register of Energy Passports CREP
EC	European Commission
EE	Energy efficiency
EEA	Administration for financing and promoting energy efficiency Energy Efficiency Administration
EED	Energy Efficiency Directive
EEE	Elaboration on Energy Efficiency
EHSG	Environmental, Health and Safety Guidelines
EIA	Environmental Impact Assessment
EMP	Environmental Mitigation Plan
ESA	Environmental and Social Assessment
ESS	Environmental and Social Standards
ESMF	Environmental and Social Management Framework
ESCO	Companies that provide energy services in accordance with the Law on Efficient Use of Energy / Law on Energy Efficiency and Rational Use of Energy
ESCO	Energy Service Companies
ESIA	Environmental and Social Impact Assessment
ESF	Environmental and Social Framework
ESS	Environmental and Social Standards
ESMP	Environmental and Social Management Plans
ESRS	Environmental and Social Review Summary
EU	European Union
GHG	Greenhouse gas
GI	Green Infrastructure
GoS	Government of Serbia
GM	Grievance Mechanism
ILO	International Labour Organization
IPF	Investment Project Financing
INP	Institute for Nature Protection
INECP	Integrated National Energy and Climate Plan
IPCM	Protection of Cultural Monuments of Serbia
IPPC	Intergovernmental Panel on Climate Change



LEP	Law on Environmental Protection
LCDS	Low Carbon Development Strategy
LMP	Labour-Management Procedures
LEIA	Law on Environmental Impact Assessment
LSGs	Local Self Governments
M&V	Measurement and Verification
MAB	Multi-apartment buildings
MAFWM	Ministry of Agriculture, Forestry and Water Management
MCTI	Ministry of Construction, Transport, and Infrastructure
MEP	Ministry of Environmental Protection
MLEVSA	Ministry of Labour, Employment, Veterans and Social Affairs
MoCTI	Ministry of Construction, Transport and Infrastructure of the Republic of Serbia
MoF	Ministry of Finance
MoME	Ministry of Mining and Energy of the Republic of Serbia
MoEP	Ministry of Environmental Protection
MoU	Memorandum of Understanding
NAP	National Adaptation Plan
NERP	National Emissions Reduction Plan
OIP	Other Interested Parties
OHS	Occupational health and safety
PAP	Project Affected People
PIU	Project Implementation Unit
POM	Project Operations Manual
PSEP	Project Level Stakeholder Engagement Plan
RF	Resettlement Framework
RS	Republic of Serbia
SDG	Sustainable Development Goal
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SFH	Single-family houses
SH	Sexual Harassment
SUDS	Sustainable Urban Development Strategy
SURCE	Scaling up Residential Clean Energy
TA	Technical assistance
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WHO	World Health Organization

EU	European Union
UN	United Nations

## Executive Summary

This Environmental and Social Management Framework (ESMF) is prepared for the Republic Serbia Scaling up Residential Clean Energy (Hereinafter referred to as: SURCE). The Project is implemented by the Ministry of Mining and Energy (MoME) and funded by the World Bank. The ESMF is required because the activities being financed by the project will not be identified, designed and have their locations known, prior to the World Bank's appraisal of the project. Therefore, in accordance with the World Bank's Assessment and Management of Environmental and Social Risks and Impacts, Environmental and Social Standard 1(ESS1), the MoME is required to prepare, consult upon and publicly disclose this ESMF. Therefore, the purpose of the ESMF is to establish system and process to examine environmental and social risks and impacts of the subproject activities when they are identified and their location determined, to ensure the requirement assessments are done and management plans prepared for subprojects and to provide a system for monitoring and managing such impacts during project implementation. Additionally, this framework describes institutional roles and responsibilities for managing environmental and social risks under the project, and the feedback and grievance mechanisms by which citizens and other interested parties can interact with the project implementation agency.

**Project objective.** Project Development Objective is to enhance the availability and affordability of energy efficiency, sustainable heating, and rooftop solar PV for households in Serbia. Also, the project aims to create a sustainable financing model to scale up clean energy solutions among households – an essential intervention to promote air quality, reduce energy poverty, and support Serbia's low-carbon transition.

Serbia has begun developing the strategic framework for the decarbonization of its economy. On a national level, a draft Low-Carbon Development Strategy (LCDS) was prepared in 2020 with financial support of the EU, setting a more ambitious target to reduce Serbia's GHG emissions by 33.3 percent in 2030 compared to 1990 levels. In January 2021, the GoS adopted an Action Plan for the Implementation of the Government's Programme 2020-2022, which includes two "Green Agenda" objectives: priority objectives 1.3. "Environmental protection and green transformation" under the responsibility of the Ministry of Environmental Protection (MEP), and 1.4. "Energy transformation and sustainability" under the responsibility of the MoME. As of September 2021, a new energy sector strategy and a National Energy and Climate Plan (NECP) are also in preparation.

Also, this Project is planned as a mixture of investment and technical assistance to boost green and inclusive infrastructure development and infrastructure service provision at the local level, including the implementation of the relevant chapters of Sustainable Urban Development Strategy (SUDS).

This objective is achieved through two components:

- 1) **Investment component** (US\$45 million), which consists in financing energy efficiency, sustainable heating, and rooftop solar investments in residential buildings by providing partial grants to households; and
- 2) **Technical assistance component** (US\$5 million) that includes support to MoME, EEA, municipalities and other stakeholders, and strengthening public awareness, in order to develop scalable financing mechanisms and remove market barriers.

The project will prioritize investments in single-family houses (SFHs) that use solid fuels (e.g., coal, firewood) for heating. It will also prioritize “light” and “standard” packages because of their higher cost-effectiveness, but it will not exclude households (HHs) willing (or able) to finance only one or two measures (e.g., window replacements and other SFHs and selected investments in individual apartments in the multi-apartment buildings (MABs) (thus ensuring continuity with the existing program).

“**Light**” renovation packages have an estimated cost of about €2000 per household and include windows and doors replacement and roof insulation.

“**Standard**” renovation packages are estimated to cost about €7000-8000 per household and include wall insulation, boiler replacement, and heat network renewal, on top of the measures included in the light package.

“**Advanced**” renovation packages have a cost of about €12000-13000 per household and include heat pump, the solar PV system and solar collector, on top of the measures included in the light and standard packages (excl. boiler replacement).

The minimum grant share will be 50 percent, in order to match the share offered under the current pilot program implemented by MoME, at least for the initial phase of the project. The grant share can be increased based on the type of intervention (eligible investments), as well as to increase participation of lower income municipalities. The program is focused on targeting vulnerable population groups and will covers the whole territory of the Republic of Serbia.

**Project location.** The Project covers the whole of Serbia. The Municipalities and HHs will be selected based on adopted criteria.

**Project potential environmental and social risks and impacts.** Overall, the project will provide a series of positive social and environmental impacts. The Project should contribute to the reduction of greenhouse gas emissions, increased share of renewable energy sources in the final energy consumption and energy efficiency. Using solar energy through the installation of solar collectors for sanitary hot water and rooftop solar photovoltaics instead of firewood and coal boilers will have a positive, indirect effect on the environment. The Project has specific mechanisms to ensure that poor and vulnerable households adequately benefit from the project. Consequently, the project is expected to decrease energy poverty within the vulnerable social groups.

Social and environmental impacts during construction phase, in terms of the construction works to be undertaken and associated with the civil works, are employment of local labor, creation of jobs, and positive economic impacts on small market suppliers for raw materials needed during construction.

**Environmental risks and adverse impacts.** The project is not expected to have significant negative environmental impacts and risks. On the contrary, it will impose positive impacts in the long run given its overall green and energy efficiency footprint. Overall, no significant negative environmental is anticipated. In the implementation phase, the project will not involve any major civil works or design. Environmental load, as a result of the execution of works at the construction site, waste generation and hazardous waste generation, together with the negative impact on water, soil and air quality, is manageable. The impacts are not adverse, likely reversible. Other negative effects, such as noise, nature protection areas and cultural sites, are negligible.

However, some potential short-term adverse impacts, mostly related to investments under the first component which envisages financing energy efficiency, sustainable heating, and rooftop solar investments

in residential buildings and includes small scale works on already existing facilities (single-family houses, multi-apartment buildings with less than five floors and multi-apartment buildings with at least five floors). During implementation of project component 1, the potential environmental impacts that could be identified are: pollution of ground and surface water, soil and air contamination (dust and noise) and inadequate waste management and health and safety for affected communities including construction workers.

To address these risks the project will have several instruments, including the current Environmental and Social Management Framework (ESMF) that has been prepared to provide guidance and check-lists on how and when to prepare any necessary site specific environmental and social instruments including LMP and SEP requirements and Environmental and Social Management Plans and Environmental and Social Management Plan- checklists (ESMP/ESMP-checklists).

**Social risks and impacts.** Overall, the social risks attributable to the project are assessed as moderate, prevalently because of the stakeholder and citizen engagement efforts the Project needs to achieve. The project will not involve major civil works and labor influx is not expected. Both Labor and OHS risks stemming from project activities are manageable and can be mitigated by application of the Labour Management procedures (LMP) prepared as a stand-alone document applicable to all project workers. Other than COVID-19 related risks the communities will have limited exposure to adverse impacts including SEA/SH which nonetheless will be managed through the Grievance Mechanism allowing uptake of harassment related grievances and the Code of Conduct which the LMP has called for to be adopted by each third party including Contractors. .

Addressing the stakeholder and citizen engagement needs which are seen as vital for project success and achievement of development objectives a Stakeholder Engagement Plan (SEP) has been adopted coupling stakeholder and citizen engagement. The SEP has articulated a contextualized engagement strategy inclusive of a project specific Grievance Mechanism which has adopted a decentralized approach given the geographically disperse project activities. All of these efforts are aiming to facilitate interactive communication by improving accountability and transparency, and enabling design and implementation adjustments based on feedback received. As complementary to the existing and through the project enhanced stakeholder engagement efforts and boost interactive communication the project will introduce an online civic engagement tool as efficient mechanism for engaging citizens and project stakeholders.

The project is designed to reach out to disadvantaged and vulnerable groups allowing equal opportunities, and removing any barrier for accessing project relevant information, providing feedback, or submitting grievances. As a design remedy, the project will introduce a solidarity mechanism to increase the share of poorer municipalities included in the program. The 50 percent co-financing (currently required under the current pilot program implemented by MoME), is considered to be decreased for poorer municipalities with below average income per capita. The Project aims to decrease Energy poverty by increasing energy saving in the domestic sector. Energy efficiency improvements will reduce domestic energy demand and rooftop solar PV plants will contribute to the diversification of the Serbian energy mix, improving the country's energy security. In addition, the development of energy efficiency and clean energy markets will spur the creation of new jobs and make the Serbian economy more competitive

Potentially adverse impact on vulnerable groups may be the exclusion from the access to project benefits, due to their drivers of vulnerabilities and inadequate access to information on project supported products and services. To promote interactive communication the project will, in addition to standard tools defined in



SEP, introduce an online civic engagement tool as efficient mechanism for engaging citizens and project stakeholders, facilitating interactive by improving accountability and transparency, and enabling design and implementation adjustments thanks to the feedback received.

To minimize the risk of exclusion, the project will conduct a survey among House Holders (HHs) eligible to SA/EVP to confirm the share of homeowners among them as well as their level of interest in participating in SURCE. On the basis of the survey findings LSGs can put forward buildings (single family or multi-apartment buildings) which house vulnerable HHs and these socially-oriented buildings could be eligible for additional support under the SURCE project.

**Overall project environmental and social risks.** Both the environmental and social risks are assessed as moderate, making the overall environmental and social risk rating *moderate*.

**Relevance of World Bank Environmental and Social Standards (ESS).** The Project will be implemented in accordance with the World Bank Environmental and Social Framework (ESF) made of ten Environmental and Social Standards (ESS). The ten ESSs are: ESS 1) Assessment and Management of Environmental and Social Risks and Impacts; ESS 2) Labor & Working Conditions; ESS 3) Resource Efficiency and Pollution Prevention and Management; ESS 4) Community Health and Safety; ESS 5) Land Acquisition, Restrictions on Land Use and Involuntary Resettlement; ESS 6) Biodiversity Conservation and Sustainable Management of Living Natural Resources; ESS 7) Indigenous Peoples / Sub-Saharan African Historically Underserved Traditional Local Communities; ESS 8) Cultural Heritage; ESS 9) Financial Intermediaries; and ESS 10) Stakeholder Engagement and Information Disclosure<sup>1</sup>. ESSs 1, 2, 3, 4 and 10 are deemed relevant to the project. All investments to be financed by this Project will apply national environmental laws and regulations as well as the relevant World Bank environmental and social standards.

**Environmental and Social Management Framework (ESMF)** The ESMF outlines the guiding principles of environmental and social screening, assessment, review, management, and monitoring procedures for the Projects activities. The ESMF provides guidance and checklists on how and when to prepare any necessary site specific environmental and social instruments including Environmental and Social Management Plans and Environmental and Social Management Plans Checklists (ESMP, ESMP checklists), in accordance with the ESS1, has been prepared, which specifies rules and procedures for the activities and subprojects' Environmental and Social Assessment (ESA) and for preparing adequate Environmental and Social Management Plans (ESMPs). The main goal of the ESMF is to define the measures, ways and mechanism for avoiding, minimizing and/or mitigating potential negative environmental and related social impacts that may occur as the result of implementation of the project. The ESMF ensures that the identified subprojects in the course of project implementation will be correctly assessed from environmental and social perspective to meet WB's Environmental and Social Standards alongside with Serbia's Environmental and Social Laws and Regulations. The ESMF will guide the SURCE process and in this regard covers the following: (i) rules and procedures for environmental and social screening of project activities and subprojects to be supported under the project; (ii) guidance for conducting subprojects SURCE and/or preparing ESMP or ESMP Checklist including monitoring plans; (iii) mitigation measures for possible impacts of proposed subprojects; (iv) safety measures during the implementation of Project Component 1; (v) implementation and monitoring

<sup>1</sup> Detailed information on the ESF and ten ESSs can be found at <https://www.worldbank.org/en/projects-operations/environmental-and-social-framework> and <https://www.worldbank.org/en/projects-operations/environmental-and-social-framework/brief/environmental-and-social-standards>

arrangements for ESMPs; (vi) overview of the capacity of MoME for environmental and social risk management and measures to fill any gaps in capacity.

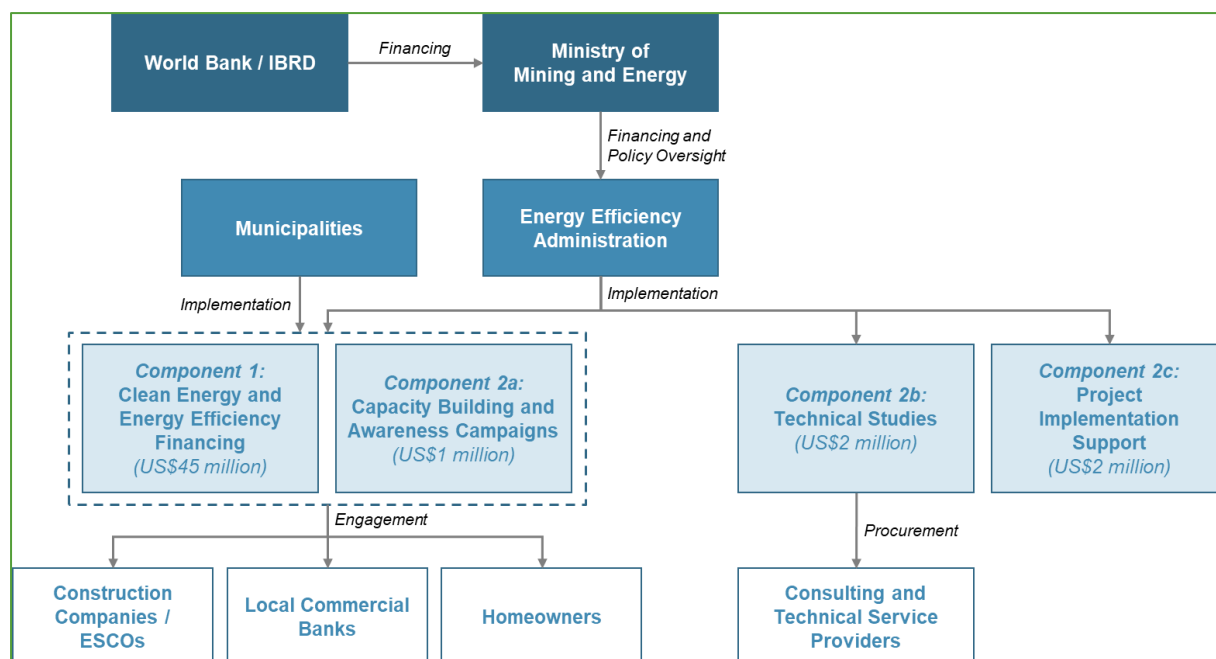
The ESMF serves also to provide details on procedures, criteria, and responsibilities for subproject environmental and social screening, preparing, implementing and monitoring of subproject site-specific ESMPs and ESMP checklists.

### Institutional Arrangements for Implementation of Environmental and Social Management Measures

The envisioned project structure and implementation arrangements are summarized in Figure 1. The World Bank will provide a US\$50 million loan to the Government of Serbia, with the Ministry of Finance acting as Borrower. The Ministry of Mining and Energy (MoME) will be the implementing agency and will receive and administer loan disbursements, with day-to-day project management being assigned to the MoME/EEA, which will house the project implementation unit (PIU). Implementation of Environmental and Social Management Measures activities will be carried out by the Project Implementation Unit (PIU).

It is envisaged that one PIU staff member (ES Expert) will be responsible for the implementation of environmental and social management measures.

**Figure 1. Envisioned project structure and implementation arrangements.**



The project will utilize the services of the Central Fiduciary Unit (CFU) within the MoF for procurement and financial management. CFU staff will work with the technical staff of the MoME with regard to technical aspects of project implementation.

**Integration of the ESMPs into project documents.** All sub-project documents shall include a requirement for

implementation of the ESMP/ESMP checklist and the documents shall be attached to the construction contracts. Based on the ESMF there will be highlighted the roles and responsibilities of all involved parties in the ESA process. Lastly, based on the ESMF and ESMPs requirements, monitoring and evaluation of mitigation/avoidance measures identified in the site-specific review and in the ESMPs will constitute integral part of the subproject implementation and the contractors will need to carry out the environmental and social obligations during civil works. Furthermore, all contractors will be required to use environmentally acceptable technical standards and procedures during carrying out of works. Additionally, as specified in the ESMF, the contract clauses shall include requirements towards compliance with all national construction, health protection, environmental and social risk mitigation procedures, and rules on environmental and social protection.

**World Bank Implementation Support and ESS Monitoring.** The Bank's environmental and social specialists will participate in regular implementation support mission to ensure smooth implementation of the Project activities in consistency with this ESMF. The GoS is responsible for compliance and monitoring of Project activities with National Laws and Regulations, the World Bank applicable ESSs, and the World Bank Group Environmental Health and Safety Guidelines (EHSg). Regular (or when required, remote) site visits will be carried out to monitor the Project's compliance with the site-specific ESMPs or ESMP-Checklists prepared for Project activities; and the contractors with good construction practices and their contractor's ESMPs. The Bank task team will provide guidance in preparation and review of the following key environmental and social instruments, such as ESMPs, ESMP checklists and progress reports.

**Grievance Mechanism (GM).** The Project GM aims to enable beneficiaries and citizens to register any grievances on all project-related issues of concern. Establishment of the Project level Grievance Mechanism (GM) shall be the responsibility of the MoME/EEA i.e., the PIU. Given the specific decentralized and geographically dispersed activities it has been decided that the GM would best serve the stakeholders interest through a Central Feedback Desk (CFD) administered by the PIU and sub-project specific Local Grievance Admission Desks (LGAD) (collectively referred to as Grievance Mechanism (GM)) to be established at the LSGU levels.

The PIU will maintain grievance log to ensure that each complaint has an individual reference number and is appropriately tracked, and recorded actions are completed. Every grievance shall be tracked and assessed if any progress is being made to resolve them. It is expected that project will receive some grievances and should ideally have an established system for entering, tracking, and monitoring grievances. The project monitoring and evaluation information system should also include indicators to measure grievance monitoring and resolution.

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns.

**Public consultations and information disclosure.** Comments received during public consultation have been reflected in ESMF. The Stakeholder Engagement Plan (SEP) is an instrument intended to serve as a practical guidance to support stakeholder consultation and engagement activities carried out by the MoME in relation to the Project development and implementation. The SEP aims to ensure that the engagement activities are conducted effectively, fairly, and in a transparent manner, cover all relevant stakeholders, as well as employ

consultation methods that promote active participation and are appropriate within the local context. It requires information about the project and communicate the relevant environmental and social data; provide useful and clear information for people affected by the project; conduct public consultations; take into account the views expressed during the public consultations in the implementation of the project.

ESF and project documents, including this ESMF, will be disclosed electronically on the websites of the MoME and Local Self Governments. The ESF documents shall be available in Serbian and English, while other project documents, public calls, decisions, instructions and guidance will be available only in Serbian: the website of the MoME (<http://www.mre.gov.rs/>); the websites of Local Self Governments who will be participating in the energy efficiency grant schemes; through social media campaigns; through the civic engagement platform with program announcements and information materials, a centralized email address for submitting feedback and queries.

### ESMF implementation Budget

The estimated costs of the environmental measures that will be integrated into the project and cannot be estimated due to a lack of data. The table below shows the unit cost data.

Table 2. Estimated costs of the project's environmental measures

No	Activity/ measure	Quantity	Unit Cost (USD)	Total Cost (USD)
1	Preparation of ESMPs	10	7000.00	70 000,00
2	Preparation of ESMP-checklists	20	1500	30 000,00
3	E&S Monitoring activities	1	10000.00	10 000,00
4	Training sessions	10	12000.00 per training	120 000,00
5	ESMF implementation Evaluation	1	10000,00	10 000.00
<b>TOTAL COST:</b>				<b>240 000,00</b>

## 1. Introduction

### 1.1 Context

The Paris Agreement goals require net-zero CO<sub>2</sub> emissions by mid-century<sup>2</sup>. The European Commission in its proposal for climate and energy strategy for 2050 indicated the need for more intensified actions to substantially improve the energy performances of buildings. Serbia signed the Paris Agreement on Climate Change in 2016 and ratified it in 2017. Additionally, as a Contracting Party to the Energy Community Treaty<sup>3</sup>, Serbia has made legally binding commitments to adopting core European Union (EU) energy legislation.

<sup>2</sup> [https://www.un.org/sites/un2.un.org/files/summary\\_-\\_ministerial\\_thematic\\_forums\\_for\\_hld\\_energy\\_of\\_june2021\\_advanced\\_copy.pdf](https://www.un.org/sites/un2.un.org/files/summary_-_ministerial_thematic_forums_for_hld_energy_of_june2021_advanced_copy.pdf)

<sup>3</sup> <https://www.energy-community.org/implementation/Serbia/reporting.html>

Serbia faces major environmental challenges, air pollution, and climate-related risks, which can cause significant damage to infrastructure, the economy, and people's livelihoods, especially among vulnerable groups. In the past few years, air pollution has become a major issue in environmental protection in Serbia.

The heating and cooling of buildings in Serbia are responsible for major energy consumption, therefore the implementation of energy efficiency measures is considered of paramount importance to sustain the energy transition and to pursue decarbonization. Within the building sector, residential buildings have a prominent role, thus it is fundamental to promote energy efficiency measures in this sector. Domestic energy consumption accounts for a substantial proportion of greenhouse gas emissions and therefore needs to be reduced to meet international climate targets for emission reductions. Replacing the inefficient firewood and coal boilers that are currently widespread in Serbia will contribute to reducing air pollution, which has a severe negative health impact.

Air pollution can affect health in many ways and have both long- and short-term effects. New data have revealed a stronger link between exposure to both indoor and outdoor air pollution and cardiovascular diseases, such as stroke and ischemic heart disease, and cancer. In addition, air pollution causes respiratory diseases, including acute respiratory infection and chronic obstructive pulmonary disease. The Institute for Health Metrics and Evaluation ranked household and ambient air pollution as the seventh and eighth leading risk factors, respectively, for most of the disease burden in Serbia.<sup>4</sup> The main sources of outdoor air pollution in Serbia include the energy sector (thermal power plants, district heating plants and individual household heating), the transport sector (an old vehicle fleet), waste dump sites and industrial activities (oil refineries, the chemical industry, mining and metal processing and the construction industry).

To tackle air pollution on January 30, 2020, the Government of Serbia adopted the National Emissions Reduction Plan (NERP). The measures are intended primarily for old large combustion plants. The state is aiming to harmonize the levels with the limits set out in the European Union's Industrial Emissions Directive by end-2027.

The residential sector has a large potential for energy efficiency improvements, especially in single family houses. Fossil fuels are the most-used energy sources in homes. Households account for about one third of Serbia's final energy consumption and they heavily rely on polluting and inefficient energy sources for heating.

The potential for energy saving in the domestic sector is another significant factor that can contribute to increasing energy efficiency. The average energy consumption in residential buildings in Serbia is over 150 kWh/m<sup>2</sup> per year, while in developed European countries it is about 50 kWh/m<sup>2</sup> per year.<sup>5</sup> Energy efficiency metrics in residential buildings are based on three dimensions: sustainable physical infrastructure, energy-efficient equipment, and energy-efficient behaviour. The most efficient results can be achieved by developing and implementing a set of measures that will trigger each of the three primary dimensions.

During the XIX and XX centuries, insufficient attention was paid to the energy efficiency of residential buildings and houses. Facades were constructed without the application of knowledge about building

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<sup>4</sup> Serbia. Seattle: Institute for Health Metrics and Evaluation; 2019 (<http://www.healthdata.org/serbia>).

<sup>5</sup> Šumarac, D., Todorović, M. N., Đurović-Petrović, M. D., & Trišović, N. (2010). Energy efficiency of residential buildings in Serbia. Thermal Science, 14.



physics. The windows were also of poor quality. All of this contributed to the fact that the energy consumption in these apartments was above 150 kWh/m<sup>2</sup> per year.<sup>6</sup> Windows can cause significant thermal heat gain or losses in buildings. The windows are responsible for a significant portion of energy losses in buildings. It was found that windows are responsible for almost 20 to 40% of energy losses in buildings<sup>7</sup>.

Implementation of energy efficiency interventions in the residential sector is pivotal to drive the energy transition and achieve energy policy targets. This will require thermal insulation of the buildings, the replacement of windows and exterior doors in the residential buildings, replacement of coal and biomass-fired boilers with cleaner, more efficient heating technology, and installation of solar collectors for sanitary hot water and rooftop solar photovoltaics (PV). This initiative can also significantly contribute to the mitigation of the seasonality and exacerbation of air pollution due to winter heating.

The promotion of energy efficiency measures is also seen as a way of supporting economic development by creating local industries engaged in the development, manufacturing, deployment, and operation of energy-efficient technologies.

Serbia is an upper-middle-income economy. However, The COVID-19 pandemic and related containment measures have taken a heavy toll on the Serbian economy. Significant further action is needed to ensure a resilient, inclusive, and green recovery from the COVID-19 crisis. The COVID-19 pandemic and related containment measures have taken a heavy toll on the Serbian economy. The Government of Serbia (GoS) is scaling up green investments to spur the recovery from the ongoing COVID- 19 pandemic and build resilience against future shocks, especially among its vulnerable citizens. The GoS has also formed a National Coalition on Energy Poverty to enhance the regulatory and policy framework and to reduce negative impacts of the expected changes in the energy sector on energy vulnerable citizens. This will contribute to Serbia's ambitious climate change mitigation commitments and will have several additional co-benefits, including air pollution reduction, increased energy security, the creation of new jobs, and enhanced competitiveness of the economy.

Unfortunately, energy poverty resulting in the difficulty or inability to ensure adequate heating in the dwelling and to have access to other essential energy services at a reasonable price is recognized as one of the constraints for successful implementation of the measures to decrease pollution and scale up energy efficiency. Serbian households spend a significant amount of their household budget on space heating. Without financial assistance, many Serbian homeowners cannot implement the required measures to scale up energy efficiency or to start using clean energy.

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<sup>6</sup> Šumarac, D., Todorović, M. N., Đurović-Petrović, M. D., & Trišović, N. (2010). Energy efficiency of residential buildings in Serbia. *Thermal Science*, 14.

<sup>7</sup> Hee, W.J.; Alghoul, M.A.; Bakhtyar, B.; Elayeb, O.; Shameri, M.A.; Alrubaih, M.S.; Sopian, K. The role of window glazing on daylighting and energy saving in buildings. *Renew. Sustain. Energy Rev.* 2015, 42, 323–343. [CrossRef]

## 1.2 Objectives of the Environmental and Social Management Framework (ESMF)

This ESMF is prepared with the aim to ensure the following:

- Project compliance with all relevant local policies and legislation, as well as the World Bank's ESF requirements.
- Adequate mitigation of all potentially adverse environmental and social impacts of the Project

The main goal of the ESMF is to avoid, minimize or mitigate, potential negative environmental and related social impacts caused by the implementation of the project. It contains measures and tools to identify, reduce, mitigate and/or offset adverse risks and impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project risks and impacts, including on its capacity to manage environmental and social risks and impacts. It also includes adequate information on the area in which subprojects are expected to be sited, including any potential environmental and social vulnerabilities of the area; and the potential impacts that may occur, and mitigation measures that might be expected to be used.

This ESMF provides general policies, guidelines, codes of practice, and procedures that will be in place during the implementation of the SURCE Project to meet requirements of the World Bank (WB) Environmental and Social Standards (ESS). The ESMF is an instrument used to assess risks and impacts of projects consisting of programs and/or a number of sub-projects, and such risks and impacts cannot be identified before the details of such program or sub-projects are defined. The document is consistent with the relevant WB Environmental and Social Standards (ESS) and national requirements and standards and defines the implementation arrangements, steps, processes, and procedures for sub-project screening, assessment, management, and monitoring of environmental and social risks and impacts of the sub-projects. The document provides a general framework for the Project and introduces screening processes to exclude any sub-project activity which could potentially have significant adverse environmental and social impacts. The ESMF also provides guidance for the process and the content for the development of site-specific documents, namely Environmental and Social Impact Assessment (ESIA), Environmental and Social Management Plans (ESMPs) and Environmental and Social Management Plans checklist (ESMP checklist).

## 2. Project description

In everyday life energy is used for transportation, heating, cooling, production, lighting, as well as for entertainment and many other purposes. However, the way in which all this energy is used significantly influences our environment and life. Therefore, it is very important not only if we are saving energy, but also if we are using it in the most efficient way. Taking this into account, we can distinguish two categories: saving energy and energy efficiency.

Inefficient use of energy is largely the result of poor design, inadequate operating characteristics of the process, poor maintenance, or the operating of the equipment when it is not necessary. Additional benefits of introducing energy efficiency measures include:

- lower energy dependence,
- reduction of pollution,
- direct impact on improving living conditions.

In Serbia as much as 47.5 percent of the final energy is spent by the households<sup>8</sup>. Consequently, the building sector has a huge potential for energy savings and has been identified as one of the most important in the area of energy efficiency improvement in Serbia. The biggest challenge will be to reduce energy consumption in residential buildings that account 75 percent of all building.

The Republic of Serbia has introduced the Central Register of Energy Passports<sup>9</sup> (CREP). CREP is also a register of licensed energy efficiency engineers and organizations that are authorized to issue energy passports.

Let's just mention a few shortcomings of most residential buildings:

- The absence / inadequacy of thermal insulation on the building, poor or worn-out windows and doors,
- Oversized installations for the heating system, boilers or heat stations if the facilities are connected to the district heating network.

According to the Energy Sector Development Strategy Implementation Programme of the Republic of Serbia<sup>10</sup>, the average specific final energy consumption for heating and domestic hot water production in Serbia is estimated at around 220kWh/m<sup>2</sup> per year, which is much more than the average in the European Union (below 80kWh/m<sup>2</sup> per year).

The most common measures that contribute to energy savings in the old buildings are:

- Placing a modern thermal insulation layer on the walls
- Thermal insulation of the roof or mezzanine construction
- Replacement of worn-out windows or installation of insulation tape on drafty windows or doors.

<sup>8</sup>[http://demo.paragraf.rs/demo/combined/Old/t/t2020\\_12/SG\\_156\\_2020\\_009.htm](http://demo.paragraf.rs/demo/combined/Old/t/t2020_12/SG_156_2020_009.htm)

<sup>9</sup> <https://www.mgsi.gov.rs/lat/kontakt/energetska-efikasnost-i-centralni-registar-energetskih-pasosa>

<sup>10</sup> [com/wp-content/uploads/2018/11/03-Regulativa-Program-ostvarivanja-strategije-razvoja-energetike-za-period-od-2017.-do-2023.-godine.pdf](https://www.mgsi.gov.rs/wp-content/uploads/2018/11/03-Regulativa-Program-ostvarivanja-strategije-razvoja-energetike-za-period-od-2017.-do-2023.-godine.pdf)

Thanks to these measures, the owners of old houses and apartments in old buildings can significantly reduce consumption energy.

The proposed Project Development Objective (PDO) Scaling up Residential Clean Energy (*SURCE*) project, to improve the availability and affordability of energy efficiency, sustainable heating, and rooftop solar for households in Serbia. Also, the project aims to create a sustainable financing model to scale up clean energy solutions among households – an essential intervention to promote air quality, reduce energy poverty, and support Serbia’s low-carbon transition.

## 2.1 Project concept and key results

The project will demonstrate a number of additional co-benefits of green investments, including air pollution reduction, increased energy security, the creation of new jobs, and enhanced competitiveness of the economy. Replacing the inefficient firewood and coal boilers that are currently widespread in Serbia will contribute to reducing air pollution, which has severe negative health impacts. Energy efficiency improvements will reduce domestic energy demand and rooftop solar PV plants will contribute to the diversification of the Serbian energy mix, improving the country’s energy security. In addition, the development of energy efficiency and clean energy markets will spur the creation of new jobs and make the Serbian economy more competitive.

The project will build a new market for solar rooftop – harnessing its impressive solar resource potential and falling cost of solar equipment.

This strategy relies on a number of considerations:

- (i) achieving Serbia’s ambitious decarbonization targets will inevitably require relying on a significant share of distributed renewable generation, given land availability and other constraints
- (ii) small renewable installations (especially rooftop solar PV) are becoming increasingly affordable; and
- (iii) Serbia has an average specific photovoltaic power output of 3.5 kWh/kWp<sup>11</sup>, which corresponds to a higher solar potential than many other European countries.

The project aims to lay the foundations of the development of a private sector-led market for energy efficiency and clean energy investments in Serbia. The size and low level of energy efficiency of the existing Serbian building stock will require decades of massive investments in building renovations and improvements. The ability to sustain this level of investments in the longer term will depend on the creation of a market for energy efficiency and clean energy investments and the mobilization of private sector resources. The project aims at laying the groundwork for this, by expanding existing financing schemes through the newly created Energy Efficiency Administration (EEA). At the same time, the project will take a forward-looking approach and seek to involve commercial banks and develop the local energy service companies (ESCO) energy service companies’ market, in order to ensure the long-term sustainability of the Serbian energy efficiency and clean energy market, even after the end of the World Bank project and the phase-out of government subsidies.

<sup>11</sup><https://www.visokaskola.edu.rs/files/predmeti/ljiljana.stosic.mihajlovic/Predavanja%20IE-25.03.2020.%20-%20Copy.pdf>

The Project will be a mixture of investment and technical assistance to boost the development of green energy and energy service provision at the local level, including the implementation of the relevant chapters of Sustainable Urban Development Strategy<sup>12</sup> (SUDS). The objective of the project is to improve LSGs' operational performance, financial sustainability and capacity to plan and deliver green and resilient energy. To incentivize this change, the LSGs will receive grant transfers from the central level for energy investments and Agreements with the MoME which will include a set of commitments to improve energy efficiency at the local level. The Agreement will define the accountabilities and commitments of LSGs to improve energy efficiency and save energy.

## 2.2 Project components

The project goal is to enhance the availability and affordability of energy efficiency, sustainable heating, and rooftop solar for households in Serbia and that will be achieved through the implementation of the following two components:

- Financing investments in energy efficiency, sustainable heating, and rooftop solar in residential buildings,
- Technical assistance and implementation support, with the overall aim to support the development of scalable financing mechanisms and remove market barriers with three subcomponents.

Components 1 and 2 will be implemented simultaneously. Pilot investments will be financed under Component 1 and scaled up relying on the analytical insights, institutional structures, and financing mechanisms developed under Component 2.

### 2.2.1 Component 1.

Project SURCE will be financing investments in energy efficiency, sustainable heating, and rooftop solar in residential buildings, with a focus on lower-income households living in single-family house (US\$45 million, cca €38.4 million).

Partial grants for clean energy and energy efficiency investments in the residential buildings sector, e.g., investments on:

- Thermal energy efficiency (e.g., outer wall insulation, window and exterior door replacement, roof improvement, installation of thermostatic and hydraulic balance valves),
- Sustainable heating (e.g., boiler replacement, fuel switching, installation of solar collectors for sanitary hot water),
- Rooftop solar PV.

This component will finance partial grants administered by the Energy Efficiency Administration (EEA) for energy efficiency, sustainable heating, and rooftop solar investments in residential buildings.

Investments will be financed through:

- partial grants offered by the EEA financed through the project and channelled through participating municipalities; and

<sup>12</sup> <https://www.pravno-informacioni-sistem.rs/SIGlasnikPortal/eli/rep/sgrs/vlada/strategija/2019/47/1/reg>



- partial grants offered by the municipalities directly as borrower co-financing to the project.

The project will utilize the services of the Central Fiduciary Unit (CFU) for fiduciary arrangements, while technical implementation of SURCE (conducting project activities, signing contracts, processing withdrawal of funds and payments, etc.) will be the responsibility of the EEA within MoME.

The project implementation will rely on the current operational arrangements, which are being revised to allow a higher degree of flexibility. The ongoing residential EE co-financing program implemented by MoME is governed by the national level rulebook adopted by MoME in consultation with the MoF and Legal Secretariat of the Government.

**Project Operations Manual (POM)** is drafted as part of project preparation and will include GOM. POM relies upon – and will refer to similar national and local rulebooks which govern the organization of public calls under MoME’s current pilot program as the approach for grant allocation via municipalities will continue under the project.

The project will prioritize investments based on their financial attractiveness, cost-effectiveness, contribution to decarbonization and air quality improvement, and uptake potential. With regard to energy efficiency and sustainable heating investments, the project will prioritize “light” and “standard” building renovation packages, because of their higher cost-effectiveness but will not exclude households willing to finance only some measures. The project will provide additional/higher grant share to stimulate investments in packages and will finance incremental investments required to achieve a “standard” renovation package for households that have already implemented some form of renovation under earlier investments.

“Light” renovation packages have an estimated cost of about €2 thousand per household and include windows and doors replacement and roof insulation. “Standard” renovation packages are estimated to cost about €7-8 thousand per household and include wall insulation, boiler replacement, and heat network renewal, on top of the measures included in the light package. “Advanced” renovation packages have a cost of about €12-13 thousand per household and include heat pump, the solar PV system and solar collector, on top of the measures included in the light and standard packages (excl. boiler replacement).

SURCE project has given priority to single-family -houses for four main reasons:

- the thermal properties of Serbian SFHs are generally worse, mainly due to the unfavourable surface-to-volume ratio and the relatively older building stock
- SFHs tend to rely more on polluting and less efficient coal and wood boilers for heating, whereas a significant share of multi-apartment buildings (MABs) relies on district heating and electricity;<sup>13</sup>
- lower-income households are more likely to live in SFHs<sup>14</sup> and use solid fuels for heating, and
- other national and donor-funded support schemes have so far targeted public buildings and MABs.

Also, within SFHs, additional selection and prioritization criteria will be adopted (e.g., household income if possible, age and structural soundness of the building, number and characteristics of the residents).

Preliminary analysis shows that eligible measures can include insulation of walls and roof ceiling, replacement of windows and exterior doors, the replacement of coal- and biomass-fired boilers with cleaner,

<sup>13</sup> Source: Support for Low-Emission Development in South Eastern Europe (SLED), based on 2011 Census data from the Statistical Office of the Republic of Serbia.

<sup>14</sup> source: EU-SILC

more efficient heating technologies, and the installation of solar collectors for sanitary hot water and rooftop solar photovoltaics.

In the definition of target project beneficiaries, the specific emphasis is placed on the vulnerable households. On the one hand, low-income households have fewer resources available to finance clean energy and energy efficiency investments and find it more difficult to access financing due to their lower creditworthiness. On the other hand, evidence suggests that the penetration of clean energy and energy efficiency investments in households is lower for lower-income households. Moreover, the phenomenon of energy poverty is relatively common among low-income households and has an impact on their livelihoods.

The minimum grant share will be 50% of the total cost, in order to match the share offered under the current pilot program implemented by MoME, at least for the initial phase of the project. The grant share will be increased based on the type of intervention (eligible investments), as well as to increase participation of lower income municipalities. The project conducts a survey among HHs eligible to SA/EVP to confirm the share of homeowners as well as their level of interest in participating in SURCE. Based on their own needs assessment, local governments can propose buildings (detached or multi-apartment buildings) that house vulnerable households and these social housing buildings may be eligible for additional support under the SURCE project.

Thermal insulation of façade walls has to be in line with the Rulebook on Technical Requirements for Fire Safety of the Exterior Walls of Buildings (Official Gazette RS Nos 59/16, 36/17 and 6/2019). Facade walls must be thermally insulated using hard mineral wool of minimum thickness according to the data from the Elaboration on Energy Efficiency (EEE). During the works on the facade, original appearance and plasticity of the façade must be preserved as much as possible.

The material used must have all the necessary certificates.

### 2.2.2 Component 2

Supporting the development of scalable financing mechanisms and removing market barriers (€5 million), with three subcomponents:

Subcomponent 2a: Enhancing local market capacity, improving enabling environment and strengthening public awareness (US\$1,000,000)<sup>\*According to temporary procurement plan</sup>

This component will include a wide range of activities aiming at enhancing local market capacity, improving the enabling environment, and strengthening public awareness. Among other activities, this component will support, in coordination with other IFIs and donors:

- policy, legal and regulatory development related to energy efficiency, sustainable heating, and rooftop solar
- market development and capacity building for local construction companies, energy service companies (ESCOs), commercial banks, and municipalities to screen, design, evaluate, appraise/finance, implement, and measure clean energy and energy efficiency investments in the residential sector
- communication and awareness raising activities.

Subcomponent 2b: Technical studies related to the design/ analyses of the financing mechanisms (cca US\$ 1,050,000)<sup>\*According to temporary procurement plan</sup>

This component will finance technical studies that are needed to implement investment projects, such as selected pre-renovation energy audits.

Hiring of contractors to conduct selected energy audits to:

- identify and assess possible energy savings measures,
- determine baseline energy usage,
- calculate investment costs, annual energy savings, and simple payback periods,
- issue technical passports and energy performance certificates of buildings (when required), and
- define investment parameters in accordance with Serbia's legislation on energy performance in buildings.

It is envisaged that the energy audits will be mainly needed for the advanced building renovation packages (e.g., installation of heat pumps, solar PV systems), since the sample walk-through energy audits carried out in October 2021 the measures to be implemented and expected savings for the light and standard renovation packages are similar across households.

The current practice of preliminary site visits to each dwelling for which an application has been submitted under the program, by members of the municipality's energy commission has the following benefits:

- a) confirms the technical soundness of the construction
- b) eliminates possible frauds (e.g., application for investments already implemented); and
- c) allows for personalized, face-to-face advice to households on optimal EE measures.

However, such visits are very resource intensive for municipalities if numbers of applications increase. Therefore, standardized checklists/guidelines/trainings for municipal staff to assess houses remotely based on the information provided in the applications will be developed.

Physical visits will be organized only for:

- a) buildings with potential (structural) problems (as identified through the checklists); and
- b) a number of randomly selected buildings (spot checks to discourage fraud).

The percentage of houses for sample checks will be determined and adjusted during implementation. Similarly, sample post-renovation checks will be carried out for the verification of the investment done by households. Municipalities that are willing and have the resources to conduct pre-and/or post-renovation audits to all houses will do so. Technical designs and construction work - The hiring of contractors to develop detailed technical designs and bills of quantity for renovation works in eligible buildings (including technical drawings and bidding documents for renovation works). Construction supervision will be performed by LSGs in accordance with Law on Planning and Construction (if needed).

Sample post-renovation energy audits and measurement and verification (M&V)-Hiring of contractors to perform sample post-renovation energy audits, including verification of the energy savings based on agreed M&V. Procurement plan has to be prepared to define basic equipment needed to support M&V (e.g., electricity and heat meters, light meters, data loggers, cameras, thermometers).

Monitoring and evaluation -The hiring of the contractor(s) responsible for carrying out M&E activities based on inputs provided by the municipalities. Development of a database and a program management support tool to be made available to the PIU and the municipalities for the collection of data required for M&E, e.g.

Collection of data required for monitoring of progress, including:

- energy savings from investments,
- disbursed, committed, and invested amounts,
- repayments,
- social surveys,
- periodic program evaluations, and
- annual stakeholder consultations.

In accordance with local law for improving the energy efficiency of Single-family houses SFHs and Multi-apartment buildings (MABs), it is necessary, in cases when for proposed works building permit is required, to prepare Elaboration on Energy Efficiency according to the Rulebook on Energy Efficiency of Buildings ("Official Gazette of RS", no 61/11), namely, both the Elaboration on the current situation and Elaboration on the newly designed state. In addition to the analysis of architectural and construction characteristics of the building, that is, the analysis of thermal characteristics of the building's thermal envelope, the Elaboration on the current situation shall provide detailed status of the existing thermomechanical installation for heating, cooling and ventilation of the building, preparation of hot sanitary water, installation of lighting in the facility and outside the building. Elaboration on the newly designed state elaborates a proposal of measures to achieve the energy properties of a building. In addition to optimizing the structure of the building, special attention must be paid to the manner of using natural lighting and exposure to sun, optimization of the system of natural ventilation, as well as of the heating system and automatic regulation of the heating system. It is necessary to provide details about the type of energy for heating, cooling and ventilation, improvement of thermo technical installations and systems of lighting, use and share of renewable energy sources. It is also necessary to present estimated savings for the necessary annual energy consumption for the operation of technical systems, together with estimated savings for the annual value of consumption of total primary energy, as well as the value of CO<sub>2</sub> emissions reduction.

Subcomponent 2c: Project implementation support (US\$ 2,920,000)<sup>\*According to temporary procurement plan .</sup>

This component will support activities related to the implementation of the proposed project, i.e., supporting the project with equipment, logistics, and key project consultant salaries.

### 3. Baseline country environmental and social background

#### 3.1 Country and environmental baseline data

The Republic of Serbia is a sovereign state situated at the crossroads between Central and Southeast Europe, covering the southern part of the Pannonian Plain and the central Balkans. The capital of Serbia, Belgrade, is one of the largest cities in Southeast Europe. Serbia's many waterways, road, rail, and telecommunications networks serve to link Europe, Asia, and even Africa at a strategic intersection in south-eastern Europe. The environment is highly diverse due to a variety of climate, topography and geology, as well as the long-term ecological and evolutionary history of the region as a biological crossroads.

Serbia's terrain ranges from fertile plains of northern Vojvodina to limestone ranges and basins in the east and ancient mountains and hills in the southeast. The countryside in the north is characterized by the fertile flatlands of the Pannonian Plain, while there are limestone ranges and basins in the east. Three mountain

ranges, the Rodope, Carpatho-Balkan and Dinaric meet in the south of Serbia, where Mount Djeravica (2,656m/ 8,714ft) is the highest point of elevation in the country.

The land itself is broken down into thirds as far as geography, with the northern third being plains, the middle third is made up of hills and rivers, and the southern third is mountainous. Using the 2017 Serbian population of 7.022 million, the population density of the nation is 205.8 people per square miles (79.5 people per km<sup>2</sup>), making it the 95th most densely populated country in the world.

Just over half of the people in Serbia live in or around an urban area (4,913,067 people in 2020), but being that Serbia isn't too large of a country in general, there aren't many large cities. Serbia has only one city with a population of over 1 million: Belgrade, the capital, has about 1.4 million people (1.7 in the metro area). The second and third largest cities are Novi Sad and Niš. Other notable cities with populations over 100,000 include Kragujevac, Kraljevo, Čačak, Zrenjanin-Pančevo, Smederevo, Subotica, and Novi Pazar. Due to the intensified processes of industrialization and urbanization, rural areas are exposed to various types of natural and anthropogenic pressure. The dominant demographic trends in present Serbia demonstrate that its population is being 'shrinking', while the growing number of villages and towns have become 'ghosts' or they appear 'too big' for their present population.

### 3.1.1 Air quality

The Republic of Serbia experiences some of the poorest air quality recorded in Europe. A country situated between central and south-eastern Europe, Serbia shares comparable levels of air pollution to its central and eastern European neighbours, while western European countries tend to experience lower levels of airborne pollution. This difference can partly be attributed to a broad trend of higher reliance on polluting coal power for energy provision in central and eastern European countries (such as Serbia, Czechia and Bulgaria) as well as member countries of the European Union being governed by stricter air quality policies and regulation. However, as Serbia aims to potentially join the EU in future, it is bringing increasing air quality management policies in line with the EU's requirements, which may signal some forthcoming improvements to the country's air pollution.

Air quality is generally poor, mainly due to outdated technology, lack of pollution abatement installations, low energy efficiency in existing industry and energy facilities, as well as poor quality of heating fuel used for households<sup>15</sup>. Serbia will need to consolidate integration and geographical coverage of its ambient air quality monitoring systems and adopt and implement cleaner air plans in its agglomerations – Belgrade, Novi Sad, Nis, Bor, Uzice, Kosjeric, Smederevo, Pancevo. The specific documented sources of air pollution include: the petrochemical industry complex in Pančevo and Novi Sad; cement factories in Popovac, Kosjerić and Beočin; chemical plants and metallurgical complexes in Smederevo, Sevojno and Bor; thermal power plants in Obrenovac, Lazarevac and Kostolac; fossil fuel-based individual household heating in peri urban and rural towns; and increasing road traffic, especially in large cities such as Belgrade, Novi Sad and Niš.

The first conference on preparing the Draft of the Air Protection Programme in the Republic of Serbia with accompanying Action plan was held today, 16 April. The programme is currently being drawn up with

<sup>15</sup> ANNEX to the COMMISSION IMPLEMENTING DECISION amending Commission Decision C(2014)5872 of 19.8.2014 adopting the Indicative Strategy Paper for Serbia for the period 2014-2020



European Union's support within the project "EU for a better environment – Developing framework for the harmonization of law in the area of air, chemicals and horizontal issues with EU legislation."

With EU support, the Ministry of Environmental Protection is preparing the first National Air Protection Programme. The project is based on three pillars: 1. Reduction of air pollutants emissions (Maximum national emissions); 2. Improvement of air quality (without exceeding the limits); 3. Reduction of the impact of air pollution on citizens' health.

The Environmental Protection Agency continuously implements operational air quality monitoring in the national network for air quality monitoring in the Republic of Serbia. This obligation of the Agency is defined by the Law on Air Protection („Off. Gazette RS" No. 36/09 and 10/13). The pollutants that are being monitored are: SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, CO, Pb and C<sub>6</sub>H<sub>6</sub>.

The Air Quality Assessment in Serbia was published within the Serbian Environmental Protection Agency (SEPA) annual report for the year 2019 in September 2021<sup>16</sup>. The zones and agglomerations for air quality monitoring are determined within the territory of the Republic of Serbia. The agglomerations are Belgrade, Novi Sad, Niš, Bor, Užice, Kosjerić, Smederevo and Pančevo while the zones are Serbia and Vojvodina.

Trend of air quality by zones, agglomerations and cities, period 2011 – 2019 (Source SEPA)<sup>17</sup>

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<sup>16</sup> [https://www.rs.undp.org/content/serbia/en/home/library/environment\\_energy/report-on-air-quality-protection-at-the-local-self-government-le.html](https://www.rs.undp.org/content/serbia/en/home/library/environment_energy/report-on-air-quality-protection-at-the-local-self-government-le.html)

<sup>17</sup> SEPA Air Quality Assessment for 2019 - table source - [https://www.sepa.gov.rs/download/izv/Vazduh\\_2019.pdf](https://www.sepa.gov.rs/download/izv/Vazduh_2019.pdf)

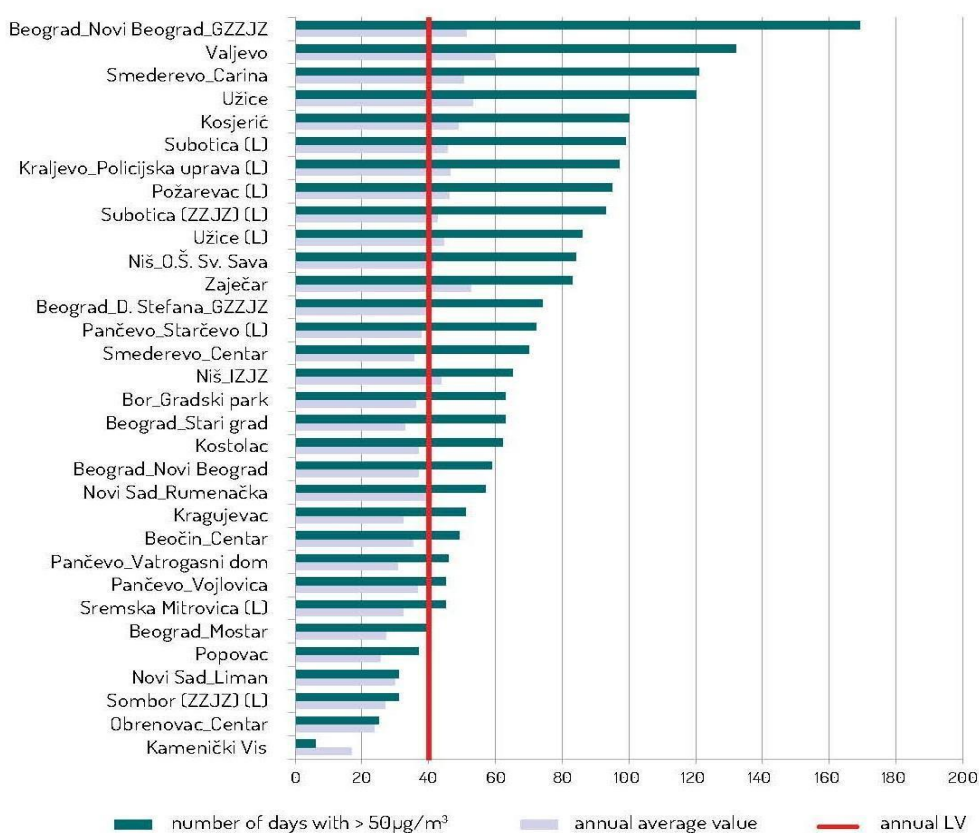
		AQ Category								
		2011	2012	2013	2014	2015	2016	2017	2018	2019
Serbia		I	I	I	I	I	I	I	I	I
Kragujevac					II	III	III	III	III	I
Kraljevo								III	III	III
Zaječar										III
Valjevo						III	III	III	III	III
Vojvodina		I	I	I	I	I	I	I	I	I
Sremska Mitrovica					II	III	III	I	III	I*
Subotica							III	III	III	III
Novi Sad		III	I	I	I	II	I	I	I	III
Belgrade		III	III	III	III	III	III	III	III	III
Pančevo		III	III	I	I	III	I	III	III	III
Smederevo		III	III	III	III				III	III
Bor		III	III	III	III	III	I	I	I	III
Kosjerić		III	III	II	I				III	III
Užice		II	II	III	III	III	III	III	III	III
Niš		III	II	I	I		I	III	III	III

Based on collected results during 2019 the air was of category III (overpoliced), as many as 92% of the inhabitants in these agglomerations and cities had excessively polluted.

During 2018, the dominant share of emissions of suspended PM<sub>10</sub> particles came from heating plants with a capacity of less than 50MW and individual combustion plants - 57%.

The impact of heating plants with a capacity of less than 50 MW and individual combustion plants on the total emissions of suspended PM<sub>2.5</sub> particles was extremely large and amounted to 77%.

**FIGURE 1. ANNUAL CONCENTRATIONS OF PM<sub>10</sub> (MG/M<sup>3</sup>) AND NUMBER OF DAYS WITH EXCEEDANCE OF LV IN 2019 (SOURCE SEPA)<sup>18</sup>**



### 3.1.2 Water

Almost all of Serbia's rivers drain to the Black Sea. The Danube, the second-largest European river, passes through Serbia with 588 km (21% of its overall length) and represents the largest source of fresh water. It is joined by its biggest tributaries, the Great Morava (longest river entirely in Serbia with 493 km of length), Sava and Tisza rivers

Due to the configuration of the terrain, natural lakes are sparse and small; most of them are located in the lowlands of Vojvodina, like the aeolian lake Palić or numerous oxbow lakes along with river flows (like Zasavica and Carska Bara). However, there are numerous artificial lakes, mostly due to hydroelectric dams.

The underground waters in Serbia are used in water supply for the human population (80%), the water supply of industry (90%), balneotherapy (100%), heating system (urban areas, industry, and agricultural areas with greenhouses) (100%), irrigation (10%). In the forthcoming period, research and exploitation of underground waters must be planned and controlled.

<sup>18</sup> SEPA Air Quality Assessment for 2019 - table source - [https://www.sepa.gov.rs/download/izv/Vazduh\\_2019.pdf](https://www.sepa.gov.rs/download/izv/Vazduh_2019.pdf)

Untreated municipal and industrial wastewaters are key sources of water pollution in the Republic of Serbia. The percentage of municipal and industrial wastewaters that are treated before being discharged in the recipient is rather low.

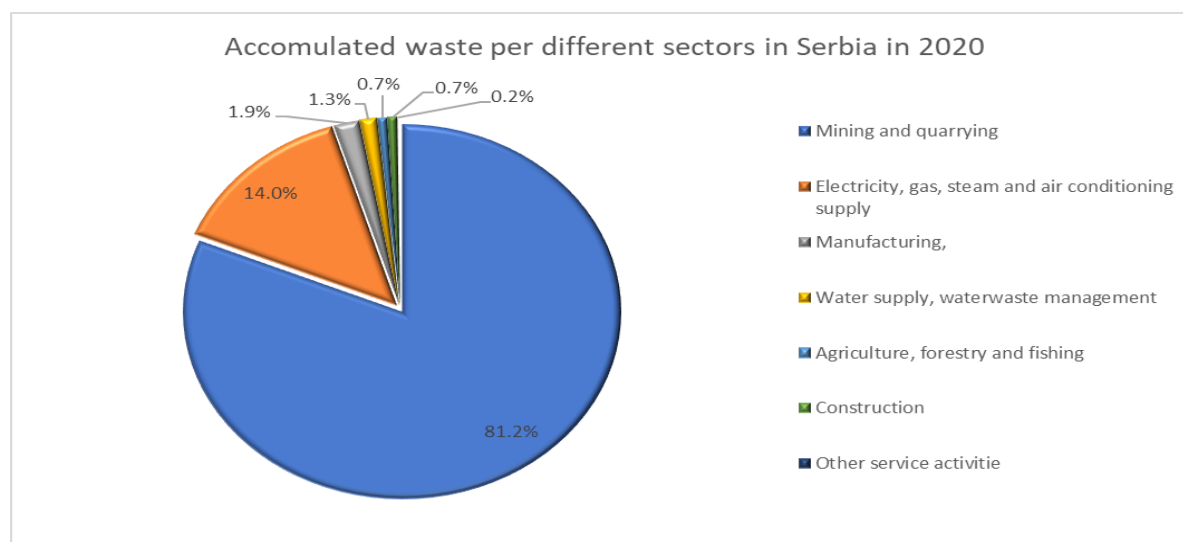
Municipal sources are dominant sources of pollution. The level of development of sewerage systems and infrastructure, in particular public wastewater treatment plants, is very low. Many of the existing collection and treatment systems are relatively old and in need of major reconstruction and renewal. Agricultural sources of pollution are dominated by livestock farming with a limited and relatively small contribution of the loads on surface and groundwaters coming from mineral fertilizer use on productive agricultural lands of which only a minor portion is irrigated.

### 3.1.3 Waste

As for national waste management legislation, there is a good level of alignment with the EU acquis with the Law on Waste Management fully harmonized with the EU acquis Communautaire, and the numerous sub-laws that are currently being developed.

According to the Statistical Office of the Republic of Serbia, during 2020, the sections: Agriculture, forestry and fishing, Mining and quarrying, Manufacturing, Electricity, gas, steam and air conditioning supply, Water supply, sewerage, waste management and remediation activities, Construction and Other service activities of the Republic of Serbia generated waste amounting to 56.3 million tons, out of which 79.9% related to non-hazardous and 2.1% to hazardous waste. The greatest share of generated hazardous waste was from the section of Mining and quarrying (39.5%).

**FIGURE 2. ACCUMULATED WASTE PER DEFERENT SECTOR IN SERBIA IN 2020<sup>19</sup>**



The waste management is based on a major shift from the model of regional sanitary landfills to regional waste management centres, which include waste sorting, separation, and recycling, as well as non-recyclable waste treatment. At this time, there are 11 regional sanitary landfills; 11 transfer stations, in 5 of which the

<sup>19</sup> <https://publikacije.stat.gov.rs/G2021/pdfE/G20211172.pdf>

separation of individual fractions of municipal waste is performed; 36 recycling centres, but only 27 of which are functional.

The Proposal of the Program of Waste Management in the Republic of Serbia for the 2021-2024 period was opened for public consultation during September 2021.

One of the key changes that will be introduced with the proposed program is switching from the system of regional sanitary landfills to a system of regional recycling centres, which will involve the separate waste collection, sorting, and recycling, as well as non-recyclable waste treatment.

The most visible and probably the most complex problems concern municipal waste management, where Serbia lags seriously behind comparable countries in Central and Eastern Europe in virtually all stages of the process – from collection to disposal, while municipal waste treatment hardly even exists. The level of recycling and re-use of waste is very low with only around 3%.

Over 140 non-sanitary landfills and dumpsites have been estimated to pose high risks to the environment. Leakage from these dumpsites poses a threat to groundwater, surface water and soil, due to the high content of organic matters and heavy metals. Serbia also lacks infrastructure for treatment, disposal and storage of hazardous waste, which is not separately collected and disposed of, and currently, it is processed in regular waste disposal sites.

### 3.1.4 Soil

At present the main processes connected with soil loss and degradation in Serbia are as follows:

- 1) soil loss and damage due to industrial, mining, and power-producing activities,
- 2) loss of soil organic matter,
- 3) acidification and salinization of soil,
- 4) different forms of soil pollution (excessive use of agrochemicals, heavy metals, industrial pollution, etc.),
- 5) aeolian and water erosion, and 6) compaction of agricultural soils.

Based on report form 2018, Towards Soil Decontamination in the Republic of Serbia<sup>20</sup> on the territory of the Republic of Serbia, 709 potentially contaminated sites and contaminated sites were identified and recorded on the territory of the Republic of Serbia, 557 of which are registered and 152 are estimated.

Soil erosion is geographically determined as a result of the interaction between natural processes and anthropogenic influences. It is a complex process controlled by numerous factors, such as topography, climate, soil characteristics, forest cover and human activities.

Soil erosion is a natural process, but the natural erosion rate has significantly increased in the last few decades as a consequence of human activity and has become a serious environmental problem.

The agricultural aspect of soil erosion is well known since the problems of yield production and transport are present in almost all branches of water management. The inappropriate use of soil affects the development

<sup>20</sup> <http://www.sepa.gov.rs/download/zemljiste/TowardsSoilDecontamination.pdf>

of erosion processes, resulting in degradation and the reduction of the infiltration–retention capacity of the soil.

On the territory of the Republic of Serbia different forms of erosion dynamic processes can be found (landslides, landfalls, screes, erosions...). Besides the natural factors which are causing these processes, inadequate usage of terrain also contributes to the making, development and intensification of these processes. Terrain instability, with occurring landslides, landfalls, screes and collapsing of riverbed banks vary in dimension and activity, is present in about 25 – 30% of Serbian territory

Large land areas in the vicinity of industrial complexes (Bor, Pancevo, Novi Sad, Smederevo, Belgrade and Kragujevac) are contaminated with various pollutants discharged from industrial facilities. Major problems of air pollution which Serbia and neighbouring countries face every winter are largely caused by individual heating solutions powered by fossil fuels. Air pollution caused by use of fossil fuel and other pollutants not only acts directly on the environment but by contamination of water and soil leads to their degradation.

### 3.1.5 Noise

Noise is a subjectively unpleasant auditory experience, a pervasive adverse factor in the living and work environment and is one of the physical factors harmful to health. Noise pollution is one of the topmost quality-of-life concerns for urban residents exposed to noise levels beyond the limit considered harmful.

Such levels have proven effects on health, including sleep disruption, hypertension, heart disease, and hearing loss. In addition, there is evidence of harmful effects on educational performance, with studies showing noise pollution causing learning and cognitive impairment in children, resulting in decreased memory capacity. The economic impact of noise is also significant. Noise pollution is not merely an annoyance but an important problem with broad societal effects that apply to a significant portion of the population.

Dominant source of noise in Serbia is traffic. It is the main source of disturbance and presents a health hazard for the Serbian citizens in urban areas and others that live close to traffic noise sources (highways and railways).

The Serbian Environmental Noise Protection in Serbia adopted in June 2021 is harmonized with the relevant European directive.

### 3.1.6 Climate change

The Paris Agreement to the UN Framework Convention on Climate Change was adopted in 2015. Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. Serbia has ratified the Paris Agreement on 25th of July 2017.

The Serbian Law on climate change was adopted on 18 March 2021, and its implementation will establish a system for reducing greenhouse gas emissions and ensure adaptation to changed climate conditions. This law applies to GHG emissions (i.e. carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), fluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>)) caused by human activity, as well as to the sectors and systems exposed to the effects of climate change.

In the process of the accession of the Republic of Serbia to the EU, Serbia is working on the transposition of EU legislation, as well as on the implementation of all regulations, thus adapting its energy system to the European Union. The Paris Agreement determines the targets for the period from 2021. to 2030.

National Adaptation Plan (NAP), as an obligation under the Paris Agreement, the Government of Serbia has not yet adopted a new. NAP requires compliance with sectoral plans and programs, that shall contain at least:

- Description of specific measures from the list of the NAP priority measures,
- Geographical area on which a specific measure is planned to be implemented, with clarification,
- The time period for implementation,
- Cost-benefit analysis and potential financial resources,
- Monitoring methodology and evaluation of measure's implementation.

In addition, sectoral ministries, as well as local communities are obliged to periodically report (every 4 years) on implemented measures as well as on floods, extreme temperature, droughts and their impacts.

According to the Law, MoEP is responsible for the development of the NAP. It shall be prepared for a period of, at least, 10 years. Also, MoEP is responsible for:

- making projections for greenhouse gases as the basis to determine and assess the possibility to reduce emissions and the measures for cost-effective limitations,
- the establishment of a system for reporting on policies and measures and projections,
- the preparation of an updated two-year report and Serbia's report to the UN Framework Convention on Climate Change.

The Law on Climate Change ("Official Gazette of RS", No. 26/2021) provides the basis for the development of the Low Carbon Development Strategy (LCDS) with Action Plan, Climate Change Adaptation Program; establishment of a system for monitoring and reporting on national greenhouse gas emissions, development of projections of greenhouse gas emissions from sources and removals by sinks and establishment of a system for reporting on policies, measures and projections of greenhouse gases in line with the requirements of the UN Framework Convention on Climate Change and its Paris Agreement. LCDS were not adopted yet, but public hearings were held at the end 2019.

According to the obligations stemming from the Energy Community Treaty and from the Sofia Declaration on the Green Agenda for the Western Balkans and within the Law of Energy<sup>21</sup> preparation of the Integrated National Energy and Climate Plan (INECP)<sup>22</sup> of the Republic of Serbia from 2021 to 2030 with the vision until 2050 (INECP) is underway and is being developed within the IPA project "Further Development of Energy Planning Capacity".

INECP will define goals for CO<sub>2</sub> reduction by 2030 with projections by 2050 and will set goals for energy efficiency and RES utilization and should provide an overview of the existing situation, key policies, and adequate measures for the consideration of five dimensions of Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action:

- Decarbonisation (greenhouse gas emissions and renewable energy),
- Energy efficiency,

<sup>21</sup> <https://mre.gov.rs/aktuelnosti/saopstenja/mihajloviceva-krecemo-u-izradu-nacrta-integrisanog-nacionalnog-plana-za-energetiku-i-klimu>

<sup>22</sup> <https://balkangreenenergynews.com/eu-supports-serbia-in-preparing-the-integrated-national-energy-and-climate-plan-inecp/>



- Energy security,
- Internal energy market,
- Research, innovation and competitiveness.

Serbia has a moderate continental climate. July is the warmest month, and January is the coldest. June is the month with the most rainfall, with an average of 13% of the total annual rainfall. The months with the least rain are February and October. Snow typically occurs from November to March, with the highest snowfall recorded in January.

Serbia is experiencing a warming trend with accelerated temperature increase.<sup>23</sup> Disturbances in heat conditions are affecting human health, agricultural production and the forest ecosystem.

Based on the Climate change knowledge portal<sup>24</sup>, temperature in Serbia will increase in mean annual temperature of 1.5° to 2.2°C by 2050, and precipitation will decrease in mean annual precipitation of 1.1 to 3.5 percent by 2050. Climate change will pose numerous direct impacts and increasing risks to the country's population health. A higher incidence of hot and dry summers with increased night and day temperatures is expected and more frequent occurrences of heat waves will pose a serious threat to human health, particularly for highly vulnerable groups. In winter, vascular patients suffer most from situations of low air pressure. Change in temperature will potentially extend seasons of power demand or periods in which cooling demand (power demands) might increase. Seasonal increases for cooling demands are expected to increase over an extended summer period. As Serbia is currently primarily dependent on fossil fuels it could have an adverse effect on air pollution. Agriculture, ecosystem and water resources could be affected by this change<sup>25</sup>

### 3.1.7 Biodiversity, flora, and fauna

Although it covers a small territory and is landlocked, Serbia is characterized by rich ecosystem diversity. The highland and mountainous regions are one of six European biodiversity centres. The Republic of Serbia hosts: 39 % of European vascular flora, 51 % of European fish fauna, 49 % of European reptile and amphibian fauna, 74 % of European bird fauna, 67 % of European mammal fauna.

The following biomes are found in the Republic of Serbia: steppe zonobiome, deciduous forests zonobiome, coniferous forests zonobiome and zonobiome of high mountain tundra. The Republic of Serbia has heterogeneous flora and fauna, which includes both widespread and endemic species (Balkan, local and steno endemic).<sup>26</sup>

Red Lists and Red Books are integrative publications presenting the characteristics of species or groups of species that are endangered at national, regional or global level. Currently 5 Red Books are published: Red

<sup>23</sup> Vuković, A. J., Vujadinović, M. P., Rendulić, S. M., Đurđević, V. S., Ruml, M. M., Babić, V. P., & Popović, D. P. (2018). Global warming impact on climate change in Serbia for the period 1961-2100. Thermal Science, 22(6 Part A), 2267-2280.

<sup>24</sup> <https://climateknowledgeportal.worldbank.org/country/serbia/climate-data-projections>

<sup>25</sup> Second National Communication of the Republic of Serbia under the United Nations Framework Convention on Climate Change - [https://unfccc.int/sites/default/files/resource/SNC%20Eng\\_Serbia.pdf](https://unfccc.int/sites/default/files/resource/SNC%20Eng_Serbia.pdf)

<sup>26</sup> Biodiversity strategy - <https://www.cbd.int/doc/world/rs/rs-nbsap-01-en.pdf>

Data Book of the Flora of Serbia, Red Data Book of Serbian Butterflies, Red Book of Fauna of Serbia II – Reptiles and ed Book of Fauna of Serbia III – Birds and ed Data Book of Fauna of Serbia IV – Orthoptera.

The erosion of biodiversity is evident not only when it comes to species' biodiversity, but also to ecosystem diversity. Destruction, degradation, and fragmentation of natural ecosystems are the result of the deforestation and conversion of forest areas into agrarian areas. Mining, industry, urbanization, water resources management, tourism, hunting and fishing, collection and trade of species, the emission of polluting substances, and invasive species also had a negative impact on biodiversity.<sup>27</sup>

The Nature Protection Programme of the Republic of Serbia for the period 2021-2023 was prepared in accordance with the Law on the Planning System of the Republic of Serbia and the relevant by-laws and was adopted in May 2021. This Programme is prepared based on a revision of the first Biodiversity Strategy of the Republic of Serbia for the period 2011-2018, in accordance with the Law on the Planning System of the Republic of Serbia, the Strategic Plan of the UN Convention on Biological Diversity 2011-202, the Aichi Biodiversity Targets, and decisions made in regular sessions of the Conferences of members of this convention and other confirmed international agreements for nature conservation, biodiversity conservation and climate change.

## 3.2 Social baseline data

### 3.2.1 Socio-economic trends

The current population of Serbia is 8,681,179<sup>28</sup> based on projections of the latest United Nations data. The UN estimates the July 1, 2021 population at 8,697,550. Observed by sex, 50.5% are women 49.5% are men. Serbia faces a host of demographic challenges, in large part due to issues such as migration, decreasing population in rural areas, and aging citizen.

Serbia's population decreased at a rate of 0.40% from 2019 to 2020. This population decline rate has been increasing every year since 2015. The fertility rate is low at 1.46 births per woman. Serbia experiences also a "brain drain," where the most educated skilled people leave to other countries to find better opportunities.

As of the beginning of 2021 Serbia had the following population age distribution as follows: 15% population is below 15 years old, 68.5% are between 15 and 64 years old and 16.5% are over 65 years. The median age is 40.0 years and life expectancy is 74.3 years (71.5 - men, 77.3 - women).<sup>29</sup>

The Serbian Labour Force Survey reports that employment in the Republic of Serbia in the 2nd quartal in 2021 is as follows: total unemployment rate is 11.1%. The highest ratee of unemployment is for the population below 25 years.<sup>30</sup>

### FIGURE 3 LABOUR FORCE SURVEY REPORT – UNEMPLOYMENT IN SERBIA IN 2021Q2<sup>31</sup>

<sup>27</sup> Amidžić, L., Bartula, M., & Cvetković, D. (2014). The state of biodiversity in Serbia. *Natural Areas Journal*, 34(2), 222-226.

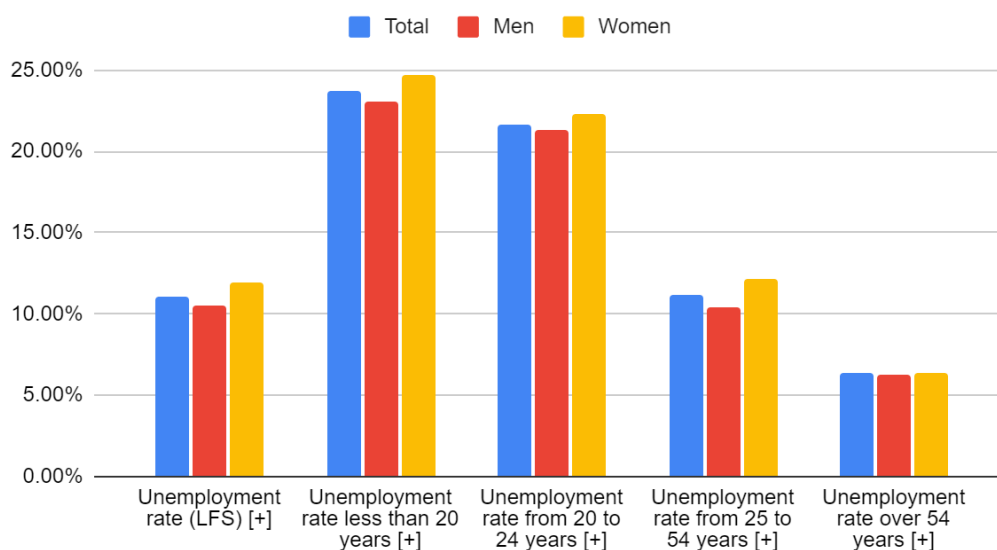
<sup>28</sup> <https://worldpopulationreview.com/countries/serbia-population>

<sup>29</sup> <https://countrysometers.info/en/Serbia>

<sup>30</sup> <https://countrysometers.info/en/Serbia>

<sup>31</sup> <https://countrysometers.info/en/Serbia>

## LFS - Unemployment Serbia 2021Q2



Based on an “Analysis of long-term poverty in the Republic of Serbia”<sup>32</sup> published by the Social Inclusion and Poverty Reduction Unit of the Government of the Republic (analysis was implemented in 2019 and 2020 and includes an analysis of the data for Serbia from the Survey on Income and Living Conditions (SILC) for 2017), a significant part of the population is in long-term poverty and it is growing from year to year. According to the data on the number of inhabitants for Serbia for 2018, the estimated number of the population experiencing long-term poverty in Serbia is 1,368,590. The percentage of the long-term poor in Serbia is twice higher than the European Union average. Long-term poverty involves the phenomenon where persons have available income beneath the at-risk-of-poverty threshold both during the survey year, and during the preceding two out of three years.

Serbs are the largest ethnic group in Serbia with 83% of the population, followed by Hungarians (3.5%). There are about 450,000 Romas in the country and 145,000 Bosniaks. Other minorities include Croats, Slovaks, Albanians, Romanians and Bulgarians.

Vulnerable groups include:

- retired, elderly, and people with disabilities and chronic diseases
- single parent headed households, male and female
- people with low literacy and Information and Communications Technology (ICT) knowledge
- economically marginalized and disadvantaged groups
- persons living below the poverty line
- Roma people

<sup>32</sup> [http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2021/11/Analiza\\_dugotrajnog\\_siromastva\\_u\\_Republici\\_Srbiji.pdf](http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2021/11/Analiza_dugotrajnog_siromastva_u_Republici_Srbiji.pdf)

- Ethnic minorities and women.

### 3.2.2 Education and skills

The literacy rate, adult total reported in Serbia in 2019 (% of people aged 15 and above) was 99.48%.

In 2020 a total of 1 218 301 persons were covered by educational activity on a certain level: preschool education – 17.8%; primary and lower-secondary education – 41.9%, upper-secondary education – 20.4%, and higher education – 19.9%.<sup>33</sup>

Serbia's education system performs well compared to other countries in the Western Balkans. Serbia is currently working on developing a new national education strategy for 2030.

In Serbia, education from primary to the end of lower secondary schools are compulsory, from age 6.5-7.5 to 14. Primary and lower secondary schools are also considered to be part of the same cycle and commonly referred to as "primary education". In 2006, Serbia amended the Law on the Foundation of Education Systems to include nine months of preparatory pre-school as part of compulsory education. Children between the ages of 5.5 and 6.5 years are required to enrol, and the programme receives public funding. There are also ongoing discussions about extending compulsory education to include secondary education. The majority of students in Serbia continue from lower secondary into upper secondary schools.

Enrolment rates in preparatory, primary and secondary levels of education are very high. Students from the lowest-income groups are three times less likely to enrol in gymnasias compared to the average Serbian student. This is of concern since the majority of students in Serbia's vocational schools do not continue their studies after upper secondary education due to high tuition fees and limited financial support in higher education. The other concern is lower participation in compulsory education in rural areas. Learning outcomes tend to be higher in urban schools than in rural schools. In 2018, students attending schools located in Serbian cities scored on average, 122.3 points higher in the PISA test of reading than students attending schools in rural areas in the country.

The Strategy for Education Development in Serbia 2020 highlights the role of ICT in raising the quality of teaching and learning at all levels of education.

According to the Serbian Statistical Office data, 81% of households have an internet connection. These data account for an increase of 0.9% in 2020 compared to 2019 and 8.1% compared to 2018. The city of Belgrade has the highest proportion of internet connections (94.1 percent), followed by the region of Vojvodina (75.3 percent). In contrast, the Southern and Eastern Serbia regions have the fewest internet connections (77.3 percent). When we are comparing internet connections in urban and rural areas, there is a significant disparity between them (87.1 percent in urban areas and 70.4 percent in other regions). According to the 2020 year's survey, approximately 81% of Serbian households have internet access, a rise of 0.9% over last year.<sup>34</sup>

<sup>33</sup> <https://publikacije.stat.gov.rs/G2021/PdfE/G202126001.pdf>

<sup>34</sup> [https://www.oecd-ilibrary.org/sites/225350d9-en/1/2/2/index.html?itemId=/content/publication/225350d9-en&\\_csp\\_=8350b5a116b8f28c78ab705d9d2a0e6d&itemIGO=oecd&itemContentType=book](https://www.oecd-ilibrary.org/sites/225350d9-en/1/2/2/index.html?itemId=/content/publication/225350d9-en&_csp_=8350b5a116b8f28c78ab705d9d2a0e6d&itemIGO=oecd&itemContentType=book)

### 3.2.3 Gender and gender equality

In October 2021, the Serbian government adopted the *Gender Equality Strategy* for the period from 2021 to 2030. The main goal is to overcome the gender gap and achieve gender equality, as a precondition for the development of society and the improvement of the daily lives of women and men, girls and boys. Earlier, in April 2021 the Serbian government adopted the Bill on gender equality, which improved the institutional framework and created conditions for the implementation of the policy of equal opportunities for women and men.

The Bill prescribed duties of public bodies, employers and other physical and legal persons regarding gender equality.

Gender-unequal norms and beliefs are dominant in Serbian society, including with respect to a household division of labour, participation in public life, employment, control over economic resources at all levels, and access to public services. According to Institute for Sociological Research surveys conducted in 2012 and 2018, patriarchal attitudes are still widespread. Inequalities are present in the domain of power and there was insignificant progress in the domain of distribution of economic and social power. Women have lower incomes than men, and certain groups of women are exposed to higher risks of poverty (particularly single mothers and older women living alone). Inequality is more visible in the distribution of time that women and men spend in caring for the household and family, i.e. doing unpaid housework. Data from the 2015 Time Use Survey reveal that women spend less time daily on unpaid household work (on average 2 hours and 18 minutes more)<sup>35</sup>. There are differences also between urban and rural areas, with rural women spending more time on unpaid household work than any other category.<sup>36</sup>

Gender segregation is present in the labour market as well. Women are mainly employed in the services and care economy while men tend to pursue job opportunities related to business, engineering, and technical sciences<sup>37</sup>.

### 3.2.4 Ethnicity

Within Serbia, most of the population identifies as ethnically Serb (83.3%). Serbian ethnic identity is often not exclusively defined by place of birth. Indeed, people who identify as Serb may have been born in Croatia, Bosnia-Herzegovina or elsewhere.

By the ethnic composition is following: 83.3% of the population are Serbs, 3.5% Hungarians, 2.1% Roma, 2% Bosniaks, 0.8% Croats, 0.7% Slovaks, 0.5% Montenegrins, 0.5 % Vlachs, 0.4% Romanians, 0.3% Yugoslavs, 0.3% Macedonians, 0.3% Muslims and around 5% other.<sup>38</sup>

<sup>35</sup> SORS. Time Use Survey in the Republic of Serbia 2010 and 2015, 2017.

<sup>36</sup> [https://serbia.unfpa.org/sites/default/files/pub-pdf/unfpa\\_un\\_women\\_secons\\_consequences\\_of\\_covid-19\\_on\\_womens\\_and\\_mens\\_economic\\_empowerment\\_final\\_2808.pdf](https://serbia.unfpa.org/sites/default/files/pub-pdf/unfpa_un_women_secons_consequences_of_covid-19_on_womens_and_mens_economic_empowerment_final_2808.pdf)

<sup>37</sup> SORS. Number of Pupils at the Beginning of the School Year by Fields of Education and Sex, 2019.

<sup>38</sup> [https://eacea.ec.europa.eu/national-policies/eurydice/content/population-demographic-situation-languages-and-religions-66\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/population-demographic-situation-languages-and-religions-66_en)

The last Census was in 2011. Due to the unfavourable and uncertain epidemic situation caused by the COVID 19 pandemic, which can significantly jeopardize the implementation of the Census activities, the enumeration is postponed for October 2022.

For many Serbs, the correlation between religion and ethnicity is very important. For example, those who identify as Serb tend to identify as Eastern Orthodox.

National minorities in Serbia, in addition to rights guaranteed by the Constitution to all citizens, also decide on certain matters related to their culture, education, information and official use of the language and script, in accordance with the law.

### 3.2.5 Economy and livelihood

Serbia is an upper-middle-income economy. The statistic shows the growth in real GDP in Serbia from 2016 to 2020. The economy entered a recession in 2020 due to COVID-19 Serbia's real gross domestic product decreased by around 0.98 percent compared to the previous year. Current EBRD forecast for Serbia's Real GDP Growth in 2021 is 6.5%.

### 3.2.6 Energy Poverty

Energy poverty is a real concern for a considerable share of Serbian households as less than 60% of households do not use the central heating system.

The Act on Energy Efficiency and Rational Use of Energy was recently adopted (April 2021). It defines energy poverty and establishes the new Directorate for financing and promoting energy efficiency. The Directorate has a task (beside others) to prepare specific programs for the implementation of energy efficiency measures with vulnerable energy customers and other customers to reduce energy poverty. The Law has energy poverty mitigation listed as one of its key areas and it defines it as a combination of a household's low income, large expenditure of available income on energy and low energy efficiency.

### 3.2.7 Population in urban/rural areas

Serbia is a predominantly hilly country. The altitude increases towards the peripheral and southern parts of the country, with some spatial differences within areas. Population concentration is usually higher in lower areas, along river valleys and roads, while peripheral mountainous areas are the most demographically endangered. In some municipalities located in hilly and mountainous areas, the increase in the elderly population is very distinctive.

Population increase is typical for large urban areas and their suburban zones, some valleys. Population decline is especially prominent in the peripheral zones of South Serbia. These are mostly mountainous areas and those traditionally affected by depopulation. In that part of Serbia, depopulation is detected not only in rural areas, marked by demographically depleted zones, but also in smaller urban areas, which are gradually losing their vitality.

Serbian households heavily rely on polluting and inefficient energy sources for heating (firewood and coal), while electricity, district heating, and natural gas are less used. Firewood and coal are often burnt in old, inefficient boilers, which has negative environmental implications and health impacts. People living in old houses and elderly people on low incomes are more exposed to energy poverty, while energy losses in buildings that have not been thermally renovated may also create susceptibility.

Residential heating is a major source of air pollution in Serbian cities. The latest WHO estimate of the annual mean PM<sub>2.5</sub> concentration in the country is 19.4 µg/m<sup>3</sup>, with a slightly higher mean in urban than in rural areas: 21.0 µg/m<sup>3</sup> and 19.4 µg/m<sup>3</sup>, respectively (8). These figures are much higher than the average annual mean PM<sub>2.5</sub> concentration calculated by WHO for the European Region as a whole (14.0 µg/m<sup>3</sup>)<sup>39</sup>.

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<sup>39</sup> <https://apps.who.int/iris/bitstream/handle/10665/346059/WHO-EURO-2019-3543-43302-60694-eng.pdf?sequence=1&isAllowed=y>



## 4 Policy, Legal and Institutional Framework

### 4.1 Foreword

The legal, legislative and institutional framework for environment and society i.e. social considerations in Serbia is founded on the Constitution of Serbia, which stipulates the right to a healthy environment and the duty of all, in line with the law, to protect and enhance the environment. Health and environment are also supported by many governmental strategies, international agreements and the Millennium Development Goals.

Environmental legislation in Serbia has over 100 laws and regulations. Currently, the majority of these are harmonized with EU directives and other legislation.

Regarding Climate Change, the Paris Agreement on Climate Change is the first general legally binding global climate agreement. It was signed on 22 April 2016 and ratified by the European Union on 5 October 2016. The Republic of Serbia is the Party to the UN Framework Convention on Climate Change (hereinafter: UNFCCC) and the Paris Agreement since August 2017.

Also, the Republic of Serbia accepts the EU acquis on Chapter 15 "Energy" and will be in a position to fully implement them until accession, as they read on January 1, 2021. Chapter 15 "Energy" covers, among other things, the following areas: Security of supply; Renewable energy sources; Energy efficiency; International agreements; Application of safeguards and etc.

Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the management of the Energy Community and Climate Action has been partially transposed into the Law on Amendments to the Law on Energy ("Official Gazette of RS", No. 40/21) which defines the legal framework for the development of the Integrated National Energy and Climate Plan as well as for reporting on the implementation of this plan.

Directive 2012/27/EU on the energy efficiency of 25 October 2012. has been partially transposed into national law. Transposition has included revisions of EED by Directive 2013/12/EU, Directive (EU) 2018/844, Directive (EU) 2018/2002, Regulation (EU) 2018/1999, Commission Delegated Regulation (EU) 2019/826 and Directive (EU) 2019/944. Full transposition will be achieved through secondary legislation.

EED was transposed through the Law on Energy Efficiency and Rational Use of Energy (ZEERUE), ("Official Gazette of RS", No. 40/21). This Law has defined the legal basis for bylaws, the adoption of which will achieve full compliance with the EED.

Among the most significant innovations related to the transposition of revised EED, which were introduced through ZEERUE, the goals in the field of energy efficiency and measures for achieving them, in the coming period will be determined through the Integrated National Energy and Climate Plan (INEKP), instead of through Energy Efficiency Action Plans. The legal basis for the adoption of INEKP is defined in the Energy Law ("Official Gazette of RS", no 40/21).

The majority of finalized or ongoing activities in the field are those requested by the UNFCCC and EU legislation. The legal framework related to climate change and adaptation is based on:

- Law on Ratification of the UN Framework Convention on Climate Change,
- Law on Ratification of the Kyoto Protocol to the UNFCCC,

- Law on Ratification of the Doha Amendment to the Kyoto Protocol as well as
- Law on Ratification of the Paris Agreement to the UNFCCC.

The Republic of Serbia has made significant efforts to improve the legal and policy framework that directly or indirectly affects the implementation of climate change-related activities.

By signing the Sofia Declaration on the Green Agenda for the Western Balkans<sup>40</sup> (Sofia, November 10, 2020) the Republic of Serbia has committed to a number of actions like introducing carbon pricing instruments and market-based renewables support schemes, as well as phasing out coal subsidies. “We commit to work towards the 2050 target of a carbon-neutral continent together with the EU through mainstreaming a strict climate policy and reforming energy and transport sectors, and in particular through the following actions,” the declaration reads. Some of the actions include:

- Align with the EU Climate Law once it is adopted with a vision of achieving climate neutrality by 2050;
- Set forward-looking 2030 energy and climate targets in line with the Energy Community framework and EU acquis, as well as develop and implement integrated Energy and Climate Plans with clear measures designed to reduce greenhouse gas emissions in the Western Balkans economies by integrating climate action into all relevant sectoral policies
- Continue alignment with the EU Emissions Trading Scheme, as well as work towards introducing other carbon pricing instruments to promote decarbonization in the region
- Review and revise, where necessary, all relevant legislation to support progressive decarbonization of the energy sector and secure full enforcement, notably through the Energy Community
- Cooperate in the preparation of an assessment of the socio-economic impact of decarbonization at individual economy and regional level with a view to a just transition
- Priorities energy efficiency and improve it in all sectors
- Increase the share of renewable energy sources and provide the necessary investment conditions, in line with the EU and Energy Community acquis and target
- Strive to decrease and gradually phase-out of coal subsidies, strictly respecting state aid rules
- Actively participate in the Coal Region in Transition initiative for the Western Balkans.

Also, the Republic of Serbia signed the Glasgow Climate Pact<sup>41</sup> (all 197 members of the United Nations are signatories to the Agreement) which aims to prevent global warming, which was reached at the United Nations climate change conference, Conference of the Parties - COP26 summit held from October 31 to November 12, 2021. and represents the first climate agreement to explicitly plan to reduce coal use. Generally, Conclusion:

- Agreement on the Paris rulebook reached:
  - Article 6: agreement on how global carbon trading will work (apart from some operational elements), some loopholes – especially about double counting – were closed,
  - Agreed rules allowing for the trade of carbon credits should help drive new investments towards climate action.
- Parties agreed on presenting updated NDCs (Nationally Determined Contributions) plans next year in Egypt (happens normally every 5 years, which would have meant in 2025)

<sup>40</sup> [https://www.consilium.europa.eu/media/34805/sofia-declaration\\_bs.pdf](https://www.consilium.europa.eu/media/34805/sofia-declaration_bs.pdf)

<sup>41</sup> [www.eurochambres.eu](http://www.eurochambres.eu)

- First COP acknowledging the importance of the principle of loss & damage – the idea that richer countries compensate poorer countries for climate change effects they cannot afford to adapt to – but no dedicated fund
- The COP26 brought some progress and momentum, further real impact could and needs to be seen as a result of next year’s negotiations, especially with updated NDCs,
- Some countries made further commitments,
- Agreement on coal phase-down is a positive sign,
- Positive, that rules on carbon trading were agreed.

## 4.2 Reaching environmental standards in Serbia

The Republic of Serbia is taking a huge effort to reach good environmental standards. A set of environmental laws adopted during the last two decades contributed to Serbia coming closer to desired environmental standards. The standards of good environmental practice are applied throughout the country, and progress is particularly visible within the energy and transport sector, also due to the fact that several large projects were financed by different International Financing Institutions (IFI), which implemented a strict environmental system.

## 4.3 Relevant Government Policies, Acts, Rules, Strategies and Guidelines

Environmental protection in the Republic of Serbia is regulated by several national and municipal laws and by-laws. Full List of regulations in the field of environmental protection in the Republic of Serbia is placed on the following website: <http://www.pravno-informacioni-sistem.rs> while national legislation relevant for SURCE project, are presented below.

### 4.3.1 *The Constitution of the Republic of Serbia*

The Constitution of the Republic of Serbia is passed in 2006 (the constitution was approved in the constitutional referendum of 2006, held from the 28-29th of October). It was officially proclaimed by the National Assembly of Serbia on November 8, 2006), the Constitution of RS proclaims the rule of law and social justice, principles of civil democracy, human and minority rights and freedoms, and commitment to European principles and values. Article 58 generally acknowledges and guarantees peaceful tenure of a person’s own property and other property rights legally acquired. It states that right of property may be revoked or restricted only in public interest established by law and with compensation which cannot be less than market value. It is important to note that the Constitution of RS prohibits the payment of a compensation less than the "market value" but allows the payment over the established market value. The provisions of the Constitution also do not make formal difference between property constructed without a construction permit and the ones acquired with the valid construction permit. The Constitution further proclaims that all human rights (including the right of property) and minority rights guaranteed by the Constitution shall be implemented directly. Furthermore, Article 16 states that all general accepted rules of international law and ratified international treaties shall be an integral part of the legal system in the Republic of Serbia and applied directly.

Also, Serbia’s Constitution, states that “Everyone shall have the right to a healthy environment and the right to timely and full information about the state of the environment. Everyone, especially the Republic of Serbia

and autonomous provinces, shall be accountable for the protection of the environment. Everyone shall be obliged to preserve and improve the environment.”

#### 4.3.2 *The Sustainable Urban Development Strategy (SUDS)*

The Strategy Sustainable Urban Development of the Republic of Serbia until 2030 ("Official Gazette of RS", No. 47/2019.), represents an integrated program until 2030 for tackling the next stage of the development of Serbia's cities and municipalities. The new strategy will contribute to Serbia's EU accession process and help harmonize its urban development policy and approach with the objectives of the EU Urban Agenda, the EU Green Deal, the New Urban Agenda adopted at the Habitat III United Nations (UN) Conference in 2016 in Quito, and the number 11 of the UN's Sustainable Development Goals: "Make cities and human settlements inclusive, safe, resilient, and sustainable." The SUDS applies to all LSGs and recognizes that among the main weaknesses at the LSG level are (i) insufficient and unstable access to financing, (ii) outdated infrastructure, (iii) low accessibility, (iv) lack of participatory approach, (v) legacy and ineffective public utility companies and services, (vi) climate change and air pollution, and (vii) lack of sound asset and investment management frameworks. At the same time, the Strategy recognizes that opportunities are in the improvement of these aspects.

#### 4.3.3 *Law on Environmental Protection*

Law on Environmental Protection (LEP) ("Official Gazette of RS" Nos. 135/2004, 36/2009, 36/2009, 72/2009-164, 43/2011-88, 14/2016, 76/2018 and 95/2018) is currently the main legislation relating to environment protection in Serbia. This Law shall regulate the integral system of environmental protection which shall ensure human right to live and develop in healthy environment as well as balanced economy growth and protection of the environment in the Republic of Serbia. The Law on Environmental Protection is fully harmonized with Council Directive 2003/105/EC, which amends Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances (Seveso II Directive).

The main objectives of LEP are:

- Sustainable management, preservation of the natural balance, integrity, diversity and quality of natural resources and conditions for survival of all living beings
- Prevention, control, reduction and remediation of all forms of pollution to environment.

The main thematic objectives of the LEP are:

- Management of natural resources (Utilization and protection of public natural goods, utilization of space, public green areas, protection of natural values (soil, water, air, forests, biosphere and biodiversity, flora and fauna, trade in protected species), waste management, noise and vibration protection and radiation protection)
- Measures and conditions for environmental protection (prevention, planning and construction, spatial planning, SEA, EIA, IPPC, accident risk assessment, values for emissions, environmental management system, eco-labelling, hazardous waste management and safety procedures);
- Environmental monitoring
- Information on disclosure of information and public participation.

#### 4.3.4 *The Law on Environmental Impact Assessment (LEIA)*

The Law on Environmental Impact Assessment ("Official Gazette of RS" Nos. 135/2004 and 36/2009), regulates the impact assessment procedure for projects that may have a significant impact on the environment, the contents of the Environmental Impact Assessment (EIA) Study, the participation of authorities and organizations concerned, the public participation, trans-boundary exchange of information for projects that may have a significant impact on the environment of another country, supervision and other issues of relevance to impact assessment. This law has been fully aligned with the Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

However, due to entering into the force of the new Directive 2014/52/EU amending the Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment in the EU, drafting of the new Law on Environmental Impact Assessment in compliance with it is ongoing.

According to this law, object of environmental impact assessment are projects where are planned and performed technology changes, reconstructions, capacity enlargement, deactivations and removal of the projects which can have significant environmental impact. Also, the subject of impact assessment are projects which have been realized without environmental impact assessment, and don't have building or operational permit (i.e. current status impact assessment).

Government of the Republic of Serbia determines the List of projects for which an impact assessment is mandatory and the List of projects for which an impact assessment may be required. Based on these lists of the projects authorized bodies decide about the need of certain projects impact assessment. The Law also contains the procedures for obtaining Final Environmental Approval to the EIA study from the Department of EIA for different types of proposed industries or projects.

Other pieces of legislation regulating the EIA process are the following:

- Law on Strategic Environmental Impact Assessment ("Official Gazette of the RS", Nos. 135/04 and 88/10);
- Regulation on the determination of the List of projects for which impact assessment is mandatory, and the List of projects for which the environmental impact assessment may be required ("Official Gazette of the RS", No. 114/08);
- Rulebook on the contents of requests for the necessity of Impact Assessment and on the contents of requests for specification of scope and contents of the EIA Study ("Official Gazette of the RS", No. 69/05);
- Rulebook on the contents of the EIA Study ("Official Gazette of the RS", No. 69/05);
- Law on confirmation of convention on information disclosure, public involvement in process of decision making and legal protection in the environmental area ("Official Gazette of the RS" no. 69/05);
- Rulebook on the content, appearance and manner of keeping the public book on implemented procedures and adopted decisions on environmental impact assessment ("Official Gazette of the RS" no. 69/05);
- Rulebook on the procedure of public inspection, presentation and public consultation about the EIA Study ("Official Gazette of the RS" no. 69/05);

- Rulebook on the work of the Technical Committee for the EIA Study ("Official Gazette of the RS" no. 69/05).

Note: Amendments to the Law on Environmental Impact Assessment is currently in the process of public consultations in order to be in compliance with the new Directive 2014/52/EU. The Ministry of Environmental Protection invites representatives of all public authorities in the Republic of Serbia, interested citizens, companies, NGOs, representatives of the academic community and other interested parties to join the consultation process on the Draft Law on Environmental Impact Assessment.

The consultations were conducted in the period from November 18 to 28, 2021. The draft law on environmental impact assessment has been available on the website of the Ministry of Environmental Protection of the Republic of Serbia - [www.ekologija.gov.rs](http://www.ekologija.gov.rs)

The video conference was held on November 24, 2021, from 1:00 pm to 2:30 pm.

#### *4.3.5 The Law on Air Protection*

Law on air protection ("Official Gazette of the RS", No. 36/2009, 10/2013 and 26/2021) regulates air quality management and determines the measures, the manner of organizing and controlling the implementation of protection and improvement of air quality as a natural value of general interest that enjoys special protection.

#### *4.3.6 The Law on Climate Change*

The Law on Climate Change ("Official Gazette of RS" No. 26/2021) has been adopted in March 2021, in force from April 1st, 2021. This law regulates the system for limiting greenhouse gas emissions (hereinafter: GHG) and for climate change adaptation, monitoring and reporting on low-carbon development strategy and its improvement, program for climate change adaptation, adoption of low-carbon development strategy and program for climate change adaptation, issuing permits for GHG emissions to plant operators, issuing approvals to the aircraft operator's monitoring plan, monitoring, reporting, verification and accreditation of verifiers, administrative fees, supervision and other issues relevant to limiting GHG emissions and climate change adaptation.

The provisions of this law apply to man-made GHG emissions and sectors and systems exposed to the effects of climate change.

The GHGs referred to in this Law are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), fluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>).

The aims of this law are:

- to establish a system to reduce GHG emissions in a cost-effective and economically feasible way, thus contributing to the achievement of scientifically necessary levels of GHG emissions to avoid dangerous climate change at global level and the adverse effects of climate change,
- to reduce GHG emissions and adapt to changed climate conditions by adopting and implementing public policy documents,
- to establish mechanisms for timely, transparent, accurate, consistent, comparable and complete reporting and verification of information on the fulfilment of obligations set by relevant laws and protocols on climate change.

#### *4.3.7 The Law on Waste Management*

The Law on Waste Management ("Official Gazette of RS" Nos. 36/2009, 88/2010, 14/2016 and 95/2018), which is harmonized with all relevant EU directives, has been adopted in 2009 and last amended in 2018. The Law regulates types and classification of waste; waste management planning; waste management entities responsibilities and obligations in waste management; organization of waste management; managing special waste streams; conditions and procedure for permit issuance; transboundary movement of waste; reporting on waste and database; financing of waste management; supervision, and other issues relevant for waste management.

Waste Management is based on the principle of the selection of the most optimal option for the environment, self-sufficiency principle, principle of proximity and regional approach to waste management, principles of waste management hierarchy, responsibility and "polluter pays" principle.

The waste catalogue of the Republic of Serbia is fully harmonized with the European waste catalogue and is part of the Regulation on the conditions and manner of sorting, packaging and storage of secondary raw materials ("Official Gazette of RS", Nos. 55/2001 and 72/2009).

#### *4.3.8 The Law on Water*

The Law on Water ("Official Gazette of RS", Nos. 30/10, 93/12, 101/2016 and 95/2018), which incorporates the EU Water Framework Directive, covers water regimes, water management areas, responsibilities for water management (including sub-law water management legislation), water management activities, limitation of owners' and beneficiaries' rights, water cooperatives, financing of water management activities, and administrative inspection to enforce the Law. The legislation provides for various water management sub-laws on water resource conditions, water resource compliance and water resource permits.

The Law prescribes various provisions aimed to define the legal status of waters on the territory of the Republic of Serbia, defines the integrated water management approach, rules regarding the management of water facilities and water land, resources and financing of water activities, sustainable use of water resources, supervision, rules related to the surface water and groundwater including thermal and mineral waters, except groundwater from which useful mineral raw materials and geothermal energy can be obtained.

#### *4.3.9 The Law on Energy Efficient and Rational Use of Energy*

The adoption of four laws in the field of mining and energy, including the new Law on Energy Efficiency and Rational Use of Energy (LEERUE), laid the foundation for Serbia's new energy policy, which focuses on ensuring energy security, greater use of green energy and the fight against climate change. Law on Energy Efficiency and Rational Use of Energy is fully harmonized with current EU regulation in the energy efficiency field.

The Law on Efficient and Rational Use of Energy ("Official Gazette of RS", No. 40/2021) regulates the conditions and manner of efficient use of energy and energy products (hereinafter: energy); energy efficiency policy; energy management system; energy efficiency policy measures: use of energy in public buildings, in energy activities and end customers, for energy facilities and energy services; energy labelling and eco-design requirements; financing, incentives and other measures in this area; establishment and operations of the Directorate for Financing and Encouragement of Energy Efficiency (hereinafter: the Directorate), as well as



other issues of importance for the rights and obligations of individuals and legal entities related to the efficient use of energy.

The establishment of the Administration for Financing and Promotion of Energy Efficiency as a separate legal entity within the Ministry of Mining and Energy instead of the Budget Fund for Energy Efficiency, which was just as a budget line operated by the Ministry since 2014. The establishment of the Directorate is expected to enable subsidies for improvement of energy efficiency in residential and other energy consumption sectors in addition to the public sector.

The aim of this law is to create conditions for efficient use of energy and improvement of energy efficiency, which contributes to:

- achieving energy savings
- security of energy supply
- reducing the impact of the energy sector on the environment and climate change
- sustainable use of natural and other resources
- increasing the competitiveness of the economy
- improving the conditions for economic development
- reducing energy poverty.

Also, implementation of the energy management system includes a broad set of regulatory, organizational, promotional, technical and other measures and activities that are determined and implemented by the different actors involved in this system, within their scope of competencies, including public administration bodies and designated parties of the system. The Law sets the legal base for the transposition of the Energy Efficiency Directive (EED). Full alignment is expected through secondary legislation.

Energy poverty within the meaning of this Law is the result of the combination of low household income, large expenditure of available income on energy and insufficient energy efficiency.

#### *4.3.10 The Law of Energy*

The Law of Energy ("Official Gazette of RS", Nos, 145/2014, 95/2018 and 40/2021) regulates the goals of energy policy and the manner of its implementation, the conditions for a reliable, safe and quality of delivery of electricity and fuels, conditions for the safe supply of customers, protection of energy customers, conditions and manner of performing energy activities, requirements for the construction of new energy facilities, status and scope of the Energy Agency of the Republic of Serbia (hereinafter: the Agency), renewable energy use, stimulus measures and guarantees of origin, organization and functioning of the electricity, natural gas and petroleum and petroleum products markets, the rights and obligations of participants in the market, the establishment of property rights on the networks of operators of the system, and monitoring of the implementation of this law.

This law regulates the production, distribution and supply of thermal energy as an energy activity.

Long-term goals of energy policy of the Republic of Serbia are focused on reliability, safety, quality, security, sustainable development, competitiveness, transparency, improvement and development. Important energy goals include:

- ensuring the conditions for improvement of energy efficiency in performing energy-related business activities and energy consumption,
- creating of economic, industrial and financial conditions for energy production from renewable energy sources and combined production of electrical and thermal energy,
- improving of environmental protection in all areas of the energy industry.

“Energy policy is developed and implemented in detail by the Energy Development Strategy of the Republic of Serbia (Strategy), Strategy Implementation Program (Program) and the Energy Balance of the Republic of Serbia (Energy Balance).

The Government, in accordance with the Law of Energy, Strategy and the Program, adopts national action plans that more closely define developmental goals and measures for their implementation.”

#### *4.3.11 The Law on the Use of Renewable Energy Sources*

The Law on the use of renewable energy sources ("Official Gazette of RS", No. 40/2021) regulates the use of energy from renewable sources, targets for the use of energy from renewable sources, the method of determining the share of renewable energy sources in the gross final energy consumption, integration of energy from renewable sources into the market, incentive systems for electricity production from renewable sources, guarantees of origin electricity, production of electricity from renewable sources for own consumption, use of renewable energy sources in the field of heat and transport, special procedures related to the construction and connection of energy facilities using renewable energy sources, basics of cooperation mechanisms with other countries in the field renewable energy sources, supervision over the implementation of this law, as well as other issues of importance for renewable energy sources.

To regulate the use of energy from renewable sources, the Law defines the following measures and activities (among others), relevant to the Project, to be taken to achieve long-term goals:

- reducing the use of fossil fuels and increasing the use of renewable energy sources in order to protect the environment
- creation of new jobs and development of entrepreneurship in the field of renewable energy sources.

#### *4.3.12 The Law on Protection Against Environmental Noise*

The Law on Protection against Environmental Noise ("Official Gazette of RS", Nos. 36/2009, 88/2010 and 96/2021), transposed EU Directive 2002/49/EC. The Law has the following main goals: establishment, maintenance and improvement of the system of noise protection on Serbian territory; and determination and realization of measures in the field of noise protection that avoid, prevent or decrease the harmful effects of noise on human health and the environment. The limit levels of noise are covered by the Regulation on permitted level of noise in the environment ("Official Gazette of RS", No. 75/2010).

#### *4.3.13 The Law on Soil Protection*

The Law on Soil Protection ("Official Gazette of RS", No. 112/2015) regulates land protection, systematic monitoring of the condition and quality of land, remediation, remediation, reclamation, inspection and other issues of relevance to protection and conservation of the land as a natural resource of national interest.

#### 4.3.14 *The Law on Nature Protection*

The Law on Nature Protection ("Official Gazette of RS" Nos. 36/2009, 88/2010, 91/2010, 14/2016 and 95/2018) defines protection and preservation of nature, biological, geological and regional diversity. Nature as a common interest for the Republic of Serbia enjoys special protection in accordance with this and special laws.

The following objectives are achieved by this law:

- protection, conservation and improvement of biological (genetic, special and ecosystem), geological and landscape diversity
- harmonization of human activities, economic and social development plans, programs, bases and projects with sustainable use of renewable and non-renewable natural resources and long-term preservation of natural ecosystems and natural balance
- sustainable use and / or management of natural resources and goods, ensuring their function while preserving the natural values and balance of natural ecosystems
- timely prevention of human activities and activities that can lead to permanent impoverishment of biological, geological and landscape diversity, as well as disorders with negative consequences in nature
- identification and monitoring of the situation in nature;
- improvement of the state of disturbed parts of nature and landscape.

The natural protected areas are governed by Institute for Nature Protection of Serbia (INP), according to the Law on Nature Protection.

#### 4.3.15 *The Law on Planning and Construction*

The Law on planning and construction ("Off. Gazette of RS", No. 72/2009, 81/2009, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014, 145/2014, 83/2018, 31/2019, 37/2019, 9/2020 and 52/2021) regulates the following: conditions and modalities of spatial planning and development, development of general and detailed regulation plans, development and use of construction land and the construction of facilities, predominant use of land when the land has multiple uses, public use of land and other issues of significance in the development of space, landscaping and use of construction land and the construction of facilities. It also prescribes procedure for: issuance of site conditions; issuance of building permit; notice of works; issuance of occupancy permit; attainment of conditions for design, i.e. connection of a facility to the infrastructure network; obtaining legal instruments and other documents issued by the holders of public authorities required for the construction of facilities, i.e. for the issuance of site location conditions, building permit and occupancy permit within their competence, as well as for the provision of conditions for connection to the infrastructure network and for the registration of title to the built facility and for designating a house number (unified procedure).

This Law states that social and population issues are to be considered in the development of all planning documents such as spatial plans, urban plans, regulation plans, project designs, etc.

#### *4.3.16 Building legalization law*

The Building Legalization Law ("Official Gazette of the RS ", No. 96/15, 83/2018 and 81/2020) regulates the conditions, procedure and manner for legalizing buildings, parts of buildings, auxiliary buildings and other buildings constructed without a building or construction permit. The custom of constructing complete buildings (houses, shops, even apartment buildings), or adding auxiliary buildings to existing, legal building (garage, additional floors on houses or rooms) without a construction permit became quite usual in last 30 years. The governments over the years always maintained the intention to legalize all illegally constructed buildings, if constructed on own land and/or with consent of the owner, but a fair portion of the existing buildings have not yet been legalized.

#### *4.3.17 The Law on State Survey and Cadastral*

The Law on State Survey and Cadastre ("Official Gazette of the RS", Nos. 72/2009, 18/2010, 65/2013, 15/2015, 96/2015, 47/2017, 113/2017, 27/2018, 41/2018 and 9/2020) regulates the professional activities and affairs of the state administration related to land, buildings and other structures survey, real estate cadastre, records and registration of property, registration of possession, registration of illegal buildings and buildings legalized according to provision of the latest Building Legalization Law of RS, utilities cadastre, basic geodetic works, address register, topographic and cartographic activities, valuation of real estate, geodetic and cadastral information system.

#### *4.3.18 The Law on Housing and Building Maintenance*

The Law on Housing and Building Maintenance ("Official Gazette of the RS", No. 104/2016 and 9/2020) requires the development of a resettlement plan for persons occupying illegal structures located on land not belonging to them (Article 82). This Law states that physical displacement of persons who have no legal rights to the land they occupy is carried out for the construction of investment projects only if it can be proved that there is no alternative for resettlement and the settlement (or part of the settlement) cannot remain in the existing location (Articles 78, 81).

The decision on the necessity of resettlement and resettlement plan have to include the following information:

- Reasons for resettlement,
- Map of the area which will be resettled with a presentation of affected land plots,
- Total number of households and persons who are to be resettled,
- The dynamic and deadlines for resettlement,
- Identification data for people who are to be resettled (name, surname and personal ID number).
- The location of resettlement and type of accommodation.

#### *4.3.19 Law on Fire Protection*

The Law on Fire Protection ("Official Gazette of RS", Nos. 111/2009 and 20/2015 and 87/2018) provides all necessary rules and requirements aimed to determine the: measures and standards to be implemented in order to establish a competent national system of fire protection; rights and responsibilities of state organs and other responsible institutions; rules governing the autonomous province and local self-government bodies and their tasks in mandatory fire protection duties; business organizations in fire protection sector; measures for correct data collection and monitor.

The system established by this Law involves planning for fire protection, also prescribing measures for fire protection, setting up entities for fire protection, mandatory enforcement for fire protection, fire protection funding, training and accreditation, with the aim of protecting life, health and safety of people and the safety of goods.

The measures provided by this Law will further apply to the prevention of the fire risk; early detection, notification and containment and effective firefighting; safe rescue of people and education of its consequences to the environment.

The Law have 90 articles, including all offences and related penalties.

#### *4.3.20 Law on Protection of Personal Data*

Law on Protection of Personal Data ("Official Gazette of RS", No. 87/2018), regulates the right to the protection of individuals with regard to the processing of personal data and the free flow of such data, processing principles, rights of data subjects, obligations of data controllers and processors, code actions, transfer of personal data to other countries and international organizations, supervision over the implementation of this law, remedies, liability and penalties in case of violation of the rights of natural persons in connection with the processing of personal data.

#### *4.3.21 Law on Occupational Safety and Health*

The Law on Occupational Safety and Health ("Official Gazette of RS" Nos. 101/2005, 91/2015 and 113/2017) regulates the occupational safety and health system in Serbia. By harmonizing this law with the ratified International Labour Organization conventions and EU Framework Directive 89/391/EEC, as well as special directives derived from the Framework Directive, all guidelines originating from them have been accepted in a form adjusted to national conditions. Apart from this Law, the regulatory framework of the occupational safety and health system is integrated by several sub-acts.

This Law regulates working conditions at a workplace, rights of employees and employer obligations, in general. Nor does it specify those issues, except for general emergency situations like fire at a workplace, electrical hazards, and so on. It does not cover any specific issues related to infrastructure deployment.

Rulebook on preventive measures for occupational health and safety and prevention and containment of contagious diseases epidemic ("Official Gazette of RS", No. 94/2020) governs preventive measures employers need to introduce at workplaces and applies to all persons at workplaces in cases an epidemic has been declared.

The provisions of this are further elaborated in numerous by-laws, for regulating the specific implementation procedures. A total of 8 legal acts and 55 rulebooks related to the area of occupational health and safety are ensuring implementation of the Law, and providing targeted OHS procedures for e.g. working on temporary and movable construction sites; deep drilling and exploitation of raw minerals; exposure to asbestos; working in an environment at risk from explosive atmosphere; mitigation measures from hazardous risk of electricity.

#### *4.3.22 Regulation on Labour, Working Conditions and Gender equality*

The following regulations are relevant to labour, working conditions and gender equality in general and also apply to workers engaged by the Project:

Labour Law ("Official Gazette of RS", Nos. 24/2005, 61/2005, 54/2009, 32/2013, 75/2014, 13/2017, 113/2017 and 95/2018) is the main legislation that guides labour practices in Serbia. It provides for the minimum rights of employees such as the right to corresponding salary/wage, safety and health at work, health-care protection, personal integrity protection, personal dignity, and other rights in the event of illness, reduction or loss of work ability and old age, including unemployment financial benefits during temporary unemployment, as well as the right to other forms of protection, in conformity with the law and bylaw, i.e. the employment contract. An employed woman is entitled to special protection during pregnancy and childbirth. Special protection is also guaranteed to employees under 18 years of age and an employed person with a disability.

The terms and conditions provided by this Law also includes a ban to direct or indirect discrimination regarding employment conditions and choice of candidates for performing a specific job, conditions of labour and all the rights deriving from the employment relationship, education, vocational training and specialization, job promotion and termination of employment contracts on the grounds of differences by the virtue of sex, birth, language, race, the colour of the skin, age, pregnancy, health condition, and/or disablement, ethnic origin, religion, marital status, family obligations, sexual orientation, political or other belief, social background, financial status, membership in political organizations, trade unions, or any other personal characteristic. The LL guarantees the employee's right to corresponding earnings, compensations and refund of expenses, entitlement to training and professional development, provision of safety and health at work, health-care protection, personal integrity protection, personal dignity, and other rights in the event of illness, reduction or loss of workability and old age, including financial benefits of temporary unemployment, as well as the right to other forms of protection.

The provisions of the Labour Law apply to all employees who work in the territory of the Republic of Serbia for a national or foreign legal or natural person (i.e. employer), as well as to employees assigned to work abroad by an employer unless otherwise specified by the law.

Law on Civil Servants ("Official Gazette of RS", Nos. 79/2005, 81/2005, 83/2005, 64/2007, 67/2007, 116/2008, 104/2009, 99/2014, 94/2017, 95/2018 and 157/2020);

The Law on Peaceful Settlement of Labour Disputes ("Official Gazette of RS", Nos. 125/2004, 104/2009 and 50/2018);

Law on Employment and Unemployment Insurance ("Official Gazette of RS", Nos. 36/2009, 88/2010, 38/2015, 113/2017 and 49/2021);

Law on Employment of Foreign Citizens ("Official Gazette of RS", Nos. 128/2014, 113/2017, 50/2018 and 31/2019);

Law on Retirement and Disability Insurance ("Official Gazette of RS", Nos. 34/2003, 64/2004, 84/2004, 85/2005, 101/2005, 63/2006, 5/2009, 107/2009, 101/2010, 93/2012, 62/2013, 108/2013, 75/2014, 142/2014, 73/2018, 46/2019, 86/2019 and 62/2021);

Law on Health Insurance ("Official Gazette of RS", No. 25/2019)



Law on the Prohibition of Discrimination (“Official Gazette of RS”, No.22/2009 and 52/2021);

Law on the Prevention of Harassment at the Workplace (“Official Gazette of RS”, No. 36/2010)

Rulebook on Conduct of Employers and Employees in Relation to Prevention and Protection from Harassment at Work (“Official Gazette of RS”, No. 62/2010);

Law on Protection of Whistle Blowers (“Official Gazette of RS”, No. 128/2014);

Law on Gender Equality (“Official Gazette of RS”, No. 104/2009).

#### *4.3.23 Rulebook on conditions, content and manner of issuance of the certificate on energy performance of buildings*

The Rulebook on conditions, content and manner of issuance of the certificate on the energy performance of buildings (“Official Gazette of the RS”, Nos. 69/2012 and 44/2018) prescribes the conditions, content and manner of issuing certificates on the energy performance of buildings. The certificate is a document that contains the calculated values of energy consumption within a certain category of buildings, energy class and recommendations for improving the energy performance of the building.

#### *4.3.24 Rulebook on Content, Method and Procedure for Preparation and Control of Technical Documentation by Class and Intended Use of Structures*

The Rulebook on Content, Method and Procedure for Preparation and Control of Technical Documentation by Class and Intended Use of Structures (“Official Gazette of RS”, No.73/2019) prescribes the content, manner and procedure of preparation and manner of performing control of technical documentation according to the class and purpose of facilities. Article 11. The energy efficiency of the facility should ensure the lowest possible level of energy consumption during construction, use, maintenance and removal.

#### *4.3.25 Rulebook on Energy Efficiency of Buildings*

The Rulebook on Energy Efficiency of Buildings (“Official Gazette of RS”, No. 61/2011) applies to the construction of new buildings, reconstruction, extension, renovation, adaptation, rehabilitation and energy rehabilitation of existing buildings, etc. Among other things, Article 4. Energy properties and methods of calculating thermal properties are determined for the following categories of buildings: residential buildings with one flat, residential building with two or more flats etc.

In accordance with this Rulebook, it is necessary to perform Elaboration on Energy Efficiency, namely, both the Elaboration on the current situation and Elaboration on the newly designed state.

In addition to the analysis of architectural and construction characteristics of the building, that is, the analysis of thermal characteristics of the building’s thermal envelope, the Elaboration on the current situation shall provide detailed status of the existing thermomechanical installation for heating, cooling and ventilation of the building, preparation of hot sanitary water, installation of lighting in the facility and outside the building.

Elaboration on the newly designed state elaborates a proposal of measures to achieve the energy properties of a building. In addition to optimizing the structure of the building, special attention must be paid to the manner of using natural lighting and exposure to the sun, optimization of the system of natural ventilation, as well as of the heating system and automatic regulation of the heating system. It is necessary to provide details about the type of energy for heating, cooling and ventilation, improvement of thermo technical

installations and systems of lighting, use and share of renewable energy sources. It is also necessary to present estimated savings for the necessary annual energy consumption for the operation of technical systems, together with estimated savings for the annual value of consumption of total primary energy, as well as the value of CO<sub>2</sub> emissions reduction.

#### *4.3.26 Decree on Energy Vulnerable Customers*

The Decree on Energy Vulnerable Customers ("Official Gazette of RS", Nos. 113/2015 and 59/2018) in force stipulates that the beneficiaries of financial social assistance, child allowances and other low-income households can receive discounts on their electricity and natural gas bills, thanks to a subsidy financed from the state budget. The MoME is currently developing a new draft regulation to enhance and expand the protection of energy vulnerable customers, thus further mitigating existing energy poverty as well as anticipating future changes in the sector.

#### *4.3.27 Rulebook on Conditions for Distribution and Use of Resources of the Budget Fund for Improvement of Energy Efficiency of the Republic of Serbia and Criteria*

Rulebook on conditions for distribution and use of funds from the Budget Fund for Energy Efficiency Improvement of the Republic of Serbia ("Official Gazette of RS", No. 39/2021) prescribes the conditions for the distribution and use of incentive funds for the improvement of energy efficiency, the manner of distribution, monitoring and agreed rights and obligations are regulated. This Rulebook is under change and new version has to be adopted in the beginning of 2022.

#### *4.3.28 Rulebook on special types of facilities and special types of works for which it is not necessary to obtain an act of the competent authority, as well as types of facilities under construction, i.e. types of works performed, based on the decision on approval for works, as well as scope and content documentation attached to the request and the procedure carried out by the competent authority*

The Rulebook on special types of facilities and special types of works for which it is not necessary to obtain an act of the competent authority, as well as types of facilities under construction ("Official Gazette of RS", Nos. 102/2020, 16/2021 and 87/2021) and General conditions for the connecting of photovoltaic modules with an installed production capacity of 10.8 kW or less to the internal installations of the existing customer's facility - individual households (SFH) define the legal framework for the installation of solar collectors for sanitary hot water and rooftop solar photovoltaic (PV).

In 2021 the following acts were adopted in the field EE:

- The Decree on the Program for Financing Activities and Measures for Improvement of Efficient Use of Energy in 2021 ("Official Gazette of RS", No. 32/2021),
- The Decree amending Decree on the Program for Financing Activities and Measures for Improvement of Efficient Use of Energy in 2021 ("Official Gazette of RS", No. 32/2021),
- The Decree amending Decree on energy-related products for which indication of the consumption of energy and other resources is necessary ("Official Gazette of RS", No. 41/2021) which enables adoption of EE labelling acts for new kind of products,

- Rulebook on energy efficiency labelling of refrigerating appliances ("Official Gazette of RS", No. 43/21),
- Rulebook on energy efficiency labelling of household dishwashers ("Official Gazette of RS", No. 43/21),
- Rulebook on energy efficiency labelling of household washing machines and washer-dryers ("Official Gazette of RS", No. 43/21).

The Republic of Serbia is a signatory of a number of important and binding international documents, which guarantee the equality of women and men and prohibit gender-based discrimination. Among these documents, the most important are documents of the United Nations (Universal Declaration of Human Rights, the Convention on the Elimination of All Forms of Discrimination against Women — CEDAW), the Council of Europe (European Conventions for the Protection of Human Rights and Fundamental Freedoms, the European Social Charter and the Council of Europe Convention on preventing and combating violence against women and domestic violence) and the European Union (EU Charter of Fundamental Rights).

#### *4.3.29 The Law on Cultural Heritage*

According to the Law on Cultural Heritage ("Official Gazette of RS", Nos. 71/94, 52/2011, 99/2011 and 6/2020) regulates the system of the protection and use of the cultural property and defines conditions for the implementation of activities relating to the protection of cultural property.

The Central cultural property protection institution is the Republic Institute for the Protection of Cultural Monuments. The main activities of the Central protection institutions are: to examine the state of cultural property and take measures relating to its protection and use; to provide expert assistance and promote the work relating to cultural property protection, particularly in regard to contemporary methods of professional work; to ensure professional training of staff engaged in activities relating to cultural property protection, to maintain central registers by type of cultural property and documentation on such property; and to set up and maintain a computerized information centre by type of cultural property.

Protection institutions adopt the professional guidance on conditions and manner of keeping, using and maintaining a particular type of movable cultural property and shall ensure the implementation of such guidance and secure cultural property against fire, physical, chemical and biological disintegration and unauthorized alienation.

### **4.4 Relevant Institutions**

A large number of institutions in the sector of environment, energy, construction and climate change are relevant and involved at the national, regional and local levels.

The main actors are the following:

- The Ministry of Environmental Protection (MoEP),
- The Ministry of Mining and Energy (MoME),
- Administration for financing and promoting energy efficiency (EEA)
- Energy Agency of the Republic of Serbia (AERS)
- The Ministry of Construction, Transport and Infrastructure (MCTI),
- The Provincial Secretariat for Urban Planning and Environmental Protection (PSUEP)
- Serbian Environmental Protection Agency (SEPA)

- The Ministry of Health (MoH)
- Institute of Public Health of Serbia
- Ministry of Finance (MoF)
- Labour Inspectorate
- OHS Inspectorate
- The local self-government authority responsible for environmental protection issues
- The local self-government units (LSGs), and
- Public Utility Companies (PUCs).

Additionally, a PIU unit established by the MoME will be responsible for conducting early environmental and social screening of Scaling Up Residential Clean Energy (SURCE) sub-projects to be used for defining grant eligibility criteria, and for overall project implementation in line with the ESMF to ensure risks are identified, impacts anticipated, and mitigation measures designed and implemented to minimize adverse environment and social impacts.

#### *4.4.1 The Ministry of Environmental Protection (MoEP)*

MoEP is the key relevant institution for environmental management of all activities under the RCEEE Project. In addition, for subcomponents relevant environmental departments within respective cities/municipalities are responsible for environmental protection and for conducting all environmental procedures in accordance with the applicable Laws.

MoEP is in charge for the development, review and monitoring of the implementation of the National Programme for the Adoption of the Acquis for chapter 27, for the follow-up of European Union environmental regulations, and preparation of proposals for the planning of communication activities for Chapter 27. MoEP is responsible for the development of the policy and regulatory framework which is largely driven by the EU accession process.

MoEP is responsible for the following areas relevant for the EU Acquis in environment:

- horizontal environmental issues (EIA, SEA, public participation, etc.),
- air quality,
- chemicals management,
- climate change (excluding technical demands to vehicles and fuel quality),
- ozone layer protection,
- waste management excluding radioactive waste,
- protection from major chemical accidents and participation in response on chemical accidents,
- industrial pollution,
- nature and biodiversity,
- water quality (water pollution protection to prevent quality deterioration of surface and underground water),
- waste and wastewater infrastructure,
- protection from environmental noise.

#### *4.4.2 The Ministry of Mining and Energy (MoME)*

MoME is in charge of the operations of the State Administration related to mining, energy and natural resources development. Within each of these spheres and their specific resources, the Ministry creates the

strategies and development policies, conducts the research about sustainable use of resources and their exploitation, deals in safety, monitoring and other operations as defined by the Law.

The Ministry of Mining and Energy consists of the following Sectors:

- Electricity Sector,
- Green Energy Sector,
- Energy Efficiency and District Heating Plants Sector,
- Oil and Gas Sector,
- Geology and Mining Sector,
- International Cooperation and European Integration Sector,
- Inspection Sector.

Sector for Energy Efficiency and District Heating Plants Sector is in charge for energy efficiency but is also in charge for climate sustainable development and climate change in energy sector. MoME is also responsible for Carbon Capture and storage and Quality of Petrol and Diesel fuels issues.

The Project will be implemented by the Government of the Republic of Serbia, the Ministry of Finance, the Ministry of Mining and Energy (MoME), and the ministry team establishing the Energy Efficiency Administration (EEA), Administration for financing and promoting energy efficiency, Project Implementation Unit (PIU) and local self-government units. The project will utilize the services of the Central Fiduciary Unit (CFU) for fiduciary arrangements, while technical implementation of SURCE (conducting project activities, signing contracts, processing withdrawal of funds and payments, etc.) will be the responsibility of the MoME/EEA with the assistance of PIU (still not known where the PIU will sit). As the body of the State Administration which deals in energy efficiency, renewable resources, climate changes, environment protection in energy sector and coordinating the activities related to the investments in energy, the Ministry of Mining and Energy is the lead partner in the implementation of the SURCE Project''. Administration for financing and promoting energy efficiency started working with its operation as of January 2022 and will engage on the project implementation within its capacity.

The MoME will be overall responsible for the implementation of the Project. MoME/EEA will house the Project Implementation Unit (to be confirmed at alter stage).

The Group for the Implementation of Programs and Projects for Financing Energy Efficiency Improvement Activities and Measures is included in the act of organization of the MoME within the Directorate for Financing and Encouraging Energy Efficiency. Administration for Energy Efficiency is established in order to perform executive and professional activities related to the financing of energy efficiency in accordance with Law on energy efficiency and rational use of energy and its bylaws (Law). Competences of the Administration are determined by the Law.

Also, in Energy Efficiency and District Heating Plants Sector are existing:

- Energy Efficiency Department,
- Group for Sustainable Development and Climate Change in the field of energy.

An Administration for Energy Efficiency Financing and Promotion (hereinafter Energy Efficiency Administration, EEA) has been created within the MoME through LEERUE 2021 energy legislation. The EEA will finance energy efficiency improvement activities that used to be financed by the Budget fund for energy

efficiency managed by the MoME (Budget fund was just a budget line operated by MoME). MoME will create and oversee implementation of the national energy efficiency policy while EEA will have a task to implement this policy based on the annual investment programs adopted by the Government each year. The EEA will provide grants (either repayable or non-repayable) to all energy consumption sectors and particularly to household sector and other types of support which will be developed in the future. It will also provide assistance to municipalities, financial institutions, energy service companies, and consumers to implement EE measures and will be in charge for rising awareness on energy efficiency. Under the LEERUE, the EEA is mandated to coordinate the different energy efficiency and clean energy support programs and develop programs for energy vulnerable customers, and to develop boiler replacement program jointly with the MoEP.

#### *4.4.3 The Environmental Protection Agency – SEPA*

It is an administrative body within the MoEP. It is responsible for:

- management of the national Environmental Protection Information System and Register of Polluters,
- state monitoring of water and air quality and management of the national laboratory,
- implementation of established and compliance programmes for the quality control of air, surface and groundwater from first aquifer and precipitations,
- monitoring, analysis and forecasts of quality of air and water
- collection and integration of environmental data, and processing of data in order to prepare annual reports on the state of the environment and implementation of environmental policy in Serbia, as focal point, for co-operation with the EEA and EIONET.

#### *4.4.4 The Ministry of Construction, Transport and Infrastructure (MCTI)*

MCTI is generally responsible for road transport, roads and traffic safety, railways and intermodal transport, air traffic and transport of dangerous goods, waterways transport and navigation safety, construction affairs, implementation of consolidated procedures and legislation, spatial and urban planning, international cooperation and European integration, inspection supervision and housing and architectural policy, communal activities and energy efficiency.

#### *4.4.5 Ministry of Health*

The Ministry of Health is responsible for:

- the implementation of sanitary regulations pertaining to environmental protection and biosafety,
- sanitary inspection,
- water supply for public consumption,
- control and the monitoring of sanitary conditions in and on objects and at the border and other places.

#### *4.4.6 The network of institutes responsible for Labour, working conditions and OHS*

The authorities relevant to the labour and OHS sector in terms of supervising the implementation of the Labour and OHS regulations are the Ministry of Labour, Employment, Veteran and social issues, Occupational Safety and Health Directorate of the Ministry for Labour, Employment, Veterans, and Social Policy. The Labour Inspectorate of the Ministry for Labour, Employment and Social Policy.

#### 4.4.7 *Relevant Institutions on Provincial level*

The Government of the Autonomous Province of Vojvodina has the responsibility for administration and control of its own territory. The responsibilities of AP of Vojvodina, according to the Law on Establishment of Responsibilities of AP Vojvodina, ("Official Gazette of RS", Nos. 99/2009 and 67/2012) include, but are not limited to, the following sectors, relevant to the EU environmental and climate change acquis:

- urban planning, construction and land use,
- environmental protection (art 16, 25, 28) including nature resources management
- environmental program in line with national programmes
- inspections and enforcement
- collection of charges for the protection and improvement of the environment.

#### 4.4.8 *Local self-government (LSG) units – municipalities and cities*

Serbia has three levels of government consisting of the State level and the municipalities at the local self-government level. A conglomeration of two or more municipalities can have the status of a city. The functions, powers, structures, and procedures of local self-government is set out in the Law on Local Self-Government ("Official Gazette of the RS", No. 83/2014). Municipalities have their own elected assemblies and the power to tax. They are responsible for planning, implementation, and enforcement in their territory. Responsibilities of municipal level cover following sectors: horizontal legislation, waste, water, air quality, noise, civil protection.

Their responsibilities relating to environmental protection include (article 20):

- Development of plans and programs
- Land use planning and construction
- Communal services including water purification and distribution, wastewater collection and treatment, district heating, solid waste management, landfills, spatial planning, parks, nature and other
- Environmental protection, environmental planning, in accordance with (higher level) strategic documents
- Charges for environmental protection and improvement
- Inspections and enforcement
- Regulation, support and supervision of the operation and development of municipal services (treatment and distribution of drinking water, disposal and treatment of waste and wastewater);
- Regulation and definition of procedures for the use and management of springs, public water wells and public taps, including water quality standards
- Permitting and authorization of water abstraction and use; and
- Organization of protection against natural and other major disasters, e.g. floods, erosion.

However, the energy services market is underdeveloped, and there are practically no qualified energy service companies (ESCOs) with sufficient technical and financial capacity to provide a broad range of energy services.



## 4.5 EIA procedure in the Republic of Serbia

Environmental impact assessment procedure in Serbia is regulated by the Law on Environmental Impact Assessment and a set of relevant bylaws. National legislation in this field is harmonized with the European EIA Directive (85/337/EEC, 97/11/EC, 2003/35/EC and COM 2009/378 as codified by the Directive 2011/92/EU). Responsibility for enforcing the EIA procedure in line with the Law on EIA lies with the following institutions:

- The ministry in charge of environmental protection (MoEP) – for projects for which the construction permit is issued by the republic authority
- The autonomous province administrative authority responsible for environmental protection – for projects for which the construction permit is issued by the autonomous province
- The local self-government unit responsible for environmental protection (department responsible for environmental protection within city/municipal administration) – for projects for which the construction permit is issued by the LSG.

Environmental impact assessment is carried out for future and ongoing projects, changes in technology, reconstruction, capacity enhancement, closure and decommissioning activities and for removal of projects that may have significant impact on the environment. The EIA is applicable to the industry, mining, energy production, transport, tourism, agriculture, forestry, water management, waste management and utility services sectors, as well as for all the projects that are planned in areas of protected natural resources of special value and within the protected zones of immobile cultural resources.

The Government of the Republic of Serbia has adopted the Regulation on the determination of the List of projects for which environmental impact assessment is mandatory, and the List of projects for which the environmental impact assessment may be required ("Official Gazette of the RS" no. 114/08):

List I – projects for which environmental impact assessment is mandatory – the list includes projects with significant environmental impacts (major infrastructure projects, heavy industry, etc.). It is not expected that List I projects will be implemented under the SURCE project. List I is given in Annex 2.

List II – projects for which the environmental impact assessment may be required. For List II projects, within the SURCE project it is the responsibility of MRE/PIU to implement the EIA procedure for each subproject, in the following steps: 1) Screening – MRE/PIU submits a Request for the Decision about the need for EIA to competent authority; 2) If the Decision is that EIA is not required, the competent authority may determine the minimum environmental protection requirements. 3) If the Decision is that EIA is required, the competent authority proposes the content and the scope of the EIA study. 4) Development of the EIA study and submission to the competent authority for approval. 5) Decision on the approval of the EIA study by the competent authority. This procedure is also applicable to all activities not listed in List I. List II is provided in Annex 3.

In addition, for any project activity adjacent to or within the nature/cultural protected area an EIA might be required based on the conditions and opinions obtained from the relevant institutions. Depending on the geographical location these are the Institute for Nature Protection (INP), Provincial Institute for the Nature Protection (PINP), Institute for Protection of Cultural Monuments (IPCM).

## 4.6 Legal requirements relevant to the Proposed Project

Apart from LEP and LEIA, all other policies, strategies and legal instruments do not explicitly require any environmental assessment of the Project-related activities. Most of the policies, strategies and legal instruments emphasize the need to consider the environment during project planning and implementation without any explicit environmental categorization for the proposed activities. Project owners are expected to ensure, on a case-by-case basis, that principles of sound environmental management are incorporated in sub-project planning, design, implementation, and operation and maintenance.

In the legislative system of the Republic of Serbia, as regulated by the Law on Environmental Impact Assessments, drafting an Environmental Impact Assessment is not required for activities foreseen by the Proposed Serbia Residential Clean Energy and Energy Efficiency Scale-Up Project.

There is currently no sectoral legislation directly governing climate change, climate resilience or adaptation. There is a lack of clear allocation of responsibilities and efficient communication among stakeholders.

## 5 World Bank Environmental and Social Standards

### 5.1 Environmental and Social Framework

The **Environmental and Social Framework (ESF)** (launched on October 1, 2018 ) requires the Borrowers manage environmental and social risks compliant to the ESF and improve development outcomes. As of October 1, 2018, the ESF applies to all new World Bank investment project financing.

The ESF protects people and the environment from potential adverse impacts that could arise from Bank-financed projects and promotes sustainable development. This new framework provides broad coverage, including important advances on transparency, non-discrimination, social inclusion, public participation and accountability. The ESF also places more emphasis on building borrower governments' own capacity to deal with environmental and social issues.

The ESF also requires attention to environmental and social issues throughout the preparation and implementation of a project, with increased focus on stakeholder engagement and monitoring. It clarifies roles and responsibilities between the World Bank and Borrowers. The ESF sets out a risk management approach tailored to risks and impacts of projects.

The ESF consists of:

- Vision for Sustainable Development
- WB Environmental and Social Policy for Investment Project Financing (IPF)
- Borrower requirements – ten (10) Environmental and Social Standards (ESS)
- Environmental and Social Directive for Investment Project Financing
- Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups

**A Vision for Sustainable Development** sets out the corporate goals of ending extreme poverty and promoting shared prosperity in all partner countries. Securing the long-term future of the planet, its people and its resources, ensuring social inclusion, and limiting the economic burdens on future generations will

underpin these efforts. The two goals emphasize the importance of economic growth are inclusion and sustainability including strong concerns for equity.

Within the parameters of a project, it is needed to:

- Avoid or mitigate adverse impacts to people and the environment;
- Conserve or rehabilitate biodiversity and natural habitats, and promote the efficient and equitable use of natural resources and ecosystem services;
- Promote worker and community health and safety;
- Ensure that there is no prejudice or discrimination toward project-affected individuals or communities and give particular consideration to Indigenous Peoples, minority groups, and those disadvantaged or vulnerable, especially where adverse impacts may arise or development benefits are to be shared;
- Address project-level impacts on climate change and consider the impacts of climate change on the selection, siting, planning, design and implementation and decommissioning of projects; and
- Maximize stakeholder engagement through enhanced consultation, participation and accountability.

**Environmental and Social Policy for Investment Project Financing (IPF)** sets out the mandatory requirements of the Bank in relation to the projects it supports through Investment Project Financing. The Bank is committed to supporting Borrowers in the development and implementation of projects that are environmentally and socially sustainable, and to enhancing the capacity of Borrowers' environmental and social frameworks to assess and manage the environmental and social risks and impacts of projects.

To carry out this Policy, the Bank will:

- Undertake its own due diligence of proposed projects, proportionate to the nature and potential significance of the environmental and social risks and impacts related to the project;
- Support the Borrower to carry out early and continuing engagement and meaningful consultation with stakeholders in affected communities, and in providing project-based grievance mechanisms;

**The Environmental and Social Standards** are designed to help Borrowers to manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach.

The standards

- Support Borrowers/Clients in achieving good international practice relating to environmental and social sustainability
- Assist Borrowers/Clients in fulfilling their national and international environmental and social obligations
- Enhance non-discrimination, transparency, participation, accountability and governance;
- Enhance the sustainable development outcomes of projects through ongoing stakeholder engagement

The ten Environmental and Social Standards are:

1. Assessment and Management of Environmental and Social Risks and Impacts
2. Labor and Working Conditions
3. Resource Efficiency and Pollution Prevention and Management
4. Community Health and Safety
5. Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
6. Biodiversity Conservation and Sustainable Management of Living Natural Resources
7. Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
8. Cultural Heritage
9. Financial Intermediaries and
10. Stakeholder Engagement and Information Disclosure

## 5.2 Overview of Environmental and Social Standards and their relevance to the Project

The project aims to increase the uptake of clean energy and energy efficiency investments in the residential sector in Serbia, with a focus on lower-income households. Increased investments in clean energy and energy efficiency will contribute to reducing the energy and carbon intensity of the residential sector, improving air quality in urban settings, and increasing heating comfort levels of lower-income households.

The project is not expected to have significant negative environmental impacts and risks. On the contrary, it will impose positive impacts in the long run given its overall green and energy efficiency footprint. However, some short-term risks and potential adverse impacts, mostly related to infrastructure investments may be identified.

The activities under component 1 of the project involve minor civil works with no land acquisition. There will be positive social impacts for all households. The project has specific mechanisms to ensure that poor and vulnerable households adequately benefit from the project. Consequently, the project is expected to have low social risk.

The Contractors, assigned to carry out sub-project activities, will be obligated to apply all the measures prescribed in the prepared documents - ESMP/ESMP checklists. Supervision of the site-specific measures' implementation will be done by LSGs with oversight from the PIU's environmental and social specialists.

The Environment and Social Standards (ESSs) relevant to the activities being considered by SURCE project are presented in the following table:

*Table 1. Environmental and Social Standards*

<b>Environmental and Social Standards</b> <small>*Relevance Given its Context at the time of Appraisal</small>		<b>Relevance</b>
ESS1	Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS10	Stakeholder Engagement and Information Disclosure	Relevant
ESS2	Labor and Working Conditions	Relevant
ESS3	Resource Efficiency and Pollution Prevention and Management	Relevant
ESS4	Community Health and Safety	Relevant
ESS5	Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Relevant
ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Relevant
ESS7	Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Relevant
ESS8	Cultural Heritage	Not Relevant
ESS9	Financial Intermediaries	Not Relevant

Out of ten Environmental and Social Standards, five were considered relevant to the project as shown in the table above.

### 5.2.1 ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Component 1 of the Project will support civil works, including typical building-level energy efficiency measures, e.g., 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). Therefore, some environmental adverse impacts and risks may occur in Component 1, within civil works on rehabilitation and reconstruction, but the project will not include works outside the already existing parameters. If the potential risks and adverse impacts are identified timely and all mitigation measures are applied adequately these

should be small in magnitude and temporary. Impacts should be typical for construction works, e.g., noise emission, dust emission, wastewater, construction waste, risks to workers (OHS issues). These impacts are predictable and easily manageable. Since activities on residential buildings in which investments will take place are not determined with certainty yet, the framework approach is adopted.

This ESMF identifies environmental risks and adverse impacts, provides guidance to manage them properly, specifies legislative and regulatory framework, procedures and institutional responsibilities and provides an outline for site-specific Environmental and Social Assessments (ESA) to be developed for each specific site.

The ESA will be prepared, approved, disclosed prior to the commencement of any civil works and will be part of bidding documents. Given that the majority of the risks are related to the OHS, the importance of OHS measures and proper implementation/supervision is clearly addressed in the ESMF and will be applied in ESMPs/ESMP checklists. OHS procedures are clearly defined and the Contractor is required to hire an OHS coordinator for the design phase and OHS coordinator for the implementation phase (one or more, depending on type of sub-project and number of assigned Contractors).

Since most of the investments will be focused on the single-family houses, the ESMF includes a template for ESMPs which will facilitate their preparation. Since all the anticipated works on single-family houses will be similar in magnitude and nature, within an already existing footprint, no E&S screening will be conducted for this type of works. This refers only to single-family houses. For interventions on buildings, whether they are less or above five floors, every ESA will be subject to prior approval.

The ESMF defines a screening mechanism to ensure that substantial or high-risk activities are not financed under the Project. Since the project will be country wide implemented, the ESMF gives very clear and concrete eligibility criteria, screening environmental and social procedures. Based on the screenings' findings it will be decided what instrument should be used for relevant sub-project activity, and monitoring provisions. Detailed description provided under chapter 6.

The ESMF 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.

Taking into account the health and safety issues related to COVID-19, the ESMF includes a section specifying the necessary actions to address these risks at the project level, in line with the national guidelines and the WB Note on "COVID-19.

### 5.2.2 ESS10 Stakeholder Engagement and Information Disclosure

Awareness-raising, behaviour change and targeting of poor, remote, and vulnerable households are central to the project PDO. Considering the nature of the Project, strong stakeholder engagement for the proposed activities is the key to Project success. Project design includes emphasis on putting in place mechanisms like subsidies at municipal level, targeting vulnerable households and policy amendments to cater to issues like access to finance and awareness raising of the marginalised population.

The project risk rating is raised from low to moderate to adequately reflect the importance of delivering on the stakeholder engagement aspect of the program. A project SEP is prepared which has identified relevant stakeholders, classifying them in Project Affected Parties ( PAP) and Other Interested Parties ( OIP) including

specific vulnerable groups. The SEP will ensure that the planning, implementation, and monitoring of engagement activities are adequately coordinated across key stakeholders.

Furthermore, the project related SEP serves as a guideline for the preparation of specific municipal SE and CE strategies and will be further tailored in the course of the project. The SEP has mainstreamed citizen engagement aspects by addressing both, SE and CE in outreach to stakeholders, as well as awareness-raising. The project's CE activity will target broader community and project beneficiaries but will also support the engagement of vulnerable groups to ensure that they benefit from the project.

The SEP includes a Grievance Mechanism, and the overall process of stakeholder engagement (at central and local level) will be facilitated inter alia through the establishment of a dedicated Civic platform. This platform will facilitate both stakeholder and citizen engagement activities and information disclosure to bridge COVID-19 impediments to face to face meetings.

The stakeholder engagement activities will start during the early preparation of the Project and continue throughout the Project's lifecycle.

### 5.2.3 ESS2 Labor and Working Conditions

There are small civil work activities in component 1 such as installation of solar panels, better insulation etc. There will be no labour influx. A standalone LMP has been prepared to cover Project workers. The project will institute a Code of Conduct for project workers and dedicated grievance mechanism to receive confidential complaints. The contractors and project workers will receive training in the prevention of SEA/SH. There will be no bulk purchase of solar panels under the project by the PIU or other entities. Hence no supply chain assessment is called for, as any solar panels purchased will be by individual owners from the local market.

### 5.2.4 ESS3 Resource Efficiency and Pollution Prevention and Management

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. Furthermore, the ESMF will provide clear guidance for site-specific instruments on management and disposal of hazardous materials, and it will assess the Serbian regulations and facilities in terms of their adequacy to manage these waste streams in accordance with national/EU requirements.

### 5.2.5 ESS4 Community Health and Safety

The Standard is relevant to the project, as possible adverse impacts on the health and safety of the surrounding communities and staff may occur during works; these risks are identified as generation of waste, noise, dust, unauthorized entrance to sites, traffic management and traffic safety. Traffic/Road Safety



Management Plans with measures to ensure the safety during construction and for the operation phase will be prepared together with the Emergency Response Plans with procedures to respond to accidental spills, emissions, fires and other crisis events. General guidelines for traffic management plans will be included in the ESMF. Additional guidelines will be given for such sites like those located in sensitive areas - near schools, hospitals etc. Risks from unauthorized access to working sites will be prevented through a set of measures specified in the ESMPs such as allowing access only to authorized persons with informational and warning signs and fences.

#### 5.2.6 ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

All small civil works associated with component 1 will be carried out within the footprint of existing residences and buildings. There will be no Land acquisition nor restriction of access to services nor any livelihood impacts stemming from land acquisition.

#### 5.2.7 ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources.

The standard is not relevant. The project will not entail any physical investments nor civil works which could cause adverse impacts on biodiversity, living natural resources and sensitive areas, as it includes works in the already existing buildings/houses footprint within urban and peri-urban areas. However, some areas that are inhabited by humans can also contain biodiversity that is of significant value in particular in peri-urban areas. Any relevant risks identified in later stage will be addressed and provisions will be made in the ESMF to secure full compliance with applicable regulations, including provisions on excluding investments/works that may be located in such environments or that may have impacts on such areas.

#### 5.2.8 ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

There are no indigenous people in Serbia.

#### 5.2.9 ESS8 Cultural Heritage

Although the expected civil works will be conducted within already existing buildings footprint, Chance Find's procedures in line with national legal requirements and good international practice are included in the ESMF. The ESMF also includes general requirements for contractors in regard with protection of any cultural heritage objects during the implementation of respective contracts. Furthermore, site specific ESA will consider the potential impacts in a more detailed manner. If any cultural heritage object is to be identified during the preparation of site-specific ESA, the Cultural Heritage plans may be required as part of ESMPs or ESMP-Checklists.

Chance Find Procedure to be established and implemented prior to construction works commencing in accordance with ESS8 requirements.

In the event of the unexpected discovery of archaeological objects, the Contractor shall immediately inform MoME/PIU and the Institute for the Protection of Cultural Monument. The construction works will be temporarily stopped while the authorities decide if any research are needed or any protection measures should be applied. The Contractor shall follow the instructions provided by the authorities responsible for the protection of cultural heritage.

### 5.2.10 ESS9 Financial Intermediaries

The standard is not relevant. The project will not involve any financial intermediaries.

## 5.3 General Environmental, Health and Safety (EHS) Guidelines

The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank Group, and that are generally considered to be achievable in new facilities at reasonable costs by existing technology.

The World Bank Group requires borrowers/clients to apply the relevant levels or measures of the EHS Guidelines. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects will be required to achieve whichever is more stringent.

The General EHS SURCE Guidelines contain information on cross-cutting environmental, health, and safety issues potentially applicable to all industry sectors and should be used together with the relevant Industry Sector Guideline(s)

## 5.4 Key ESF objectives compared to national requirements

ESF Objectives	National Laws and Requirements	Gaps	Recommended Actions
<b>ESS1: Assessment and Management of Environmental and Social Risks and Impacts</b>			
<ul style="list-style-type: none"> <li>• To identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs.</li> <li>• To adopt a mitigation hierarchy approach to: <ul style="list-style-type: none"> <li>○ Anticipate and avoid risks and impacts</li> <li>○ Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels</li> </ul> Once risks and impacts have been minimized or reduced, mitigate and where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.</li> <li>• To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.</li> <li>• To utilize national environmental and social institutions, systems,</li> </ul>	Law on EIA Decrees and lists	<p>Public consultations on project design are not requested.</p> <p>Social impact assessment is not required</p> <p>Small scale activities that may not require specific measures as per Serbian law, but require an ESMP, ESMP Checklist or E&amp;S audit as per Bank ESF</p> <p>Associated facilities are not covered</p>	<p>Stakeholder engagement and public consultations in accordance with the Stakeholder Engagement Plan (SEP) and Sub-project specific SEPs</p> <p>Conduct Social Impact Assessment</p> <p>Prepare E&amp;S management instruments in line with the WB ESF and this ESMF such as ESMP, ESMP Checklist or E&amp;S screening</p>

<p>laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate.</p> <ul style="list-style-type: none"> <li>• To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.</li> </ul>			
<b>ESS2: Labor and Working Conditions</b>			
<ul style="list-style-type: none"> <li>• To promote safety and health at work.</li> <li>• To promote fair treatment, non-discrimination, and equal opportunities for project workers.</li> </ul>	<p>Various laws, policies and code of practices are applicable to the implementation of this LMP.</p> <p>These laws and policies are aligned with the international</p>	<p>Specific Labor Grievance Mechanism is not requested.</p> <p>_Code of Conduct and training on OHS related issues for workers is not mandatory.</p>	<p>Grievance mechanism for project workers shall be established</p> <p>Project activities will require engagement of direct and contracted workers.</p>
<ul style="list-style-type: none"> <li>• To protect project workers, including vulnerable workers such as women, persons with disabilities, children (of working age, in accordance with this ESS) and migrant workers, contracted workers, community workers and primary supply workers, as appropriate.</li> <li>• To prevent the use of all forms of forced labor and child labor.</li> <li>• To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.</li> <li>• To provide project workers with accessible means to raise workplace concerns.</li> </ul>	<p>standards, namely ILO Conventions and EU Directives, as the terms, conditions and instruments proposed in the international conventions and directives are incorporated into the Labor Law of Serbia</p>		<p>Both groups will be subject to the Project LMP and the World Bank Group Environment, Health and Safety Guidelines.</p> <p>Contractors will be required to develop Code of Conducts and SEA/SH Code of Conduct which must be read, understood and signed by all workers.</p> <p>As per the ESS2 the Borrower needs to develop and implement written Labor Management Procedures which set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS.</p>

ESS3: Resource Efficiency and Pollution Prevention and Management			
<ul style="list-style-type: none"> <li>• To promote the sustainable use of resources, including energy, water and raw materials, as well as other resources</li> <li>• To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.</li> <li>• To avoid or minimize project-related emissions of short and long-lived climate pollutants.</li> <li>• To avoid or minimize generation of hazardous and non-hazardous waste (where possible waste will be reused and recycled in safe manner; if not possible, waste will be disposed in accordance with relevant procedures)</li> <li>• To minimize and manage the risks and impacts associated with pesticide use.</li> </ul>	<p>Law on Environmental Protection</p> <p>Law on integrated environmental pollution prevention and control</p> <p>Law on waters</p> <p>Law on protection and sustainable use of fisheries</p> <p>Law on Plant Protection Products</p> <p>Law on Energy Efficiency</p> <p>Law on Waste Management</p> <p>Basel Convention on Transboundary Movement of Hazardous Wastes and their Disposal Official Journal of FRY, International Treaties, No. 2/99, The Aarhus Convention</p>	<p>Regular monitoring is not required.</p> <p>No request for GIIP adherence.</p>	<p>In addition to national legislation adherence, adopt and implement the WB EHS and measures as prescribed in this ESMF to achieve the highest of the standards.</p> <p>Carry out regular monitoring of ESAs implementation.</p>
ESS4: Community Health and Safety			
<ul style="list-style-type: none"> <li>• To anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances.</li> <li>• To promote quality and safety, and considerations relating to climate change, in the design and construction of infrastructure.</li> <li>• To avoid or minimize community exposure to project-related traffic and road safety risks, diseases and hazardous materials.</li> <li>• To have in place effective measures to address emergency events.</li> <li>• To ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.</li> <li>• To apply noise prevention and mitigation measures if/when predicted or measured noise</li> </ul>	<p>Law on planning and construction Decree on health and /safety and OHS at construction sites</p> <p>Law on Roads</p> <p>Law on Road Safety</p> <p>Rulebook on technical standards for universal access</p> <p>Fire protection act</p>	<p>In substance the gaps between the national requirements and the ESS are not substantial. However, mitigation and prevention measures shall be required in the form of site-specific Contractor management plans. In case double standards are detected within the ESF and national requirements the more stringent will prevail.</p>	<p>To be ensured that Project activities do not pose any unintended negative consequences on communities, following defined ESMP and ESMP checklist</p> <p>t contractors will develop pertaining parts of the plans such as but not limited to:</p> <p>Health and Safety Policy (HSP); Construction H&amp;S Management Plan (OHS, community safety plan, traffic management plan, hazardous materials safety plan, training program, emergency preparedness and response etc.)</p> <p>H&amp;S training requirements and plan(s); Risk assessments</p> <p>H&amp;S operational control</p> <p>Security of the Construction worksites; Traffic Management Plans etc. to address the impacts on local communities of moving construction equipment</p> <p>measures and actions developed to assess and manage specific risks and impacts outlined in the ESMF and subsequent ESMPs.</p> <p>Trainings on SH/SEA</p>

impacts from a project facility or operations exceed the applicable noise level guideline			
<b>ESS8: Cultural Heritage</b>			
<b>*Not relevant for this project</b>			
<ul style="list-style-type: none"> <li>• To protect cultural heritage from the adverse impacts of project activities and support its preservation.</li> <li>• To address cultural heritage as an integral aspect of sustainable development.</li> <li>• To promote meaningful consultation with stakeholders regarding cultural heritage.</li> <li>• To promote the equitable sharing of benefits from the use of cultural heritage.</li> </ul>	<p>Cultural property law ("Official Gazette of RoS 71/94, 52/11, 92/11). This Law regulate the system of the protection and use of cultural property and define conditions for the implementation of activities relating to the protection of cultural property.</p>	<p>There are no significant gaps between ESS 8 and national laws</p>	<p>No activities that can impact protected cultural heritage will take place. Chance findings clause will enter all ESAs for sub-projects.</p>
<b>ESS10: Stakeholder Engagement and Information Disclosure</b>			
<ul style="list-style-type: none"> <li>• To establish a systematic approach to stakeholder engagement that will help Borrowers identify stakeholders and build and maintain a constructive relationship with them, in particular project-affected parties.</li> <li>• To assess the level of stakeholder interest and support for the project and to enable stakeholders' views to be taken into account in project design and environmental and social performance.</li> <li>• To promote and provide means for effective and inclusive engagement with project-affected parties throughout the project life cycle on issues that could potentially affect them.</li> <li>• To ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible and appropriate manner and format.</li> <li>• To provide project-affected parties with accessible and inclusive means to raise issues and</li> </ul>	<p>The Republic of Serbia citizen engagement commitments do not reside under a single self-standing law or regulation. However, the recognition of importance of citizen engagement is embedded in the legal system and clearly recognized by the mandatory procedures provided by individual laws</p>	<p>While all acts spell out right to information held by public bodies, the ESS recognizes the importance of open and transparent engagement vis-à-vis project stakeholders and community by the borrower</p> <p>RS Law does not recognize project level GRM</p>	<p>SEP Prepared and implemented</p> <p>Citizen Engagement activities are to be implemented as per SEP and subproject level SEPs.</p> <p>GRM effective and operational at early Project stage and adapted to respond to project needs SEA/SH grievances.</p> <p>These types of grievances will be managed separately by a trained expert.</p> <p>The necessary training for the appointed staff member who is to deal with such grievances will be provided.</p>

grievances and allow Borrowers to respond to and manage such grievances.			
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## 6 Approach for identifying, analyzing and assessing risks and impacts

As per the Environmental and Social Framework, the World Bank will clarify all the projects into one of four classifications: Low Risk, Moderate Risk, Substantial Risk and High Risk. Criteria for risks classification will include type, location, sensitivity, the scale of the subprojects, nature and magnitude of potential impacts, as well as the existing capacity for risk management and commitment of responsible entities in achieving.

Other areas of risk can be also relevant for implementation of measures, as well as for results of environmental and social impacts mitigation measures, depending on specific project and context. These can include legal and institutional framework, nature of mitigation and the proposed technology, managerial structures and legislation, as well as considerations related to stability, conflict or security. The Bank discloses project classification and basis for such classification at its website and in the project documentation.

### 6.1 Risk assessment

Necessary subsequent environmental and social assessments shall be conducted for each of the sub-projects. For residential buildings, no matter if they are less or above five floors, E&S screening is mandatory, and based on the findings, ESMP or ESMP checklist will be prepared. E&S screening will be shared with WB for approval. ESMP or ESMP checklist prepared for subprojects will specify the approach to investigate and analyse environmental and social conditions, identify anticipated risks and impacts, develop management and mitigation measures, and roles and responsibilities and monitoring and reporting arrangements.

### 6.2 Key steps

The section below illustrates the key steps that will be followed during the conduct of sub-project specific environmental and social assessment and management process consistent with WB E&S Standards that will lead to the review and approval of sub-projects for this project.

#### 6.2.1 Step 1: Screening of Activities and Sites

This first step will aim at identifying the main environmental and social issues arising from the implementation of the sub-project and at making a preliminary identification of the potential risks. This categorization determines the nature and extent of the follow-up and the environmental and social due diligence to be conducted.

MoME/EEA/PIU or through technical assistance will carry out screening of each of the sub-projects for MBAs once they have been defined and agreed upon, to determine the nature of the respective sub-project characteristics, the characteristics of the prevailing social environment with the aim of assessing the potential project impacts on it. The screening exercise will also identify the potential socio-economic impacts that will require mitigation measures.

#### 6.2.2 Step 2: Assigning the appropriate Environmental Categories

The Screening will be conducted once the subproject is proposed for funding and will be conducted based on the Screening and Assessment methodology. The result of the screening will be the determination of the level of risks associated with each of the subject projects.

To streamline the operational procedures, individual sub-projects will be brought forward to the screening for identifying and assessing risks and impacts (as per ESMP/ ESMP Checklist). Since the overall project risk



is moderate, to assess the potential E&S risks and impact of subprojects the experts will prepare ESMP checklist template. Family houses will feature a similar environmental and social context so the risks will be very similar in scope. In that case, the approach would be to prepare very detailed lists/measures and if not applicable for every house (e.g., boiler replacement) then just to go with N/A. For each MBAs it will be necessary to conduct the E&S screening, and based on the findings to decide whether the ESMP or ESMP checklist will be prepared for civil works on MBA.

### 6.2.3 Step 3: Screening Procedure

Screening on potential environmental or social risk will be done by using the Screening Questionnaire/ESMP Checklist (Annex 8)

The Screening will be carried out by the Project Implementation Unit (PIU) who will bring in social and environmental experts for this task.

Given that the number of municipalities participating in the project has not yet been defined and consequently the scope of work at the local level cannot be clearly predicted, currently is not possible to clearly define the specific duties and responsibilities of local and PIU staff in the screening procedure.

The following activities will be performed:

- **Stakeholder consultation and participation activities:** Consultations will be conducted with relevant stakeholders at both national and local levels to identify and incorporate stakeholder views and comments into the project. At the national level, key institutional stakeholders will include the MoME and EEA while at the local level, the stakeholders will include local governments of the LSGs.
- **Document Review:** A review of relevant documents (received applications) will be undertaken to access conformity of the applications with project requirement, rulebook prepared and adopted for this project as well as to ensure continuity with the current pilot program implemented by MoME is met.
- **Site Visit:** Site visits to the selected sub-project areas will be conducted to ascertain the baseline conditions (including to ascertain some of the aspects obtained from the reviewed documents) to confirm the validity of the application.

### 6.2.4 Step 4: Carrying out Environmental and Social Impact Assessment

Identification of Key Environmental and Social risks and impacts, and recommended mitigation measures:

- Significant environmental and social risks and impacts that are potentially associated with the proposed project will be identified and described. Key mitigation/management measures will be defined for each of the identified environmental and social risks and impacts.

The risk category will be accessed by taking into account the likelihood of the impact arising and magnitude of impact, as per table below.

*Matrix of rating significance of risk factors - Risk classification*

	CONSEQUENCE (magnitude of impact)		
LIKELIHOOD	Minor	Medium	Major

Very Likely	Moderate	Significant	Significant
Likely	Moderate	Moderate	Significant
Possible	Low	Moderate	Moderate
Unlikely	Low	Low	Moderate

Unlikely impacts, that would have only minor consequences are considered low risk; very likely impacts that would have major consequences are considered high risk; unlikely impacts that would have major consequences are considered moderate risk; very likely impacts that would have only minor consequences are considered moderate risk.

For determining the risk category of the sub-project all identified risk factors are listed and their respective significance rating. The highest rating would generally guide the project's risk category. For example, if a sub-project has five risk factors, three of which are considered of low significance and two of which are considered moderately significant, the project will be classified as a moderate risk project.

#### 6.2.5 Step 5: Review and Approval

Sub-projects that are classified by the ESMP Screening as low-risk projects and this appraisal is confirmed by WB, may commence at this stage and no further formal action is required. Sub-projects classified as moderate risk projects require an ESMP or ESMP checklist and the continuation of the environmental and social due diligence. Substantial and high projects will not be taken into the consideration. For residential buildings, no matter if they are less or above five floors, E&S screening is recommended, and based on the findings, ESMP or ESMP checklist to be prepared. E&S screening will be shared with WB for approval.

#### 6.2.6 Step 6: Environmental Monitoring

Monitoring is required to ensure that all the required environmental and social mitigation measures, set out in the ESMF, ESMP and ESMP checklist for each sub-project component are implemented satisfactorily.

The Environmental and Social Instruments, Mitigation Measures and Monitoring must be in line with the requirements of the present Environmental and Social Management Framework and in the case of Project Affected People (PAP).

## 7 Potential environmental and social risks, impacts and mitigation measures

### 7.1 Project impact on communities' resilience building

The project will support investments that will enhance the integrated mobility and resilience of LSGs in a green manner. As a basic definition, green energy investments protect the natural capital and promotes a smart, inclusive and sustainable growth of cities<sup>42</sup>, by enhancing the efficiency of resource use, minimizing environmental impacts and pollution, and being resilient to climate change and natural disasters<sup>43</sup>. Through green infrastructure, the cities are designed for people and communities, protecting the health and well-being of citizens and creating stronger communities while improving social cohesion. Local Self Governments (LSGs), through green energy and increasing resilience, have a key role to play in the pace and sustainability of Serbia's growth. Green energy is also aligned with the WBG's response to COVID-19 pillar 4 "Strengthening policies, institutions and investments for rebuilding better". As per definition, green infrastructure pays special attention to resilience, sustainability and inclusiveness. Also, the Sustainable Development Goal (SDG) 7.3 target calls for global progress on energy efficiency by doubling the rate of improvement in energy efficiency globally by 2030

In line with the aims of the EU Green Deal, and the World Bank's Green Growth, and post-Covid recovery, this project stands for green energy investment that contributes to climate change mitigation, reduce the risks from environmental pollution, and promotes efficient use of resources and contributes to Serbia's shift to low-carbon infrastructure development.

#### Benefits of energy efficiency:<sup>44</sup>

- Access to energy: Energy efficiency can increase the services delivered by each kilowatt of electricity and improve energy access.
- Air quality: Energy efficiency can reduce both indoor and outdoor concentrations of air pollutants.
- Asset values: Energy efficiency can increase asset values for homeowners, businesses and utilities.
- Economic benefits: Cost-effective energy efficiency improvements can have positive macroeconomic impacts, boosting economic activity.
- Emissions savings: Energy efficiency reduces GHG emissions, both direct emissions from fossil fuel, and indirect emissions from electricity generation.
- Employment: Energy efficiency can induce job creation, improve productivity and decreases employee absenteeism.
- Energy prices: Energy efficiency can lower energy prices by reducing the need to add new power generation or transmission capacity and by reducing pressure on energy resources.
- Energy savings: Energy efficiency reduces the amount of energy used to provide a service.
- Energy security: Energy efficiency can reduce the reliance on energy imports and reduce the risks of supply interruptions.

<sup>42</sup> European Commission Environment. [https://ec.europa.eu/environment/nature/ecosystems/investing/index\\_en.htm](https://ec.europa.eu/environment/nature/ecosystems/investing/index_en.htm)

<sup>43</sup> Green Growth is defined by the World Bank as "growth that is efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters"

<sup>44</sup> Multiple Benefits of Energy Efficiency, IEA

- Health and wellbeing: Energy efficiency supports physical and mental health with healthy temperatures, humidity, noise, and air quality.
- Household savings: Energy efficiency can enable higher disposable income by lowering energy bills and other households costs.
- Productivity: Energy efficiency leads to productivity gains by lowering maintenance issues and optimising processes.
- Public budgets: Energy efficiency delivers financial benefit to public budgets through increased income and decreased expenses.

#### Eligible interventions and project's impact on community resilience

Within this project the following are areas of potential eligible interventions as given in the table below.

*Table 2 - List of areas of eligible interventions*

Investments	Description	Types of interventions
<p>Component 1:</p> <p>RESILIENEC</p> <p>(up to 90 percent - US\$ 45,00 millions)</p>	<p>Financing partial grants for energy efficiency, sustainable heating, and rooftop solar investments in residential buildings</p>	<ul style="list-style-type: none"> <li>- Light package (estimated cost of about €2 thousand per household): windows and doors replacement + roof ceiling insulation. The project will support minor civil works, including typical building-level energy efficiency measures.</li> <li>- Standard package (€7-8 thousand): measures included in the light package + wall insulation, boiler replacement, heat network renewal (e.g., the replacement of coal- and biomass-fired boilers with cleaner, more efficient heating technologies and the installation of solar collectors for sanitary hot water).</li> <li>- Advanced package (€12-13 thousand): measures included in the light and standard packages, + heat pump (instead of boiler replacement</li> </ul>

		included in the standard package), solar PV system, solar collector for sanitary hot water.
Component 2:  (up to 10 percent - US\$ 5,00 millions)	Technical assistance (TA) and implementation support, with the overall aim, to support the development of scalable financing mechanisms and remove market barriers, awareness campaigns, and technical studies.	<ul style="list-style-type: none"> <li>- Enhancing local market capacity, improving the enabling environment, and strengthening public awareness,</li> <li>- Technical studies related to the design of the financing mechanisms,</li> <li>- Project implementation support.</li> </ul>

Component 1. will finance partial grants administered by the Energy Efficiency Administration (EEA) for energy efficiency, sustainable heating, and rooftop solar investments in residential buildings. Investments will be financed through:

- Grants offered by the EEA, financed through the project and channelled through participating municipalities, and
- Grants offered by the municipalities directly as borrower co-financing to the project.

The project will prioritize investments based on their financial attractiveness, cost-effectiveness, contribution to decarbonization and air quality improvement, and uptake potential. With regard to energy efficiency and sustainable heating investments, the project will prioritize “light” and “standard” building renovation packages, because of their higher cost-effectiveness in terms of energy savings and environmental co-benefits compared to “advanced” packages. The project will also finance incremental investments required to achieve a “standard” renovation package for households that have already implemented some form of renovation (e.g., beneficiaries of the existing boiler replacement program interested in energy efficient investments, households that have replaced windows under the current energy efficiency program). However, the program will not finance the replacement of existing coal boilers with more efficient coal boilers, in order to avoid carbon lock-in.

Moreover, the program will not support boiler replacements unless the basic energy efficiency measures included in the “light” package have been implemented, since these measures allow to significantly reduce the boiler capacity needed. With regard to distributed renewable energy investments, the program will finance the installation of rooftop solar PV systems for electricity generation.

Although the project will prioritize “light” and “standard” packages because of their higher cost-effectiveness, it will not exclude households (HHs) willing (or able) to finance only one or two measures (e.g.,

window replacements). Rather, the project will provide additional incentives (higher grant share) to stimulate investments in packages; it will also provide a higher grant share for boiler replacements which result in switching away from solid fuels.

“Light” renovation packages have an estimated cost of about €2 thousand per household and include windows and doors replacement and roof insulation. “Standard” renovation packages are estimated to cost about €7-8 thousand per household and include wall insulation, boiler replacement, and heat network renewal, on top of the measures included in the light package. “Advanced” renovation packages have a cost of about €12-13 thousand per household and include heat pump, the solar PV system and solar collector, on top of the measures included in the light and standard packages (excl. boiler replacement)<sup>45</sup>.

The project will prioritize investments in single-family houses (SFHs) but selected investments in individual apartments in multi-apartment buildings (MABs) will also be considered. Priority will be given to SFHs for four main reasons:

- The thermal properties of Serbian single-family houses (SFHs) are generally worse than those of larger buildings, mainly due to the unfavourable surface-to-volume ratio and the relatively older building stock,
- SFHs tend to rely more on polluting and less efficient coal and wood boilers for heating, whereas a significant share of MABs rely on district heating and electricity,
- Lower-income households are more likely to live in SFHs and use solid fuels and
- Other national and donor-funded support schemes have so far only targeted public buildings. Within SFHs, additional selection and prioritization criteria will be adopted (e.g., household income if feasible, age and structural soundness of the building, number and characteristics of the residents). While SFHs will be prioritized over MABs, the financing mechanisms developed and tested by the project could also be used to finance investments in other market segments, e.g., MABs and commercial buildings.

The rehabilitation of SFHs and MABs will include the following standard measures:

- Replacement of windows,
- Installation of external wall insulation,
- Roof insulation and damp proofing restoration, along with work on gutters and earthing installations,
- Reconstruction of the heating system,
- Renewal of electrical lighting installations and appliance of new energy-efficient lighting,
- Renovation of floor covering, and
- Rooftop solar photovoltaic (PV).

In terms of poverty and consequent vulnerability project design intends to address both, poverty with consequently lower affordability and energy poverty. Project design will place a specific emphasis on the vulnerable households. On the one hand, low-income households have fewer resources available to finance

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<sup>45</sup> Walk-through energy audits carried out in late October 2021 in 30 houses located in 9 municipalities across Serbia

clean energy and energy efficiency investments and find it more difficult to access financing due to their lower creditworthiness. On the other hand, evidence suggests that the penetration of clean energy and energy efficiency investments in households is lower for lower-income households. Moreover, the phenomenon of energy poverty is relatively common among lower-income households. For example, it is estimated that only 5 percent of households with a monthly income below €300 have undertaken energy efficiency improvements, compared to 80 percent of households with a monthly income above €1,700.

In terms of poverty, the project design aims to address as much as possible both, income poverty (and consequently lower affordability) and energy poverty. The project will introduce a solidarity mechanism to increase the share of poor municipalities in the program. At present, grants are co-financed by municipalities who contribute half of the grant to households. This 50 percent co-financing requirement will be decreased for poorer municipalities with below average income per capita (using the official categorization of municipalities in Serbia). The initial approach would be similar in principle to the current EE program for *public* buildings, where the poorest municipalities (i.e., the ones with the lowest income per capita included in category 4 of the official classification according to the level of development) obtain 100 percent of the investment cost from national funds, compared to the “” previous program case in which 50 percent of the cost is provided from the national budget and 50 percent from the municipal one.

According to the definition adopted by the National Coalition on Energy Poverty, energy poverty is a condition in which the household lacks access to the affordable sustainable energy for living a healthy and dignified life in a way that does not jeopardize other vital human needs or wider communities<sup>46</sup>.

While comprehensive data on the heating sources used by households living in different building types is not available, 2011 Census data supports this statement: in rural areas (dominated by SFHs), virtually all households rely on firewood or coal for heating; in urban areas, among households without access to central or district heating (mainly SFHs), 60 percent use firewood for heating, 15 percent coal, 33 percent electricity, and 12 other sources (the total adds up to more than 100 percent because some households use more than one heating source).

In 2019, across Serbia, 89 percent of households belonging to the lowest income quintile lived in SFHs, compared to only 47 percent of households in the highest income quintile.<sup>47</sup> Although SFHs account for the largest share of the residential building stock, and many of them are very energy-inefficient, very limited instruments are in place to support EE improvements in these houses.

## 7.2 Environmental Impact Rating

The project is not expected to have significant negative environmental impacts. The eligible sub-projects will have to be classified as green per the definition included in the ESRS Concept Stage.

However, it is entailing some potential short-term adverse impacts, mostly related to investments under **Component 1**. This Component envisages financing energy efficiency, sustainable heating, and rooftop solar investments in residential buildings, which will include small scale work on already existing facilities (single-family houses, multi-apartment buildings with less than five floors and multi-apartment buildings with at least five floors) and depending on the type of the facility, the project envisages what type of interventions could be entailed with the chosen type of facility. At this stage, potential interventions that could be included

<sup>46</sup> <https://www.slobodnaevropa.org/a/zorana-mihajlovic-srbija-energetsko-siromastvo/31569709.html>

<sup>47</sup> EU-SILC



are 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). The exact locations of these interventions/facilities are yet to be determined, but all works are envisaged to be carried out within the scope of the existing facilities' footprint. In this regard, the potential environmental impacts that could be identified are:

- Pollution of ground and surface water, soil and air contamination (dust and noise);
- Occupational health and safety (OHS) issues and access to work sites;
- Inadequate waste management.

**Components 2.** Should have no environmental impacts as it is focusing on TA, strengthening policies and practices. The Borrower has implemented similar projects in the past and therefore they have some experience in managing. SURCE builds upon the pilot residential EE program, which is implemented by MoME in 2021-22 in two phases via public calls.

As mentioned, all works will be undertaken within the existing single-family houses and multi-apartment buildings thus the environmental impacts are expected to be low in magnitude, predictable, and temporary if identified, mitigated, and dealt with properly.

However, as project locations are not yet known, neither the sub-projects, this ESMF has been prepared for the Project as a set of due diligence procedures ensuring compliance to WB Environmental and Social policy, WB EHS, national legislation and good practices.

Site-specific Environmental and Social Management Plans (ESMP) and/or ESMP checklists will be prepared and will include site-specific impacts and mitigation measures if required. The ESMP/ESMP Checklist/Monitoring plan will be incorporated into the public calls for the contractors and into the contractor's contract for each sub-project.

Limited upgrading, renovation or reconstruction works will be financed under this project and no adverse impacts such as involuntary land acquisition, impacts on biodiversity, on cultural heritage, are expected. Having in mind activities which will be performed under SURCE Components 1, it can be assumed that no activities with major environmental and social impact ("High risk" or "Substantial risk" projects) would be implemented under the Projects.

The Project will not finance any of the activities listed in the World Bank Group - IFC Exclusion List is given in Annex 1. The environmental impact will be small in magnitude, of temporary nature and directly associated with the listed investments and TA activities under the Project.

All waste generated within the Project will be collected, categorized and properly disposed of in accordance with the adequate provisions of the Law on waste management ("Official Gazette of RS", Nos. 36/09, 88/10, 14/16 and 95/18). Disposal of non-hazardous waste (all construction waste materials, including barrels, planks, sand and gravel, cement bags...) and hazardous waste from the site should be carried out in accordance with the Law. The contractor's plan for the implementation of the project should cover all stages in the process of waste management (waste generation, primary selection, temporary storage of waste at the construction site, waste treatment (reuse, recycling) and final disposal of waste, i.e. selling or handing to authorized operator).

Waste Management Plan will, as a minimum, contain the list of waste which are generated on the construction site, instructions for sorting and marking the waste, the procedure for the temporary storage of waste on the site until the delivery/sales of the authorized operator to load, waste treatment for the purpose of its recycling and/or final disposal. The sale/delivery of waste authorized operator shall be documented, ie. depending on the nature of waste, is required to generate the chain of custody documents or chain of custody document for hazardous waste, and in conformance with the Regulations on the form document, chain custody of waste and instructions for filling ("Official Gazette", No. 114/2013) or with Rules on the form of the document chain custody of hazardous wastes and instructions for filling it ("Official Gazette of RS", No. 17/2017). Catalogue of materials as construction and demolition waste (Annex 6 b).

The Contractor is obliged to keep the documents in the field of waste management, and thereby demonstrate that the design is in accordance with the best engineering practices and regulatory requirements (forms of Records of type and amount of waste generated at the construction site, the document of chain of custody, the document of chain of custody of hazardous waste).

Any activities that may have high or substantial environmental and social impacts, including involuntary impacts on land or assets, and unpredictable risks for the environment, community health and safety will be deemed ineligible through the Project's Environmental and Social Screening Procedure (Annex 6a) to be used for defining (matching) grant eligibility. Any minor and moderate impacts will be identified by the ESMF and addressed in activity specific ESMPs/ESMP checklists. The ESMF and Project Operations Manual (POM) will ensure that the grant selection procedures are fair, transparent and merit based.

The project environmental risk is rated as *moderate*.

### 7.3 Social Risk Rating

The social risks are considered moderate and overall expected social impacts of the project are positive.

The activities under Component 1 will involve minor civil works with no land acquisition while Component 2 supports TA aimed at capitalising project benefits and has negligible adverse social impacts. Hence the project is deemed to have low social risk. However, awareness-raising and behaviour change are seen central to the project PDO, hence the risk rating is kept as Moderate to highlight the importance of implementing an effective stakeholder consultation and campaign through the project.

Several measures have been introduced to prevent potential risk of exclusion from accessing the project benefits in particular by vulnerable and disadvantaged groups, due to their drivers of vulnerabilities and inadequate access to information on the project supported products and services. Preventive measures are built into project activities and are an integral part of ESF instruments.

In the Stakeholder Engagement Plan (SEP) a comprehensive engagement strategy inclusive of a dedicated civic platform has been adopted with a specific target to reach the underserved part of the population. The project also includes specific strategies like subsidies and targeting mechanisms to ensure that poor and vulnerable households adequately benefit from the project. As mentioned earlier, solidarity mechanism for poorer LSGUs will be introduced to enable their participation in the program thanks to lower co-financing requirements.

Due to its focus on SFHs that are solid fuel users, the project targets a population group that predominantly represents the bottom 40 percentile of the income distribution. To explore additional targeting of vulnerable

households, the project will conduct a survey among households eligible for social assistance/energy vulnerable program benefits, to confirm the share of homeowners among them as well as their level of interest in energy efficiency improvement.

**No major risks are expected concerning small civil work activities in component 1**, such as the installation of solar panels and better insulation. The national labor and OHS framework offer a solid framework which the LMP builds upon. ESS2 will apply to direct workers (PIU) and to contracted workers. The employment will most probably be generated at the local level, considering the small scope of civil works under component 1. Despite the low SEA/SH risks the LMP has called for a Code of Conduct for project workers and a grievance mechanism equipped to receive confidential complaints. The project workers will receive training on the prevention of SEA/SH.

## 7.4 Generic positive environmental and social impacts

### 7.4.1 Generic Positive Environmental and Social Impacts during construction phase

The Project SURCE is expected to have overall positive social and environmental impacts as it should contribute to the reduction of greenhouse gas emissions, increased share of renewable energy sources in the final energy consumption and energy efficiency. Positive social and environmental impacts during construction phase, in terms of the construction work to be undertaken and associated with the civil works, are employment of local labor, creation of jobs, and positive economic impacts on small market suppliers for raw materials needed during construction.

### 7.4.2 Generic positive environmental and social impacts during the operation phase

It is expected that both aspects will have positive impacts during operation phase too. Importance for the local community will be manifested in lower emission of CO<sub>2</sub>, energy efficiency, the inclusion of vulnerable and poor, connectivity to jobs and business, resilience and safety, and environmental footprint. Also, LSGs benefit from economic development, lower costs and time savings, safety, environmental benefits in terms of reduced GHG emissions, and possibly other positive externalities.

It is expected that through intensive information exchange and implementation of tailored engagement strategies for both citizens and stakeholders, knowledge of energy efficiency and green technologies in local communities will be improved. This should lead to raising awareness and changing current patterns of behaviour. The capacity of local government to manage green projects is expected to improve.

## 7.5 Potential Environmental and Social risks during construction phase

### 7.5.1 Potential environmental and social risks during the construction phase

In this stage, majority of the risk are related to occupational health and safety (OHS ) and Community health and safety.

Labour risks associated with small scale civil works have been assessed as low to moderate. For the construction stage, LMP has assessed and identified key labour risks crosscut with the continuing risks of exposure to COVID - 19. These mainly relate to working in confined spaces with evaporating fuels, working at heights, working at high temperature etc. The LMP has called for labour and working condition compliance for all parties employing or engaging project workers. The OHS risks are described in more details in the section 7.5.11 and 7.5.12 of this document.

As no labour influx is expected, the possible risk related to the occurrence of SA / SHA during the construction phase is low. However, preventive measures will be adopted such as introduction of specialised training and incorporation of Code of Conduct in a contractual arrangement with workers.

As for potential social risks, as mentioned earlier, they relate to the potential exclusion of certain segments of the population, especially vulnerable groups from the benefits of the project. This risk is assessed as moderate and the potentially adverse impact will be prevented by a combination of project measures and mitigation activities defined via ES instruments, as explained in the section relevant to social risks. The risks in the construction phase for selected sub-projects will be defined in detail manner during E&S screening, when the activities of each subproject are known and will be addressed in the relevant ESMP/ESMP checklist. As a preventive measure for each sub-project ESMP/ESMP checklist/monitoring plan, together with LMP, SEP Statement of Compliance (presented in the Annex 5 of this ESMF) will be incorporated into the bidding document and contractor's agreement. Due to the fact that Serbia is prone to natural hazards such as earthquakes and wildfires that can have a significant impact on people, the design of subprojects should include necessary structural measures for adaptation to climate and geophysical hazards considering safety risks to the communities (if applicable).

The risk classification per each activity envisaged by the project Component 1. is presented in the table below:

FOCUS AREA	RISK
<ul style="list-style-type: none"> <li>small-scale civil works typical for energy efficiency measures at the building level</li> </ul>	<ul style="list-style-type: none"> <li>Moderate</li> </ul>
<ul style="list-style-type: none"> <li>external wall insulation, floor and roof</li> </ul>	<ul style="list-style-type: none"> <li>Moderate</li> </ul>
<ul style="list-style-type: none"> <li>window and exterior door replacement</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<ul style="list-style-type: none"> <li>roof improvement</li> </ul>	<ul style="list-style-type: none"> <li>Moderate</li> </ul>
<ul style="list-style-type: none"> <li>installation of thermostatic and hydraulic balance valves</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<ul style="list-style-type: none"> <li>replacement of coal and biomass-fired boilers with cleaner, more efficient heating technologies</li> </ul>	<ul style="list-style-type: none"> <li>Low</li> </ul>
<ul style="list-style-type: none"> <li>the installation of solar collectors for sanitary hot water</li> </ul>	<ul style="list-style-type: none"> <li>Moderate</li> </ul>
<ul style="list-style-type: none"> <li>Installation of rooftop solar photovoltaic (PV)</li> </ul>	<ul style="list-style-type: none"> <li>Moderate</li> </ul>

### 7.5.2 Potential environmental and social risks during the operational phase

Exact subproject activities are not defined at this time. Therefore, risks in the operational phase cannot be assessed and will be defined for site-specific when the activities of each subproject are known. Expected possible risks may include:

- lack of knowledge and skills for maintenance of installed equipment
- Unsatisfactory quality of works
- Lack of spare parts for installed equipment

To prevent this possible risk, the prepared SEP defines the establishment of GRM at the project level to enable local community residents and affected stakeholders to file complaints and seek redress in case they see a negative impact resulting from the project activities.

## 7.6 Generic negative environmental and social impacts during construction phase

Overall, no significant negative environmental or social impacts are anticipated. All works are envisaged to be carried out within the scope of the existing facilities.

Impacts on the environment that are expected during construction stage of the subprojects are a direct consequence of human presence and machinery, as well as the rehabilitation/construction and other activities related to project implementation at SFHs and MABs. The environmental impacts of the project are, temporary and of local nature. The environmental impacts identified at this stage are preliminary in nature and will need to be further elaborated specifically (subproject wise) and potential for occurrence has to be ascertained during further stages of subproject design and implementation.

Due to the nature and magnitude of potential environmental and social risks, during project implementation, no negative project impacts on the natural environment are expected. Impacts are likely to be easily mitigated with mitigation measures.

The potential environmental and social impacts that could be identified are: impacts on ground and surface water, soil and air contamination (dust and noise), improper waste management and occupational health and safety (OHS) issues and access to work sites.

### 7.6.1 Soil pollution

Contamination of soil might be possible from transportation vehicles/machines load and exhaust. The following possible impacts referring to construction activities are following:

- Soil degradation,
- Accidental spills of fuel/chemicals,
- Inappropriate waste disposal, hazardous and non-hazardous waste and demolition waste
- Temporary construction site and temporary storage.

Soil contamination should be avoided by preventing waste disposal and the release of hazardous materials. Other soil protection measures include:

- Prevention of illegal waste disposal,
- Developing procedures for prevention and remediation of spills,
- Adequate management of construction materials.

### 7.6.2 Surface and groundwater pollution

The potential impact/risks of the temporary construction sites to surface and groundwater are associated with:

- Discharge of diverse waste materials from the construction site (liquids, dust and solid waste) on banks or directly into riverbeds, which leads to water pollution and pollution spreading along the watercourse,
- Waste material, mechanical oil, fuel etc. can be potential contaminants of surface and groundwater

- The temporary construction material storage near rivers or surface watercourses.

To prevent discharge to the surface and groundwater from temporary construction sites should be implemented good engineering practices and daily monitoring.

### 7.6.3 Air pollution

An increased concentration of polluting substances, primarily dust as a consequence of construction works on outer wall insulation, window and door replacement, roof improvement, rooftop solar and etc.

The resulting dust can temporarily disturb the neighbours and the local environment. However, these impacts will be localized, and a significant impact on the neighbours is not expected, nor is the violation of law-allowed concentration of emissions into the air. Thus, all impacts are closely related to the location of works, they are temporary with the tendency to restore into original condition upon the termination of works.

Prevention and control measures of these emissions sources include:

- Control methods such as watering the storage space and access road,
- Use of covers for storage materials, if possible,
- Installation of dust screens, if necessary and if the neighbours are a particularly vulnerable group,
- Controlled loading and unloading of materials,
- Careful planning of routes and optimal loads.

### 7.6.4 Noise and vibrations

Noise can occur as a consequence of:

- Execution of works at the construction site,
- The activity of construction workers and
- Movement of vehicles and mechanization.

The following prevention measures can be applied:

- Keep roads in good condition;
- Notify the neighbours likely to be affected that work is about to start (by delivering information leaflets through letterboxes and/or by posting notices on notice boards);
- Work should be performed within regular working hours as much as possible. Where this is impossible, the persons affected should be given special notification.
- Use modern equipment wherever possible. Such equipment normally has better noise and vibration attenuation than older machines. Modern machinery also offers other benefits, such as reduced emissions, etc.

Vibrations are not expected for the type of work provided by the Project.

### 7.6.5 Waste management

The following types of waste will be generated at the locations of sub-project implementation:

- Different types of construction waste (concrete, waste wood, glass, plastic, etc.),
- Demolition waste,

- Packaging waste (paper, cardboard, plastics, etc.),
- Communal waste,
- Different types of hazardous waste but in small quantities (paints, solvents, oils, etc.).

Categories of waste material:

Category 1 – material useful for re-use. This category includes materials and parts of existing equipment which can be re-used for original purposes or as spare parts or can be sold as a material for use and not as material for recycling. This material does not contain dangerous substances that could classify him as dangerous waste.

Category 2 – material for recycling. This category includes materials and parts of existing equipment which can not be re-used in original purposes but could be used as materials for recycling. This group includes also all materials which Investor or facility beneficiary could independently use. This material does not contain any dangerous substances that could classify him as dangerous waste.

Category 3 – standard construction and demolition waste. This category includes all material which have been appeared during execution of works and is not classified in previous two categories. This category includes standard construction mixtures of, or separate fractions of concrete, bricks, tiles and ceramics, earth from excavation, other waste which can be transported to depo. This material does not contain any dangerous substances which could classify him as dangerous waste.

Category 4 – dangerous waste. This category includes all dangerous waste which is consequence of execution of works on site. This category includes waste classified according Annex A.2 and according valid legislative for environmental protection field.

Potential impacts may arise due to inadequate waste sorting, storage and handling. All sub-projects will include provisions on management of all types of waste, including management of hazardous waste. These provisions will be in line with the Law on Waste Management and WB Environmental, Health and Safety Guidelines (EHSG).

Management of different types of waste and the implementation of mitigation and monitoring measures is the responsibility of each Contractor and Sub-Contractor (sometimes the owner of SFHs and MABs).

The Waste management procedures will strictly follow the requirements of the Law on waste management and the applicable bylaws as well as WB Environmental, Health and Safety Guidelines (EHSG) for various types of construction and demolition waste.

### 7.6.6 Impacts on cultural and historic heritage

Sub-projects are planned to be implemented on facilities, not under protection by the Institute for the Protection of Cultural Monuments of Serbia (IPCM). It is not expected that cultural and historic values are located in the zone of works.

However, in case the building is under protection, the LSGs request the opinion of the responsible Institute for Protection of Cultural Monuments to confirm/identify the presence of immovable cultural heritage.

Based on the opinion, if necessary, develop a Cultural Heritage Action Plan which will ensure adequate protection of cultural heritage.



The Contractor to include in his Elaborate on the arrangement on the construction site in accordance with local law, a section on the procedures to be taken to ensure the protection of any known cultural heritage resources in the Project area, and implement a Chance Finds Procedure, in accordance with the requirements of the national legislation. The Contractor to develop Chance Finds Procedure before the commencement of construction works.

#### 7.6.7 Impacts on settlements and population

Potentially significant negative impacts on the local population are not expected, as only minor works on the reconstruction of SFH and MAB are planned.

Temporary negative impact on community health during the reconstruction works through increased noise and dust could be experienced.

In the vicinity of the construction site various possibly sensitive receptors might be identified. The receptors are composed essentially of the human population living in houses located near to the neighbourhood to SFHs and MABs where works are performed on external wall insulation, window and door replacement, roof improvement, rooftop solar PV, etc.

Potential negative impacts from transport may include increased congestion and noise, reduced access and safety, especially on minor roads that constitute the truck route. Poor driving habits by the truck drivers could result in considerable stress, but not a risk to pedestrians and other vehicles.

#### 7.6.8 Impacts on climate change

SURCE Project shall contribute to climate change mitigation and adaptation. More specifically Component 1. contribute to climate change mitigation and adaption.

The implementation of all sub-projects will have no negative impact on climate. The Project are supporting enhancing the availability and affordability of energy efficiency, sustainable heating, and rooftop solar for households in Serbia. Also, the project aims to scale up clean energy solutions among households – an essential intervention to promote air quality, reduce energy poverty, and support Serbia's low-carbon transition.

By addressing climate change issues, the project will contribute to the efforts of the Government of Serbia to fulfil their international commitments established by the Paris Agreement and Serbia's Nationally Determined Contribution to the United Nations Framework Convention on Climate Change.

#### 7.6.9 Land acquisition, Restriction on land use and involuntary resettlement

In the implementation of the project, there will be no land acquisition, as defined by OP 4.12.

#### 7.6.10 Impact on vulnerable groups

The project will take special measures to ensure that disadvantaged and vulnerable groups have equal opportunities to access information, provide feedback, or submit grievances.

Vulnerable groups may be more adversely affected by project impacts than others on the basis of their socioeconomic characteristics. Age, gender, disability and poverty may cause limited access to relevant information and exclusion from project benefits. The risk of not having sufficiently inclusive approach to

vulnerable groups is moderate. To prevent this potentially adverse impact, the design of the project envisaged integration of citizens and stakeholders engagement. Stakeholder Engagement Plan (SEP) is prepared to ensure the inclusion of vulnerable groups in consultation process. A comprehensive engagement strategy inclusive of a dedicated civic platform has been adopted with specific target to reach the underserved part of the population. The engagement method will be adapted as much as possible to vulnerable households needs.

**The project will introduce a solidarity mechanism to increase the share of poorer municipalities included in the program.** At present, grants are co-financed by municipalities who contribute half of the grant to households. This 50 percent co-financing requirement will be decreased for poorer municipalities with below average income per capita (using the official categorization of municipalities in Serbia). As additional considerations regarding targeting of vulnerable households, the project will conduct a survey among HHs eligible to SA/EVP to confirm the share of homeowners among them as well as their level of interest in participating in SURCE. Based on the survey findings, the following enhancement of the project could be considered: contingent on their needs assessment, Local governments could propose buildings (detached or multi-apartment buildings) in which vulnerable households are located and these socially oriented buildings may be eligible for additional support under the SURCE project. However, the feasibility of direct targeting of the vulnerable population groups continues to be explored.

To manage the Environmental and Social Risks of the Project MoME will hire a qualified Environmental and Social Experts as a member of PIU. S/he should ensure that environmental and social considerations are integrated into subprojects designs and implementation and that actions are taken fully comply with the Bank's Environmental and Social Framework (ESF), including communication with stakeholders and handling of grievances.

Project Stakeholder Engagement Plan (SEP) is prepared to ensure the inclusion of vulnerable groups in consultation process.

#### 7.6.11 Occupational health and safety risks

Physical hazards represent the potential for accident or injury or illness due to repetitive exposure to mechanical action or work activity. They may occur from: moving equipment at the construction site; exposure to noise and faulty electrical devices; working with chemicals, welding and hot work, working at heights; etc.

In accordance with the Law on Health and Safety at Work ("Official Gazette of RS", Nos. 101/2005, 91/2015, 113/2017), measures of /protection at work need to be envisaged to prevent hazards that may occur during the construction. The prevention of hazards during the execution of works requires engaging an organization to implement the works registered for the type of activity subject to the technical documentation hereof. The organization must have a person at the construction site authorized to manage works, having passed the professional examination and in compliance with other conditions as per the Law on Planning and Construction. The authorized person and all other persons involved in the execution of works shall adhere to the regulations, standards and norms for the type of activity they engage in, as well as the Law on Health and Safety at Work.

The MoME and LSGs, MoME/EEA/PIU will keep the central oversight role during implementation as all key implementation documents, such as local rulebooks and public calls, have to receive no objection from the Ministry.

Local self-governments assisted with TA will perform sample construction oversight as well as commissioning and measurement and verification (M&V).

The Contractor shall produce the Elaborate on the Organization of the Construction Site based on the Design for Execution and Elaboration on Energy Efficiency according to the Rulebook on Energy Efficiency of Buildings ("Official Gazette of RS", No 61/11), namely, both the Elaboration on the current situation and Elaboration on the newly-designed state for Standard and Advanced package

The contractor may only start work when the construction site is established and organized as per the provisions of the Rulebook on safety at work during the implementation of construction works ("Official Gazette of RS", Nos. 53/1997 and 14/2009), except for the "Light package" for windows and doors replacement + roof ceiling insulation.

OHS procedures in Serbia are in line with ILO conventions, with clearly defined procedures and responsibilities as well as implementation control. It will be assessed during project preparation if primary supply workers, as per ESS2 definition, would be engaged. The ESMF includes Labour-Management Procedures (LMP) and sections on Environment Health and Safety (EHS) which set out the way OHS issues will be managed in accordance with the requirements of national law and ESS2.

Direct workers will be hired on a consultancy basis whereby no objection from the Bank team will be obtained for each position. The most important aspect of the implementation of the ESS2 will be ensuring contracted companies apply the respective provisions determined in the Labour-Management Procedures (LMP). Given the expected small-scale nature of the works, employment will most probably be generated at the local level, thus minimizing the risk of labour influx and the expectancy of workers from outside of the region.

Since labour-related laws in Serbia comply with ILO conventions and are most regularly enforced. The Labour Management Procedures applicable to the Project including the requirements for labour grievance mechanism have been elaborated in the Project LMP. The procedures will propose how to overcome gaps between the legal framework of Serbia and the ESS2 requirements based on specific works that will be conducted under the Project. The LMP will be a part of tendering documents making them binding for the contractor.

#### 7.6.12 COVID -19 related OHS, Labour and Community Health and Safety risks

Considering the COVID-19 pandemic, increased incidence of communicable and vector-borne diseases attributable to construction activities represents a potentially serious health threat to project personnel and residents of local communities. The Ministry of Labour, Employment, Veterans and Social Affairs (MLEVSA) has recently issued the Rulebook on Preventive Measures for Safe and Healthy Work and Control and Prevention of Epidemic<sup>48</sup>. The Rulebook specifies the obligations of both employers and employees and lists the activities that must be carried out to prevent epidemics from spreading and ensure safe and healthy work environment. In addition, employers must prepare the plan for implementation of measures for prevention and control of epidemic, which has to be part of the act of assessment of the

<sup>48</sup> <https://www.minrzs.gov.rs/sites/default/files/2020-07/94-20%20PRAVILNIK%20ZARAZNE%20BOLESTI-converted.pdf>

MLEVSA<sup>49</sup>. These procedures reinforce the commitment of all the participants in the Project to comply with prescribed obligations and implement all required measures.

The World Bank has prepared an Interim Guidance Note on COVID-19 considerations in construction/civil works. The note provides guidance on what preparations and arrangements should be considered. In most cases the changes are expected to be covered by the terms of the existing works contract.

#### Contingency plan

At each subproject site, the contingency plan should be developed to set out the procedures that must be followed in the event of COVID-19 reaching the site. The contingency plan should be developed in consultation with national and local healthcare facilities, to ensure that arrangements are in place for the effective containment, care and treatment of workers who have contracted COVID-19. The contingency plan should also consider the response if a significant number of the workforce become ill, when it is likely that access to and from a site will be restricted to avoid spread.

Contingencies should be developed and communicated to the workforce for:

- Isolation and testing procedures for workers (and those they have been in contact with) that display symptoms,
- Specifically, the plan should set out what will be done if someone may become ill with COVID-19 at a worksite. The plan should:
  - Set out arrangements for putting the person in a room or area where they are isolated from others in the workplace, limiting the number of people who have contact with the person and contacting the local health authorities,
  - Consider how to identify persons who may be at risk (e.g. due to a pre-existing condition such as diabetes, heart and lung disease, or as a result of older age), and support them, without inviting stigma and discrimination into your workplace.

When communicating to the workforce, their roles and responsibilities should be outlined clearly, and the importance for their colleagues, the local communities, and their families that the workers follow the plans should be stressed. Workers may need to be reassured that there will be no retaliation or discrimination if they self-isolate because of feeling ill, and also with respect to the compensation or insurance arrangements that are in place.

The Contractor will be required to regularly check updates of the WHO.<sup>50</sup>

#### 7.6.13 Cumulative impacts

As most of the works will take place on SFHs and MABs and only small-scale reconstruction/rehabilitation will be supported through the project, significant cumulative impacts are not expected.

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<sup>50</sup> novel-coronavirus-2019/advice-for-public, water-sanitation-hygiene-and-waste-management-for-covid-19, infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125, WHO-2019-nCoV-IPCPPE\_use-2020.2-eng.pdf

## 7.7 Overview of impacts and proposed mitigation measures during construction

The provided overview of measures is informative only and the final set of mandatory mitigation measures will be defined in the site specific Environmental and Social Assessment (ESA) and ESA reports (ESMP or ESMP Checklists, depending on subproject's risk category, E&S Audits) for a particular sub-project or activity.

*Table 3: Informative overview of potential impacts of small civil work and proposed mitigation measure*

IMPACT	LEVEL OF IMPACT	PROPOSED MITIGATION MEASURE
Land use/ settlements	Not relevant	- Not relevant. There will be no land acquisition as defined by ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
Surface and ground water pollution	Low	Potential impacts of some subprojects on ground and surface water can be mitigated by the following measures:  - Waste oil is to be disposed of in closed containers. - Vehicle maintenance at the construction site is prohibited. Vehicles are to be maintained only in the designated workshops.  - Define a space for temporary disposal of contaminated soil (if occurs).
Public Health (Emissions of dust and noise)	Low	Civil works will be financed under the Project are typical for works related to energy efficiency  - Periodic wetting of storage materials and access road. - The contractor shall cover trucks during transport. - Do not use outdated or non-operational equipment - Use and apply control equipment to prevent air pollution - Limit working hours (e.g. until 7 AM - 5 PM) in settlements. - Prohibit the operation of machinery in the neutral shift. - Screen grievance log for dust, noise, and related grievances.
Air quality	Low	Potential impacts of some subprojects on air quality can be mitigated by the following measures:  -Use and apply adequate equipment to prevent air pollution.
Flora and fauna (protected areas and species)	Not relevant	No adverse impacts on biodiversity are expected

Waste management	Moderate	<p>Health hazards and environmental impacts can happen due to improper waste management practices. The impact can be mitigated by strictly following procedures prescribed in Serbian Law on Waste Management and by respecting site-specific mitigation measures:</p> <ul style="list-style-type: none"> <li>- Set containers for communal, recyclable and hazardous waste.</li> <li>- Provide a regular collection of different waste streams by PUC authorized companies.</li> <li>- No open burning waste on site.</li> <li>- Ensure that there is no long-term storage of waste materials on site.</li> </ul>
Cultural and religious issues	Not relevant	No adverse impacts on cultural heritage are expected
Labour management	Moderate	<p>Labour management is defined by the project LMP which provides adequate procedures and measures to allow management of labour in line with national law and ESS2</p> <ul style="list-style-type: none"> <li>- protective equipment;</li> <li>- notification,</li> <li>- information of workers for the importance of environmental and hygienic protection,</li> <li>- Officer for safety and health,</li> <li>- COVID related measures.</li> </ul>

Community Health and Safety	Moderate	<ul style="list-style-type: none"> <li>- Risks to the community stemming from unauthorized access to working sites will be prevented through a set of measures specified in ESAs</li> <li>- The principle of universal access will be incorporated into all relevant sub-projects</li> </ul>
Public relationship management		ESMP will entail provisions for stakeholder engagement, public disclosure and grievance mechanism – to ensure public concerns are captured.
Vulnerable groups		To prevent potentially adverse impact on the vulnerable groups exclusion from the project benefits, the design of the project envisaged integration of citizens and stakeholders engagement. Stakeholder Engagement Plan (SEP) is prepared to ensure inclusion of vulnerable groups in consultation process. A comprehensive engagement strategy inclusive of a dedicated civic platform has been adopted with specific target to reach the underserved part of the population. The project will introduce a solidarity mechanism to enhance the participation of poorer municipalities in the program

In all of the cases when either of the three risk factors (contaminates, receptors, exposure pathways) are considered to be present (in spite of limited data) under current or foreseeable future conditions, the following steps should be followed in ESAs:

- 1) Risk screening (identification of location, sampling and testing, evaluation of analytical results, verification of receptors and exposure pathways);
- 2) Interim risk management (implemented at any phase of the project life cycle if the presence of land contamination poses an “imminent hazard,” i.e., representing an immediate risk to human health and the environment if contamination were allowed to continue, even a short period of time);
- 3) Detailed quantitative risk assessment (Identifying relevant human and ecological receptors (e.g., children, adults, fish, wildlife), determining if contaminants are present at levels that pose potential human health and/or ecological concerns (e.g., levels above applicable regulatory criteria based on health or environmental risk considerations), determining how human or ecological receptors are exposed to the contaminants (e.g., ingestions of soil, dermal contact, inhalation of dust), the types of adverse effects, quantifying the magnitude of health risks to human and ecological receptors etc.); and
- 4) Permanent risk reduction measures.

Table 4: Summary of level of environmental and social negative impacts and mitigation measures

NEGATIVE IMPACT	LEVEL OF IMPACT	MITIGATION MEASURES
CONSTRUCTION PHASE		



NEGATIVE IMPACT	LEVEL OF IMPACT	MITIGATION MEASURES
Impacts on land use/settlements	Not relevant	Not relevant. There will be no land acquisition as defined by ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
Ground and surface water	Low	<p>Potential impacts of some subprojects on ground and surface water can be mitigated by the following measures:</p> <ul style="list-style-type: none"> <li>- Waste oil is to be disposed of in closed containers.</li> <li>- Vehicle maintenance at the construction site is prohibited. Vehicles are to be maintained only in the designated workshops.</li> <li>- Define a space for temporary disposal of contaminated soil (if occurs).</li> </ul>
Air quality	Low	<p>Potential impacts of some subprojects on air quality can be mitigated by the following measures:</p> <ul style="list-style-type: none"> <li>- Use and apply adequate equipment to prevent air pollution.</li> </ul>
Flora and fauna (protected areas and species)	Not relevant	No adverse impacts on biodiversity are expected
Noise and dust	Low	<p>Civil works will be financed under the Project are typical for works related to energy efficiency</p> <ul style="list-style-type: none"> <li>- Periodic wetting of storage materials and access road.</li> <li>- The contractor shall cover trucks during transport.</li> <li>- Do not use outdated or non-operational equipment</li> <li>- Use and apply control equipment to prevent air pollution</li> <li>- Limit working hours (e.g. until 7 AM - 5 PM) in settlements.</li> <li>- Prohibit the operation of machinery in the neutral shift.</li> </ul> <p>Screen grievance log for dust, noise, and related grievances.</p>
Soil quality	Low	<p>Soil contamination can occur from the spillage of hazardous and toxic chemicals. The impact can be mitigated by following measures:</p> <ul style="list-style-type: none"> <li>- Waste oil is to be disposed of in closed containers.</li> <li>- Vehicle maintenance at the construction site is prohibited. Vehicles are to be maintained only in the designated workshops.</li> </ul> <p>Define a space for temporary disposal of contaminated soil (if occurs).</p>

NEGATIVE IMPACT	LEVEL OF IMPACT	MITIGATION MEASURES
Waste	Moderate	<p>Health hazards and environmental impacts can happen due to improper waste management practices. The impact can be mitigated by strictly following procedures prescribed in Serbian Law on Waste Management and by respecting site-specific mitigation measures:</p> <ul style="list-style-type: none"> <li>- Set containers for communal, recyclable and hazardous waste.</li> <li>- Provide a regular collection of different waste streams by PUC authorized companies.</li> <li>- No open burning waste on site.</li> </ul> <p>Ensure that there is no long-term storage of waste materials on site.</p>
Cultural and religious issues	Not relevant	No adverse impacts on cultural heritage are expected
Labour management	Moderate	<p>Labour management is defined by the project LMP which provides adequate procedures and measures to allow management of labour in line with national law and ESS2</p> <ul style="list-style-type: none"> <li>- protective equipment;</li> <li>- notification,</li> <li>- information of workers for the importance of environmental and hygienic protection,</li> <li>- Officer for safety and health,</li> <li>- COVID related measures.</li> </ul>
Health and Safety for affected communities including construction workers	Moderate	<p>Community Health and Safety risks shall be mitigated by adhering to the relevant laws during construction works but not limited to the use of chemicals law and the Law on Occupational Safety and Health.</p> <p>Also, with respect to community health and safety, the Contractor will include health and safety measures to prevent the public from entering the works site, such as appropriate fencing and signage.</p>
OPERATION PHASE		
Impacts on land use/settlements	Not relevant	Not relevant
Ground and surface water	Not relevant	Not relevant

NEGATIVE IMPACT	LEVEL OF IMPACT	MITIGATION MEASURES
Air quality	Low	Regular maintenance in accordance with RS law
Flora and fauna (protected areas and species)	Not relevant	Not relevant
Noise and vibration	Not relevant	Not relevant
Soil quality	Not relevant	Not relevant
Waste	Low	Regular maintenance in accordance with RS law
Cultural and religious issues	Not relevant	Not relevant
Labour management	Low	Regular maintenance in accordance with RS law. To ensure any labour required to remedy any defect on the installed packages within the decent guarantee period
Health and Safety for affected communities including construction workers	Not relevant	Not relevant

## 8 Environmental and Social Risk Management

### 8.1 Risk classification according to the WB

The World Bank classifies all projects in four groups according to risks, namely projects with:

- High Risk
- Substantial Risk
- Moderate Risk
- Low Risk.

To determine appropriate risk classification, the following issues are taken into account:

- Type, location, sensitivity and scope of the project,
- Nature and magnitude of potential environmental and social risks and impacts, as well as
- Borrower's (including any other agency responsible for project implementation) capacity and commitment to manage environmental and social risks and impacts in the manner consistent with ESSs.
- Other areas of risk that may be relevant to delivery of the ES mitigation measures and outcomes.

The overall Environmental and Social Risk Classification of this Project is classified as “moderate” by the WB.

As the Project has sub-projects, the World Bank requirements involve mandatory review of adequacy of local environmental and social requirements relevant for the sub-projects and assessment of the Borrower's capacity to manage the environmental and social risks and impacts of such sub-projects.

It is also checked if the Borrower has capacity to

- perform sub-projects environmental and social screening
- ensure necessary expertise for conducting environmental and social assessment
- review findings of environmental and social assessment for individual sub-projects
- implement mitigation measures and
- monitor environmental and social impact during project implementation. If necessary, the project may envisage measures to strengthen Borrower's capacities.

The Borrower is obliged to carry out appropriate environmental and social assessment of sub-projects and prepare and implement them in compliance with local legislation and requirements of ESSs which the Bank finds relevant for moderate and low-risk sub-projects.

Sub-projects classified by the ESMP Screening as low risk projects and confirmed by WB, do not need any further approval. Sub-projects classified as moderate risk projects require an ESMP or ESMP checklist and the continuation of the environmental and social due diligence. Substantial and high risks projects will not be taken into the consideration.

If the whole MAB is applying, no matter if they are less or above five floors, E&S screening has to be conducted and ESMP or ESMP checklist has to be prepared and shared with WB for approval.

In case that risk ranking of certain subprojects gets increased, the Borrower is obliged to apply ESSs requirements agreed with the Bank.

## 8.2 Assessment and Management of Environmental and Social Risks and Impacts

To identify the potential risks and impacts of the SURCE project, the following tools for adverse impact mitigation and risk management have been developed:

- Environmental and Social Management Framework (ESMF)
- Stakeholder Engagement Plan (SEP)
- Labour Management Procedures (LMP)
- Environmental and Social Commitment Plan (ESCP)

This ESMF provides checklists to identify risk level and defines where Management Plans (ESMPs) or ESMP Checklist are required to align this project with the ESSs, World Bank Group General EHS guidelines and national legislation.

## 8.3 Environmental and Social Assessment / Screening, Review and Approval

Appropriate environmental and social assessment of the project has to be implemented, in accordance with national legislation and relevant requirements of the ESSs. Every subproject must undergo environmental and social assessment compliant to this ESMF, and consequently the ESF integrating stakeholder engagement activities including consultation and feedback.

Responsibility lies with the MoME/PIU who will ensure that environmental and social management is an integral part of project planning, design, implementation, operation and maintenance. The MoME/PIU will screen, monitor and report on the environmental and social performance, national legislation and ESF compliance under each project activity to ensure efficient application of measures as defined in ESMF.

The Environmental and Social assessment will follow the five-step process to identify risks, potential impacts and define measures aimed to prevent or minimize negative impacts and determine the type of management instrument required to meet the project standards:

- Step 1 - Project activity screening and risk classification
- Step 2 - Project activity preparation
- Step 3 - Preparation and disclosure of ESMP, ESMP checklist and public consultations (only for ESMP)
- Step 4 - Integration of ESMP and ESMP checklist in public calls
- Step 5 - Implementation, project supervision, monitoring and reporting.

### 8.3.1 Subproject screening and risk classification (Step 1)

Environmental and Social Screening Questionnaire (Annex 7) is developed for initial screening of each subproject. It shall be completed by the MoME/PIUs Environmental Specialist and Social Specialist and submitted by the MoME/PIU along with the E&S Screening report to the WB together with the proposed decision on the category of the subproject/activity. The final decision requires endorsement of the World Bank. The World Bank team will retain oversight over the process for the duration of the project implementation.

The Environmental and Social Screening Questionnaire comprises four parts:

- 1) Administrative and institutional data - short description of the project, administrative and institutional data, technical contents of the project and location.
- 2) Project eligibility criteria- questions that assist in determining whether the subproject in question is eligible for funding.
- 3) Basic information on proposed subproject, and
- 4) Project information relevant for impacts and risks: series of Yes - No questions on potential environmental and social impacts covering all ESS 1-10.

After reviewing the ESS Questionnaires, the subproject will be classified in one of the following categories:

Category	Risk level	Decision
1	Low Risk – negligible environmental and social impacts/ environmental impact assessment not needed)	Eligible for financing. No additional environmental and social assessment needed.
2	Moderate Risk – environmental and social impacts are expected to be manageable, easy to envisage, temporary and local	Eligible for financing. The MoME/PIU is responsible for developing the ESMP checklist or ESMP. Consultations are mandatory.
3	Substantial risk – possible significant and adverse impacts to human health and the environment can be expected, but the magnitude of impacts cannot be determined in the project identification phase	Not eligible for financing.
4	High Risk – expected to have highly significant, diverse and/or long-term adverse impacts to human health and the environment. It can be expected that magnitudes of these impacts are such that they may also affect an area broader than the subproject sites. Measures for mitigating such environmental impacts could be complex and costly.	Not eligible for financing.
5	Ongoing and/or completed works, including financing of works' continuation	This also is subject to risk rating.  Risk category and eligibility for financing will be determined based on Environmental and Social audit that needs to be undertaken

### 8.3.2 Subproject preparation (Step 2)

The MoME/EEA/PIU prepares guidelines for necessary documentation to be submitted to LSGs for subproject implementation

### 8.3.3 Preparation and Disclosure of the ESMP and ESMP Checklist and Public Consultations (Step 3)

Based on the screening processes and findings, the site specific ESMP/ ESMP Checklist (for “Moderate Risk” subprojects), based on the subproject description and volume (i.e. ESMP checklist for rehabilitation; ESMP for construction measures) are to be prepared for each individual subproject prior to being approved. The documents will be prepared by the Environmental and Social Specialist of the PIU, and shall be subject to review and approval of the WB.

The purpose of the ESMP is to predict potential effects and improve the environmental and social aspects of subprojects by minimizing, mitigating, or compensating for negative effects. Simpler Environmental and Social Management Plan Checklists will be used for subprojects that are unlikely to cause significant environmental and social impacts and that are typical for small scale construction and



refurbishing/repurposing/rehabilitation investments.

ESMP, and ESMP Checklist shall be publicly disclosed and public consultations shall be conducted only for the ESMPs. The documents shall be disclosed on MoME websites and websites of LSGs. It is the responsibility of MoME/PIU to organize disclosure of subject documents, announce calls for public consultations in media and on local municipality level, prepare and perform presentation of the subprojects and its environmental and social aspects in line with the Project Level SEP. Alongside the documents, an invitation for the public consultation will be published (e-format and printed media) and comments are invited to be submitted electronically and written submission thereof within a clearly defined time period (for a minimum of two weeks). Hard copies shall be made available at MoME/PIU premises, and other locations as deemed relevant. By the end of the disclosure period, the public consultation meetings for the ESAs shall be conducted, inviting stakeholders and the general public to proactively participate. The design and organization of the consultation meeting will take into account the COVID19 national and WHO rules and recommendations. If the measures related to the COVID19 pandemic would not allow the classic public consultations, virtual public consultation is to be organized where the subject document is disclosed and a set of activities is performed to ensure public awareness (public call for comments announced through newspapers, TV, radio, social networks; recording or live stream of the presentation etc.). The public consultation meeting for ESMP Checklists will be agreed at a later stage with the WB.

All comments and questions shall be processed and together with feedback incorporated in the final version of the Environmental and Social Assessments (ESAs, meaning ESMP, ESMP Checklist) and captured in the minutes of the meeting.

#### 8.3.4 Integration of ESMP and ESMP Checklist in tender documents (Step 4)

The ESAs (ESMP, ESMP Checklist) will be prepared prior to public calls and the CFU/LSGs will be responsible to integrate the final version of ESAs into documents for public calls for the selected subprojects and in the contracts for their execution to be signed with the selected works contractors. The Contract agreements shall impose the Contractor's obligation to comply with the requirements specified in the ESAs. The Contractors will be required to demonstrate that all mitigation measures have been accounted for to ensure subproject implementation in environmentally and socially acceptable manner. Standard Bidding Documents of the WB for Procurement of Works (Last version January 2020) already contain clauses for enhancement of environmental, social, health and safety performance.

#### 8.3.5 Implementation, project supervision, monitoring and reporting

Implementation of mitigation measures and environmental and social monitoring is an obligation of the Contractor compliant to ESMP and ESMP Checklist. The Supervision Engineer checks compliant to the Standard conditions of contract, alongside other routine activities, shall supervise the Contractor's Environmental and Social performance and verify compliance with E&S Instruments.

The overall implementation and compliance are the responsibility of the MoME/EEA. The PIU Environmental and Social Specialist will report on ESA implementation and E&S (ESF, national regulation, and EHSG) compliance to WB in Progress Reports, while sub-project ESAs implementation reporting will be quarterly, unless differently agreed with the WB E&S specialists.

## 8.4 Environmental and Social Management Plan (ESMP)

Site-specific Environmental and Social Management Plans (ESMPs) will include the provisions for the identification of site-specific impacts and mitigation measures. The ESMPs provisions will be incorporated into the contractor's agreement for each sub-project.

The Environmental and Social Management Plan (ESMP) will identify the principles, approach, procedures and methods that will be used to control and minimize the environmental and social impacts of all construction activities and further, on the operation phase of the respective investments.

ESMP should outline the mitigation, monitoring and administrative measures to be taken during project implementation to avoid or eliminate negative environmental and social impacts, and may also be an effective way of summarizing the activities needed to achieve effective mitigation of negative environmental and social impacts.

ESMP identifies feasible and cost-effective measures that may reduce potentially significant adverse environmental and social impacts to acceptable levels.

The proposed content of ESMP is outlined in Annex 6

The borrower's decision to proceed with a project, and the Bank's decision to support it, are predicated in part on the expectation that the ESMP will be executed effectively. Consequently, the Bank expects the plan to be specific in its description of the individual mitigation and monitoring measures and its assignment of institutional responsibilities, and it must be integrated into the project's overall planning, design, budget, and implementation.

Such integration is achieved by establishing the ESMP within the project so that the plan will receive funding and supervision along with the other components.

ESMP document will ensure that the environmental mitigation measures and their practical monitoring become a legal responsibility of PIU to be established within the MoME.

### 8.4.1 Waste management plan

Following the expected nature of projects anticipated to be financed under the Project, among other project specific issues, waste generation will be unavoidable for majority of subprojects. Therefore, waste management will be mandatory elaborated within the ESMP documents and Waste Management Plans (WMP) should be developed by subproject Contractors as part of their own site-specific Implementation Plans.

WMP shall contain the following:

- Documentation on the waste generated by the company<sup>20</sup> (origin, type of waste pursuant to waste classification list, composition, volume),
- Measures to be taken to limit waste generation, particularly in case of hazardous waste,
- Segregation of waste, particularly segregation of hazardous waste from other types of waste and from recyclables,
- Waste disposal practices,

- Waste treatment and/or disposal methods.

#### 8.4.2 OHS Management Plan

The Contractor will be required to prepare an OHS Plan to establish and maintain an effective health and safety management system. Through the Plan he will commit to implementing a structured approach to workplace health and safety in order to achieve a consistently high standard of safety performance.

This Plan will assist the Contractor in meeting his obligations in accordance with work health and safety legislation. This Plan applies to all contracted workers and to other persons at risk from work carried out at workplaces.

#### 8.4.3 Generic ESMP

ESMP sample has been prepared for the purpose of this ESMF and is provided in Annex 6 of this ESMF complemented by a Sample Mitigation Plan and Sample Monitoring Plan in Annex 7. The generic ESMP provides mitigation measures and monitoring value chain for construction works.

Provisions of the ESMPs will be integrated into the tender documents for respective subprojects and shall be annexed to the contract and considered in the specifications and bills of quantities.

Bidders will be required to budget the cost of ESMP requirements in their financial bids and required to comply with them while implementing the project activities. Specifications ensuring effective implementation of environmental, social, health and safety performance criteria by the selected bidder will include an obligation to inform the communities representatives and MoME/PIU of any incidents involving community members, all significant accidents and events involving contract and subcontract workers etc.

Template of an ESMP document - part I & II (Table Mitigation Plan and Table Monitoring Plan) is enclosed as Annex 7 to this ESMF document.

#### 8.4.4 ESMP Checklist

ESMP Checklist or ESMP shall be prepared for subprojects categorized as 'Moderate Risk' projects by using templates provided in the respective Annexes – ESMP / Annex 6&7, ESMP Checklist template / Annex 8.

ESMP Checklist shall include the following content:

- Descriptive part – subproject specifics in terms of physical location, the institutional and legislative aspects, the project description, inclusive of the need for a capacity building program and description of the public consultation process.
- Environmental and social screening – simple Yes/No format followed by mitigation measures for any given activity type.
- Monitoring plan – for activities during project implementation, in the same format required for standard World Bank EMPs.

Environmental and social screening and Monitoring plan shall be included as bidding documents for contractors. The steps to be followed in while preparing the ESMP Checklist are given below:

**General identification and scoping phase.** Identification of subproject activities and environmental and social screening is implemented and main potential adverse impacts to human health and environment are

identified. At this stage, the ESMP Checklist is drafted.

**Detailed design and tendering phase, including specifications and bills of quantities for individual activities by integrating the environmental provisions in tabular format.** This phase also includes the tender and award of the works contracts. This phase finally defines the contractual obligations of the Contractor on environmental measures to be taken during the construction/rehabilitation/repair process. The ESMP Checklist should be disclosed publicly at the tendering stage.

**Implementation phase.** During the implementation phase environmental compliance and other qualitative criteria are checked on the respective site by the supervising engineer. The mitigation measures in Environmental and social screening and Monitoring plan are the basis to verify the Contractor's compliance with the required environmental provisions.

For each subproject screened as 'Moderate Risk' category the ESMPs Checklist provisions will form part of the design documents for the project and will be included in contracts for selected subprojects, both into specifications and bills of quantities.

Respectively the Contractors will be required to include the cost of ESMP Checklist requirements in their financial bids and required to comply with them while implementing the project activities.

#### 8.4.5 Monitoring and reporting

Subprojects categorized as 'High and Substantial Risk' will not be eligible for financing.

For subprojects classified as 'Moderate Risk' the monitoring of the Contractor's safeguards due diligence, the supervising engineer will work with Monitoring plan of the ESMP Checklist, developed site specifically.

PIU together with the LSGs shall monitor the implementation of this Framework, both at the overall Project level and individual sub-projects. Within its usual monitoring activities, PIU shall perform monitoring (including on-site monitoring, as needed) to ensure that Applicants comply with their grant agreement obligations.

Applicant's labour management compliance with local legislation on labour and safety at work shall be monitored based on brief Report on Compliance with Legal Obligations Related to Labour, which shall be submitted on annual basis by the Applicant to PIU.

## 9 Labour Management Procedures

The Serbian legal framework guiding Labour and Working Conditions, including OHS, is less a few minor gaps fully aligned with the standards set out in ESS2 as Serbia is signatory to the International Labour Organization (ILO) and United Nations (UN) Conventions informing the ESS2. Serbia has ratified more than 70 ILO Conventions including the 8 Core Conventions. Labour issues (including OHS, workplace SEA/SHA) under the Project will be managed through an autonomous LMP applicable to all project workers as defined by ESS2<sup>51</sup>. Salient features of the document and standard it enforces are provided below.

This LMP applies to all **Project workers** hired under the Project as defined by ESS2.

In the context of this Project the term “**Project worker**” refers to:

**Direct workers**, persons employed or engaged by:

- (a) directly by the MoME,
- (b) directly by the Energy Efficiency Administration (EEA),
- (c) directly by the Central Fiduciary Unit (CFU) and
- (d) each Local Self Governments (LSG) (to work specifically in relation to the project- launching public calls for grants), and

**Contracted workers**, persons employed or engaged by:

- (e) third parties that may include contractors, subcontractors, brokers, agents or intermediaries) to perform work related to core functions of the project, regardless of location.

Contracted workers are expected to be employees of firms and service providers engaged in providing technical assistance, trainings, capacity building, legal and financial advisory service, energy audits, development of detailed technical design and bill of quantities for renovation works in eligible building and construction supervision, building commissioning and measurement and verification.

The LMP applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers.

For any civil servants of the MoME and LSG who may be engaged in carrying out project activities, the terms and conditions of their public sector employment will continue to apply. ESS2 provisions on OHS, as well as prohibition of child and forced labour, will apply also to civil servants.

Workers engaged by grantees (individual households) of partially repayable grants (i.e. for installation and mounting of 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 and alike) are considered project workers under ESS2 definition.

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<sup>51</sup> The term “project worker” refers to: (a) people employed or engaged directly by the Borrower (including the project proponent and the project implementing agencies) to work specifically in relation to the project (direct workers); people employed or engaged through third parties to perform work related to core functions of the project, regardless of location (contracted workers); (c) people employed or engaged by the Borrower’s primary suppliers (primary supply workers); and (d) people employed or engaged in providing community labor (community workers). ESS2 applies to project workers including fulltime, part-time, temporary, seasonal and migrant workers.

The category of primary suppliers is not relevant within the scope of this Project as the decision on the sourcing and supply of eligible materials will be the decision of every individual grantee. However, due to allegations of forced labor risks associated with the polysilicon suppliers, if centralized procurement is considered during the project implementation the Borrower will require bidders to provide two declarations: a Forced Labor Performance Declaration (which covers past performance), and a Forced Labor Declaration (which covers future commitments to prevent, monitor and report on any forced labor, cascading the requirements to their own sub-contractors and suppliers). In addition, the Borrower will include enhanced language on forced labor in the procurement contracts.

Regarding the risk of forced labor, under Environmental and Social Standard 2 (ESS2), where there is a significant risk of forced labor related to primary supply workers, the Borrower requires the primary supplier to identify those risks and if forced labor cases are identified, the Borrower will require the primary supplier to take appropriate steps to remedy them. Ultimately, where remedy is not possible, the Borrower will, within a reasonable period, shift the project's primary suppliers to suppliers that can demonstrate that they are meeting the relevant requirements of ESS2. Prior to beginning the procurement process, the Borrower will undertake market analysis to identify the possible sellers of solar panels to the project. The bidding documents will emphasize forced labor risks in solar panels and components and will require that sellers of solar panels to the project will not engage or employ any forced labor among their work force. Bidders will be required to provide two declarations: a Forced Labor Performance Declaration (which covers past performance), and a Forced Labor Declaration (which covers future commitments to prevent, monitor and report on any forced labor, cascading the requirements to their own sub-contractors and suppliers).

In addition, enhanced language on forced labor will be included in the procurement contracts. The Bank will prior review procurements of solar panels and components to ensure that enhanced provisions are used by the Borrower.

Community workers will not be engaged as the nature of the project does not require engagement of community labour.

Serbia has adopted ILO conventions on child labour. The minimum age of employment is 15 in Serbia. Notwithstanding, it no person under the age of 18 will be employed or engaged on the Project given the classification of labour and OHS risks. If any contractor employs or engages a person under the age of 18 years. Breach of this standard will be reported to the authorities (Labour Inspectorate) and measures taken against the contractor in accordance with the Contract for construction works. No child labour will be permitted under the project.

The risk of informal labour and associated lack of protection will be mitigated through:

- i). application screening/E&S screening checklist
- ii). labour and working conditions commitments signed by any third party (annex 05)
- iii). labour and working conditions reporting requirements during contract implementation (annex 04), and
- iv). by providing access to the Project workers grievance mechanism.

There will be no labour influx. The project has instituted a Code of Conduct for project workers (Annex 03 of the LMP) and dedicated grievance mechanism to receive confidential complaints. The project workers will receive a training of the prevention of SEA/SH.

The grievance mechanisms provided by the Serbian legislation are considered as minimum standard to be achieved in addressing labour dissatisfaction and perceived maltreatment. Any third party (Contractor) employing and engaging contracted workers are expected to design and implement grievance mechanisms that will be aligned or surpass this standard ensuring an easy access to protective measures and effective remedial actions in work situations that may give rise to grievances and disputes. Contractors will prepare detailed description of grievance mechanism (GM) before the start of their assignment. The GM must be well circulated and written in a language understood by all. The PIU will develop and implement a grievance mechanism for direct workers to address workplace concerns.

The Project will use the Bank's Standard Procurement Documents for solicitations and contracts, and these include labour and occupational, health and safety requirements.

The implementation of the LMP begins with the tender procedure. The PIU will ensure that these incorporate standardized social clauses in the tender documentation and contract documents, in order for potential bidders to be aware of the requirements to be met. The tender documents shall also state that adherence to the national legislation regarding labour and employment relations and occupational health and safety is a prerequisite for participation in the project. Tender documents shall be clear that forced labour, child work or disguised employment are unacceptable and may be the ground for exclusion from the project. The requirements should also include ban to discrimination, harassment and gender-based violence. The bidders will be required to submit a statement confirming their awareness of WB ESF standards, their firm compliance with the national labour and employment and occupational health and safety laws and labour management procedures in accordance with WB ESS2, their willingness WB ESS2, their willingness to establish a GM if not established or to use the project GM, to refrain from any practice that can be interpreted or perceived as discriminatory or unfair to their employees and in breach of ESS2 requirements. The statement template is presented in Annex 01. The statement should be signed by the bidder's legal representative. The failure to submit such statement will exclude a bidder from taking part in bidding. The CFU and EEA will make reasonable efforts to ensure that the third parties awarded with the contract are reliable law-abiding entities who do not have history of disrespect for labour law, unresolved labour disputes or frequent work-related accidents. During the evaluation the reliability of the third party's Due diligence shall be exercised.

During the implementation of the contract, the third parties engaging/employing project workers will have to submit quarterly reports presenting their compliance with the LMP by using the reporting template provided in ANNEX 07 LMP COMPLIANCE REPORT. The report should include the number and status of project workers, the number of hired and terminated employees in the given period, the number of hours worked, overtime, regularity of payment, OHS issues (injuries and fatalities, if any), safety measures, grievances raised and resolved, training provided/attended, incidents of non-compliance with the law or the LMP.

In case of any inconsistencies or departure from the required standards and practice and depending on the gravity of a situation or malpractice, the MoME may decide to inform the Labour Inspectorate on suspected transgressions.





in project preparation and will review submitted projects against eligibility criteria, inclusive of the outreach and communication activities in line with the Project SEP.

The Project Operations Manual (POM) shall include detailed guidelines on eligibility criteria and application procedure for LSGUs, homeowners, and to the extent applicable ESCOs. The POM will also outline implementation arrangements including operating, fiduciary and M&E procedures, staffing, responsibilities, resources, etc. to the Banks satisfaction. In addition, **Project Operations Manual (POM)** is being drafted as part of project preparation and rely upon – and will refer to – the national and local rulebooks which govern the organization of public calls under MoME’s current pilot program as the approach for grant allocation via municipalities will continue under the project. The CFU will be responsible for fiduciary issues like financial management and support to LSGs to implement procurements. The main task of the CFU will be to raise procurement capacities of LSGs and guide the procurement of projects under the Loan.

Given that the Project will be implemented at the national level, support and involvement of the relevant LSGs will be necessary. With proper training on ESMF requirements and with the support of the PIU, these staff in LSGs will be in charge of gathering reports from the Contractors.

All municipalities will have their employee(s) who will be in charge of managing the projects financed by the loan. Each beneficiary municipality will first sign the Agreement with the MoME where mutual responsibility and obligations are defined, and obligations of the MoME and municipality in the execution of the during project SURCE. Also, MoME has prepared a rulebook on the distribution of funds attached to the Agreement. Agreement will be defined in a Project Operational Manual (POM).

In the initial phase, the clean energy and energy efficiency financing mechanism established through the project will require municipalities to play a pivotal role.

Municipalities will launch two public calls:

- one for local companies (e.g., construction companies, ESCOs) capable of implementing clean energy and energy efficiency improvements, and
- one for homeowners interested in undertaking clean energy and energy efficiency investments.

Also, municipalities will process homeowner applications and, in later phase, when (and if ) the mechanism is established, apply for partially repayable grants from the EEA that will be used to pay the local companies for their services (together with grants offered by the municipalities directly). The two financing components (partially repayable grants from the EEA and grants from the municipalities) will cover a significant share of the total investment amount, up to 100 percent for households with the lowest income levels. In 2019, across Serbia 89 percent of households belonging to the lowest income quintile lived in SFHs, compared to only 47 percent of households in the highest income quintile.<sup>52</sup>

The public call under the project will include the following design elements:

- Eligible investments. As described above, the project will prioritize “light” and “standard” building renovation packages, because of their higher levels of cost-effectiveness.

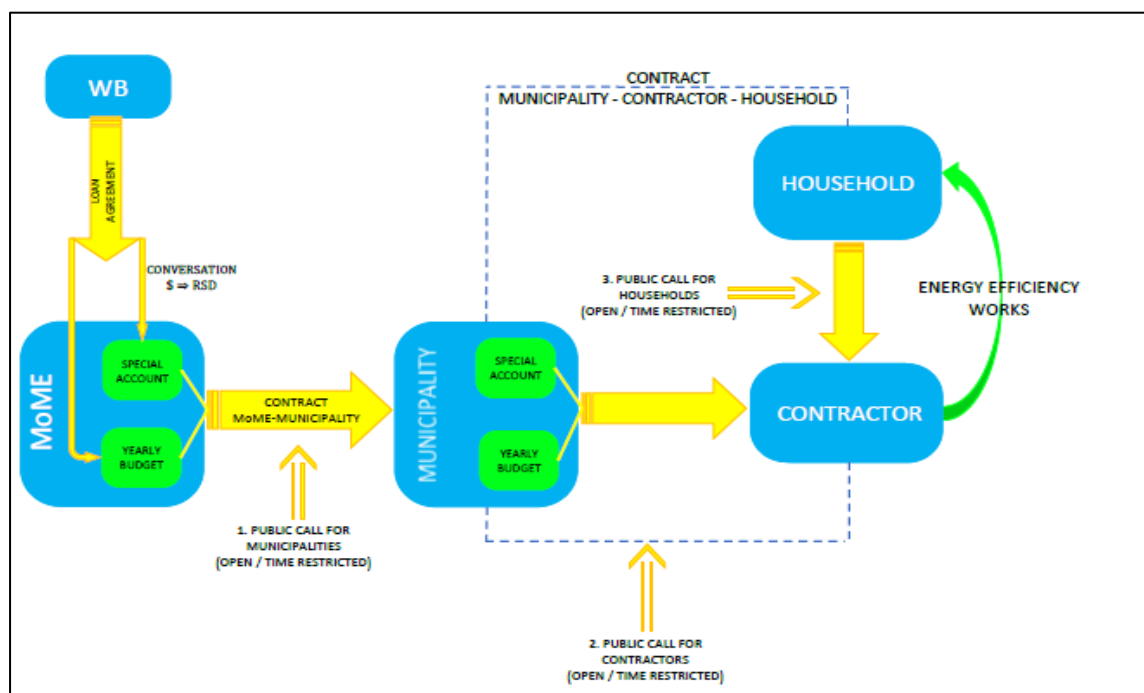
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<sup>52</sup> Source: EU-SILC

- Financing structure. The project will assess the possibility to offer different grant shares depending on the type of intervention being financed (e.g., the replacement of coal boilers could be prioritized) and, potentially, the beneficiary household's income.
- Solidarity mechanism for poorer municipalities. The project will also seek to ensure that poorer municipalities (where energy vulnerable households are likely to be overrepresented) are included in the program, e.g., by providing special assistance and more favourable conditions for their participation, as well as TA to support their participation.
- World Bank E&S and fiduciary requirements. The public call will be required to meet all E&S and fiduciary requirements and will be cleared by the World Bank.

The financing channels envisioned by the project, with different actors channelling grants and processing household applications are shown in Figure 4.

**FIGURE 4 FLOW OF FUNDS / CONTRACTING / PUBLIC CALL**



MoME/PIU will be responsible for the Project monitoring and evaluation (M&E) according to the Monitoring and Evaluation scheme to be developed to ensure that the project is implemented in accordance with the objectives and expected results. The MME/PIU will monitor, assess, and report the implementation progress and results based on the M&E framework.

Since single-family homes (SFH) are mostly similar in size and nature, screening will not be done. For the first ten SFH subprojects, ESMP Checklists will require prior review and Bank approval. For interventions on the whole buildings, whether they are less or above five floors, every ESMP will be subject to prior Bank approval.

Prior to the preparation of technical documentation, it is necessary to resolve property rights for the subject plot and the facility in question and provide proof of this, i.e., submit a copy of the real estate folio to the MoME. The MoME will not be able to finance illegally constructed buildings, but this issue is still under discussion

During the works, contractors will work according to the full ESMP or ESMP Checklists and Monitoring Procedures (Checklists). The Contractor is obliged to confirm that:

- ESMP and ESMP Checklists conditions have been included in the bid price,
- The Contractor has a qualified and experienced person in a team who will be responsible for the environmental compliance requirements of the ESMP. For this part of the work on the construction site, the presence of a responsible person is mandatory on a daily basis,
- The Contractor and its subcontractors will comply with Republic of Serbia national laws, EU standards and Lender requirements,
- The Contractor is required to hire an OHS coordinator for the implementation phase (one or more, depending on the type of sub-project and number of assigned Contracts).

The Contractor should identify potential risks before the commencement of works. Provisions for emergency responses are to be included in the Construction Site Safety Plan, which shall include the nomination of a person who will be immediately contacted if an accident occurs. In case of any accidents or environmental threats, there will be immediate reporting about these events. The Contractor shall inform the project manager and local authorities immediately after the accident. The Site Safety Plan shall be submitted to the Project Supervision Consultant for approval one week before the commencement of the works.

The Contractor will be responsible for the implementation of environmental mitigation measures during construction and shall employ an environmental specialist who will supervise the implementation of the Contractor's environmental responsibilities. He will coordinate between the Contractor, PIU and the LSGs, and will address any complaints during project implementation in cooperation with PIU.

The Contractor will prepare, as quarterly progress reports, the reports for PIU, which would present all the mitigation measures and measures for environmental protection along with the anticipated activities for monitoring, which were performed during the reporting period. The Contractor will take care of the quality of the environment, in accordance with Mitigation Plan and Monitoring Plan, and will provide reports to PIU.

The cost for ESMF implementation cannot be estimated as the type and number of projects to be submitted under Component 1 is currently unknown. The cost of ESMF implementation will be integrated into the total Project cost.

The activities for implementation of mitigation and management tools are shown in the following table:

*Table 5: implementation activities*

	Activity	Responsibility/ Primary	Responsibility/ secondary	Cost estimate
1	Capacity building of the PIU (within the MoME)  (Hiring of environmental and social specialist prior to the start of works).	WB Staff  External Environmental and Social Specialist	MoME/PIU	300.00 - 400 USA per day/10 days per month/4 years  (cca 144 000.00 – 192 000.00 USA)
2	Incorporation of E&S requirements and guidelines	MoME/EEA/PIU	MoME/PIU	n/a
3	Preparation, internal approval, Clearance and approval of the Project Operational Manual	MoME/EEA/PIU	MoME/EEA/PIU Environmental and Social Specialist WB final approval	n/a
4	Incorporation of the E&S requirements and guidelines into the tender documents	MoME/EEA/PIU/CFU	MoME/EEA/PIU Procurement specialist	n/a
5	Stakeholder Engagement Plan Implementation including project-level GM	MoME/EEA/PIU/LSG	Environmental and Social Specialist	n/a
6	Implementing the LMP including GM for workers	MoMEEEA//PIU/LSG	Environmental and Social Specialist	n/a

7	Establishing GM	MoME/EEA/PIU	LSGs	No additional costs
8	Environmental and Social Screening of Subprojects	MoME/EEA/PIU	MoME/EEA/PIU Environmental and Social Specialist	n/a
9	ESMP Checklist and Social Screening completion for Subprojects	MoME/EEA/PIU		n/a
10	Environmental and Social Screening Report	MoME/EEA/PIU Specialist and Env. Social Specialist	WB	n/a
11	Development of ESA Checklist, Environmental Monitoring Procedures	MoME/EEA/PIU	MoME/EEA/PIU Environmental and Social Specialist	7000.00 USA/Unit costs for ESMP, ESMP Checklist – 400,00 USD/Unit cost E&S Audit – 600.00 USD
12	Quality control and submission of ESS instruments to the WB	MoME/EEA/PIU	Environmental and Social Specialist	n/a
13	Review and approval of ESS Instruments	WB E&S specialist	Regional ESSA	n/a
14	Implementation of ESMP (Checklists)	Contractor	Subcontractors	No additional costs

15	Monitoring and reporting on ESMP implementation	MoME/EEA/PIU	Environmental and Social Specialist	No additional cost
16	Reporting to the Bank on the environmental and social performance of the project as part of the established progress reporting procedure	MoME/EEA/PIU	Environmental and Social Specialist	n/a
17	Supervision of ESMP	MoME/EEA/PIU	GRM Environmental and Social Specialist	No additional cost
18	Evaluation of the ESMF implementation prior to project closure	MoME/EEA/PIU	Consultants	No additional costs.

Environmental, Social Management Plans (ESMP) will identify feasible and cost-effective measures that may reduce potentially significant adverse environmental and social impacts to acceptable levels. The ESMP divide the project cycle into three phases: construction, operation, and decommissioning. For each phase, the PIU identifies any significant environmental and social impacts. For each impact, mitigation measures are to be identified and listed. Estimates are made of the cost of mitigation actions broken down by estimates for installation (investment cost) and operation (recurrent cost). To keep track of the requirements, responsibilities, and costs for monitoring the implementation of ESMP Checklists and Monitoring Plan (Checklists) will be applied.

### 10.1 Implementation Support

The environmental and social risks of the Project are classified as Moderate, taking into account the impact and predictable nature of the interventions, and the experience of the MoME in managing similar activities. For the purpose of implementation of the World Bank Environmental & Social requirements and their related measures qualified Environmental and Social Expert(s) needs to be engaged as a member of PIU. S/he should ensure that environmental and social considerations are integrated into subprojects designs and



implementation and that actions taken fully comply with the Bank's Environmental and Social Framework (ESF) policies and standards, including communication with stakeholders and the grievance mechanism.

The Environmental and Social Expert will work closely with the MoME and other relevant stakeholders to ensure that the Project and selected subprojects are managed efficiently and in compliance with the approved overall objective, the approved Project's Environmental and Social Management Framework (ESMF), the Project's Legal Agreements and Financing Agreements, and the Project Operating Manual (POM).

Environmental and Social Expert, always aligned with the Project Implementation Unit Manager (Project Manager) and in collaboration with the other Project staff in Local Self Governments shall interact, liaise and cooperate with other Project Officers, shall interact and liaise with other relevant ministries and stakeholders.

There is currently, no information on whether the MoME will hire an IT specialist, to manage/administer the project platform. Also, project management at the local level will be defined before the start of the project.

An Environmental and Social Expert will be engaged through the Project, and will be responsible for screening sub-projects/grants selected for financing to ensure:

- Compliance with the World Bank Group (IFC) exclusion list,
- That no sub-projects with major impacts of a Category "High risk" or "Substantial risk" type are supported,
- That sub-projects/grants will not necessitate involuntary land acquisition or any form of resettlement,
- No World Bank ESS other than ESS1, ESS2, ESS3, ESS4 and ESS10 are relevant to proposed sub-project. Any activities corresponding to the World Bank Category 2 ("Moderate Risk") Projects will be required to have an Environmental and Social Management Plan (ESMP) in place prior to approval that would identify potential environmental impacts and provide adequate mitigation measures.

Also, the obligations of the specialists will include oversight of environmental and social issues within the Project i.e overall implementation of ESF Policies and ESMF as well as E&S management of the project, including, but not limited to: preparation and quality of ESAs, disclosure and organization of meaningful public consultations of ESAs, supervision of ESAs implementation and assessing compliance, prescribing corrective measures, reporting to WB, engaging other experts as needed and otherwise supporting and advising other PIU members in the area of E&S. Environmental and Social Assessments (ESA) will be developed for each specific site.

In addition, the Environmental and Social Expert will be responsible to ensure that any Technical Assistance (TA) outputs supported under the Project are compliant to the ESF.

Additional hiring of either full-time or part-time consultants may occur during the project implementation, which at this time cannot be determined. All additional staffing would be agreed upon by the PIU and the Bank team and supported by the Project.

## 10.2 Capacity Building

Component 2 will cover the incremental costs (staff, equipment, operating costs etc.) of a PIU which will be established under the MoME/EEA. PIU staff will include at least a head of PIU, project manager, project

officers, M&E officer, procurement and financial management officers, an ESE and other experts required by the Project.

Capacity building measures to PIU as, may be necessary in environmental and social safeguards and annual program planning and can be achieved by:

- Training program for the existing staff.
- Technical Assistance: knowledge sharing and on-the-job training and mentorship.

PIU will prepare an annual training plan which will be agreed with the Bank. It will include information on the title of training, institution that shall provide it, timeline, cost, number, position and names of relevant people to be trained. The training plan shall be updated in agreement with the Bank through the duration of the Project at least annually or as required to reflect the actual project implementation needs.

A key concept in training programs is to provide training through a combination of formal classroom training and practical on-the job sessions. Technical assistance should be made available to provide training, guidance and advisory support in all aspects of works implementation in order that the key players (environmental as well as technical team) become fully conversant with, and capable of carrying out their respective duties. Training for the various categories of staff needs to be carried out with varying durations and through different approaches, such as on-site and classroom training, workshops, seminars and practical on-the-job training.

Intensive refresher courses for periods of one to three days are useful for addressing specific problem areas. Such workshops are organized to supplement on-the-job training for some of the technical and administrative staff. Short workshop can either be arranged through the provision of technical assistance, an in-house training facility, or by contracting other training institutions within the country.

Seminars will be useful as a means for disseminating data and information, in particular for senior government officials at central and local level, as well as representatives of other government agencies. Seminars can be an effective platform for policy makers, planners and administrators to review the importance of an Environmental and Social Management System. Equally important, this type of seminar is important in terms of creating awareness of the potential of utilizing new organizational arrangements, work methods, and involvement of the private sector, beyond the boundaries of a particular program.

## 11 ESMF Implementation Budget

The estimated costs of the environmental measures that will be integrated into the project cannot be estimated due to a lack of data. The table below shows the unit cost data.

Table 6: Estimated costs of the project's environmental measures

No	Activity/ measure	quantity	Unit Cost (USD)	Total Cost (USD)
1	Preparation of ESMPs	10	7 000.00	70 000.00
2	Preparation of ESMP-checklists	20	1 500.00	30 000.00
3	E&S Monitoring activities	1	10 000.00	10 000.00
4	Training sessions	10	12 000.00 per training	120 000.00
5	ESMF implementation Evaluation	1	10 000,00	10 000.00
<b>TOTAL COST:</b>				<b>240 000.00</b>

It is the ESCOs obligation to include the costs of implementation of environmental mitigation measures in his overall costs. The ESCO will be required to provide a short statement that confirms that:

- All costs of the implementation of environmental mitigation measures are included in the total costs;
- There is a qualified and experienced person on the ESCO's team who will be responsible for coordinating the Environmental Protection Plan, H&S and Social issues;
- The Contractor and its subcontractors will comply with Republic of Serbia national laws, EU standards and Lender requirements.

Time of employees in Local Self Governments engaged in support of the SOURCE project is not covered by the budget.

## 12 Project Grievance management

The Project has adopted a stand-alone Stakeholder Engagement Plan (SEP)

Establishment of the Project level Grievance Mechanism (GM) shall be the responsibility of the MoME/EEA i.e., the PIU. Given the specific decentralized and geographically dispersed activities it has been decided that the GM would best serve the stakeholders interest through a Central Feedback Desk (CFD) administered by

the PIU and sub-project specific Local Grievance Admission Desks (LGAD) (collectively referred to as Grievance Mechanism (GM)) to be established at the LSGU levels.

The CFD shall be responsible for overall grievance administration. The LGAD shall serve as local admission point for uptake of grievances and acknowledgment of grievance receipt through local avenues (in the value chain labelled as Step 1, Step 2 and Step 3).

The system and requirements (including staffing) for the grievance redress chain of action – from registration, sorting and processing, and acknowledgement and follow-up, to verification and action, and finally feedback are embodied in this GM. As a part of the GM outreach campaigns, MCTI will make sure that the relevant staff are fully trained and has relevant information and expertise to provide phone consultations and receive feedback. The project will utilize the existing system (hotline, online, written and phone complaints channels) to ensure all project-related information is disseminated and complaints and responses are disaggregated and reported.

Initially, GM would be operated manually, however, development of an IT based system is proposed to manage the entire GM. Quarterly reports in the form of Summary of complaints, types, actions taken and progress made in terms of resolving of pending issues will be submitted for the review to the Head of PIU. Once all possible avenues of redress have been proposed and if the complainant is still not satisfied then the GM would advise of their right to legal recourse.

The GM shall serve as both Project level information centre and grievance mechanism, available to those affected by implementation of all Project sub-components and be applicable to all Project activities and relevant to all local communities affected by project activities. The GM shall be responsible for receiving and responding to grievances and comments of the following four groups:

- A person/legal entity directly affected by the project, potential beneficiaries of the Project,
- Other interested parties with interest in the project, and
- Residents/communities interested in and/or affected by project activities.

The Central Feedback Desk (CFD) shall be effective immediately after appraisal of the Project, in order to manage and appropriately answer complaints during its different phases while the LGAD shall be effective upon decision on each new Sub-Project has been taken. In addition to the GM, legal remedies available under the national legislation are also available (courts, inspections, administrative authorities etc.).

The MoME through the EEA and PIU will cooperate with LSGUs in joint efforts to establishing functioning GM and informing stakeholders about the GM role and function, the contact persons, admission channels, and the procedures to submit a complaint in the affected areas. Information on the GM will be available:

- On the website of the MoME (<http://www.mre.gov.rs/>)
- On the notice boards and websites of LSGU
- Through social media campaigns.
- Information window on Civic platform which will be created with the support of WB

Risk from Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) and Sexual Exploitation and Abuse/Sexual Harassment risk is negligible because of (i) the expected local employment and (ii) expected low number of workers on construction sites. The GM will, on a precautionary base, be enabled to recognize

SEA/SH grievances. However, in the very unlikely event of occurrence, such grievances will be managed separately by a trained expert but will use the same process value chain and timeframes. The necessary training for the appointed staff member who is to deal with such grievances will be provided.

## 12.1 Raising grievances

Effective grievance administration strongly relies on a set fundamental principle designed to promote the fairness of the process and its outcomes. Any grievance can be brought to the attention of the CFD or LGD anonymously, personally or by telephone or in writing by filling in the grievance form by phone, e-mail, post, fax or personal delivery to the address of the details on entry points to LGD shall be publicized and shall be part of the awareness building once the LSGU participating in the project are known.

Until LGD becomes operational Stakeholders are encouraged to send all grievances, concerns and queries to the contact points below:

*Table 7: MoME Grievance contact details.*

Description	Contact details
Implementing agency:	Ministry of Mining and Energy
Main contact:	During the transitional period until the Focal Point is appointed Grievances shall be referred to the Energy Efficient Administration
Address:	Nemanjina 22-26, 11000 Beograd
E-mail:	
Telephone:	+ 381 11 3346 755

## 12.2 Grievance administration

Any grievance shall follow the path of the following mandatory steps: receive, assess and assign, acknowledge, investigate, respond, follow up and close out.

Once logged the GM shall conduct a rapid assessment to verify the nature of grievances and determine on the severity. Within 5 days from logging, it will acknowledge that the case is registered and provide the complainant with the basic next step information. It will then investigate by trying to understand the issue from the perspective of the complainant and understand what action he/she requires. The GM will investigate by looking into the facts and circumstances interview all parties involved and confer with relevant stakeholders. Once investigated, and depending on the severity and type of grievance, the provisional

decision shall be discussed with the complainant in the timeframe of 10 days after logging the grievance. Unilaterally announcement shall be an exception. The final agreement should be specific and issued and grievant informed about the final decision not later than 30 days after the logging of the grievance. Closing out the grievance occurs after the implementation of the resolution has been verified. Even when an agreement is not reached, or the grievance was rejected it is important to document the result, actions and effort put into the resolution, close out the case. If the grievance could not be resolved in amicable endeavour, the grievant can resort to the formal judicial procedures, as made available under the Serbian national legal framework. Logging a grievance with the GM does not preclude or prevent seeking resolution from an official authority, judicial or other at any time (including during the grievance process) provided by the Serbian legal framework.

In case of anonymous grievance, after acknowledgment of the grievance within three days from logging, the CGD will investigate the grievance and within 30 days from logging the grievance, issue final decision that will be disclosed on the website of the MoME. Closing out the grievance occurs after the implementation of the resolution has been verified.

The CGD shall keep a grievance register log that will have all necessary elements to disaggregate the grievance by gender of the person logging it as well as by type of grievance. The personal data of each Grievant shall be protected under the Data Protection Law. Each grievance will be recorded in the register with the following information at minimum:

- description of grievance,
- date of receipt acknowledgement returned to the complainant,
- description of actions taken (investigation, corrective measures),
- date of resolution / provision of feedback to the complainant,
- verification of implementation, and
- closure.

In case a grievance cannot be resolved in manner satisfactory to the complainant he/she has the right for an appeal. In such cases the resolution of the grievance will be reviewed by a commission at the level of the implementing agency. The commission will consist of three appointed members that are not directly involved in Project implementation. The commission will acknowledge the receipt of the appeal within 3 days and issue the final decision within 5 days of the receipt of the appeal. The decision of the commission will entail a detailed explanation of the grievance resolution process as well as the explanation of the final decision and guidance on how to proceed if the outcome is still not satisfactory for the complainant.

### 12.3 Grievance log

The role of the GM, in addition to addressing grievances, shall be to keep and store comments/grievances received and keep the Central grievance log administered by the PIU.

The PIU will maintain grievance log to ensure that each complaint has an individual reference number and is appropriately tracked, and recorded actions are completed. When receiving feedback, including grievances, the following is defined:

- Type,
- Category,

- Deadline for resolving the appeal, and
- Agreed action plan.

Each complaint should be assigned with an individual reference number and is appropriately tracked and recorded actions are completed.

The log should contain the following information:

- Name of the grievant, location and details of the grievance,
- Date of submission,
- Date when the Grievance Log was uploaded onto the project database,
- Details of corrective action proposed,
- Date when the proposed corrective action was sent to the complainant (if appropriate),
- Date when the grievance was closed out,
- Date when the response was sent to the grievant.



## 12.4 Grievance admission and process value chain

Table 8: Grievance flowchart

STEPS	ACTIONS	DAYS
<b>STEP 1: Submission of grievances</b>	Verbal, in writing via suggestion/complaint box, through telephone hotline/mobile, mail, SMS, social media (WhatsApp, Viber, Facebook etc.), email, website, and the LGD. The GM will also allow anonymous grievances to be raised and addressed. The site specific SEPs shall include details of Grievance entry points and focal points.	
<b>STEP 2: Recording of grievance</b>	Classifying the grievances based on the typology of complaints and the complainants in order to provide more efficient response and providing the initial response immediately if possible. The typology will be based on the characteristics of the complainant (e.g., vulnerable groups, persons with disabilities, people with language barriers, etc.) and also the nature of the complaint	0
<b>STEP 3: Acknowledgement of grievance</b>	Acknowledging of grievance via the same communication channel the Grievance was received	5
<b>STEP 4: Investigate and discuss with Complainant</b>	Gathering information about the grievance to determine its eligibility and to generate a clear picture of the circumstances surrounding the issue under consideration. This process normally includes site visits, document reviews, a meeting with the GM user (if known and willing to engage) and meetings with individuals and/ or entities who can assist with resolving the issue. Reasonable efforts will be taken to address the complaint. If the grievance is vague and not clear enough, the GM is obliged to help and provide counsel and even help in redrafting the submission, in order for the grievance/ to become clear, for purposes of an informed decision by the GM, in the best interests of persons affected by the Project. If the GM is not able to address the issues raised by immediate corrective action, a long-term corrective action will be identified. The decision shall give a clear assessment on the grievance/complaint, clear ruling and recommendations for fair remedy and propose measures to modify future conduct that caused the grievance as well as proposed measures to compensate if mitigation measures cannot remedy the harm or injury. The decision shall be in writing and shall be delivered to the person who filed the grievance as well as to any other person or entity to which the recommendation and measures shall apply or is under obligation by Law. The person who filed the grievance can express his/her personal satisfaction to the outcome of the grievance	10

	resolution procedure. Unilateral decision shall be an exception and resolution shall be sought through a dialogue between the GM and the Grievant	
STEP 5: Communication of the decision		30
STEP 6: Complainant Response	<p>Either grievance closure or taking further steps/second tier commission if the grievance remains open. Before any closure of complaints/grievances, the GM shall:</p> <p>Confirm that the required GM actions have been enforced, that the grievance resolution process has been followed and that a fair decision has been made;</p> <p>Organize meeting(s) within 10 days of being contacted by the concerned parties to discuss how to resolve the issue, if not previously conducted;</p> <p>Recommend the final decision on the mitigation measure to the complainant/aggrieved party;</p> <p>Implement the agreed mitigation measure;</p> <p>Update the Grievance Report Form and have it signed by the complainant/aggrieved party;</p> <p>Sign the Grievance Report Form and log the updated information of the grievance into the Grievance Registry; and</p> <p>Send copies of relevant documents (e.g. completed Grievance Report Form, mitigation measure, minutes of the meetings, if appropriate) to the concerned parties.</p>	

The awareness raising campaign and civic engagement platform will have details on each Grievance admission points, grievance administration processes, timelines, investigation activities and closure conditions including the 2nd tier resolution instance. Further details on local access details LGD are to be known and disseminated at later stages and shall be part of the awareness raising campaign.

## 12.5 Monitoring and reporting on Grievances

The CFD will be responsible for:

- ✓ Regular acquisition of data, as soon as the grievance is received through LGD serving as local admission points, on the number, substance and status of complaints and uploading them into the single regional database

- ✓ Maintaining the grievance logs on the complaints received at the regional and local level
- ✓ Monitoring outstanding issues and proposing measures to resolve them
- ✓ Disclosing quarterly reports on GM mechanisms:
  - On the website of the MoME (<http://www.mre.gov.rs/>)
  - On the notice boards and websites of LGSU
  - Through social media campaigns.
- ✓ Summarizing and analysing the qualitative data received from the local Grievance Admission points on the number, substance and status of complaints and uploading them into the single project database.

The regular social monitoring reports to the WB shall be submitted through the MoME, which shall include a section related to GM which provides updated information on the following:

- ✓ Status of GM implementation (procedures, training, public awareness campaigns, budgeting etc.).
- ✓ Qualitative data on number of received grievances (applications, suggestions, complaints, requests, positive feedback) and number of resolved grievances.
- ✓ Quantitative data on the type of grievances and responses, issues provided and grievances that remain unresolved.
- ✓ Level of satisfaction by the measures (response) taken.
- ✓ Any corrective measures taken.

## 12.6 World Bank Grievance Redress System

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond.

For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>.

For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org)

## 13 Stakeholder Engagement

Operations and activities for which the World Bank's Investment Project Financing (IPF) is sought after October 1, 2018, fall under the application of the Environmental and Social Framework (ESF)<sup>53</sup>. The ESF comprise, inter alia, the 10 Environmental and Social Standards which set out mandatory requirements for the Borrower and the Project. Under the ESS10, a Stakeholder Engagement Plan (SEP) should be developed prior to Project appraisal that sets out the principles and procedures for stakeholder engagement in a manner that is consistent with ESS10.

For SURCE project awareness raising and behaviour change is seen as central to the project PDO, hence the risk rating is kept as Moderate to highlight the importance of implementing an effective stakeholder consultation and campaign through the project.

To this end a standalone Stakeholder Engagement Plan (SEP) has been prepared as part of the ESF instruments, to outline the target groups and methods of stakeholder engagement and the responsibilities in the implementation of stakeholder engagement activities. The intention of the SEP is to activate the engagement of stakeholders in a timely manner during project preparation and implementation. Specifically, SEP serves the following purposes: (i) stakeholder identification and analysis; (ii) planning engagement modalities and effective communication tools for consultations and disclosure; (iii) defining role and responsibilities of different actors in implementing the SEP; (iv) defining the Project's Grievance Mechanism (GM); (v) providing feedback to stakeholders; (vi) monitoring and reporting of the SEP. Project-related SEP serves as a guideline for the preparation of specific municipal SE strategies which will entail provisions for stakeholder engagement, public disclosure and grievance mechanism – to ensure public concerns are captured.

The stakeholder engagement will be integrated into project's environmental and social performance and project design and implementation. The adequacy of the engagement methods shall be part of the Monitoring & Evaluation (M&E) segment of the Project.

For the purpose of effective and tailored engagement, stakeholders of the proposed project are divided into "affected parties" and other interested parties. These 2 groups are further subclassified into a) citizens/citizens groups (including informal community groups, civil society organisations (CSOs) and non-governmental organisations (NGO's), and b) government/state actors and other institutions whereas "vulnerable persons/ groups" always fall under category of citizens/ citizens groups.

The project affected parties belonging to citizen/citizens groups will be households receiving grants for the implementation of clean energy and energy efficiency measures. This group also includes vulnerable households to which special attention will be paid during the engagement and consultation process. This regard in the SEP comprehensive engagement strategy inclusive of a dedicated civic platform has been adopted with a specific target to reach the underserved part of the population.

The project affected parties belonging to government and government groups are:

<sup>53</sup> The ESF is accessible at - <https://www.worldbank.org/en/projects-operations/environmental-and-social-framework>. Lates accessed on December 10, 2021

- **Ministry of Energy and Mining**, will benefit from the increased capacity through additional technical and advisory hires
- **Ministry of Finance**, Borrower to the Loan Agreement,
- **Energy Efficiency Administration (EEA)**, will benefit from the increased capacity through additional technical and advisory hires and
- **Local Municipalities**, will benefit from increased capacity through administration and implementation of energy efficiency and clean energy grants
- **Households** (including low income and women lead) receiving partial grants for the implementation of clean energy and energy efficiency measures

Other Interested Parties constitute individuals, groups, entities that may not experience direct impacts from the project but who consider or perceive their interests as being affected by the project and/or who could affect the project and the process of its implementation in some way. Accordingly, there are a number of other stakeholders who have a stake, have expressed, or may express interest due to a variety of reasons. They include project implementing agencies, project partners, political institutions, service providers, host communities, civil society organizations, NGOs, religious institutions, political authorities, academic institutions, and project beneficiaries.

Also, Construction companies, equipment suppliers and ESCOs will benefit from the enlarged clean energy and energy efficiency markets and the subsequent increased demand for their products and services. Commercial banks.

Identified stakeholder groups and their level of influence have been cross-referenced with the interest they may have in the project to determine the type and frequency of engagement activities necessary for each group.

The current MoME pilot program integrates a feedback mechanism whereby citizens can submit complaints or requests for additional information to the MoME by email or phone. MoME responds to all complaints and requests. To facilitate overall Stakeholder engagement activities to bridge COVID-19 impediments to face to face meetings the project will introduce an online civic engagement tool as supporting mechanism for engaging citizens and project stakeholders, this tool will facilitate online two-way communication with stakeholders and citizens, thus improving accountability and transparency, while enabling design and implementation adjustments thanks to the feedback received. The online civic engagement tool is proposed to enhance the mechanism for collecting citizen's feedback, and broaden the reach of the process, e.g. by the use of smartphone supported applications. The design of the tools currently under advisement of the MoME and the WB Team. Nevertheless, the final layout will display three key windows: Information sharing, Stakeholder/ Engagement and Monitoring Window.

The Stakeholder engagement, coupled with Citizens Engagement, will be an upgrade of the outreach activities already under way in the existing government program financing residential energy efficiency (EE) investments.

Outreach and engagement of vulnerable groups

As mentioned earlier, the Project design will place a specific emphasis on the vulnerable households. The feasibility of direct targeting of the vulnerable population groups continues to be explored. Documentation that certifies that a person is a recipient of social assistance (SA) or eligible under the Energy Vulnerable Program (EVP) is available at local level and could be included in the application process. The project will conduct a survey among HHs eligible to SA/EVP to confirm the share of homeowners among them as well as their level of interest in participating in SURCE. On the basis of the survey findings, the following enhancement of the project could be considered: on the basis of their own assessment of need, LSGs can put forward buildings (stand alone or multi-apartment buildings) which house vulnerable HHs and these socially oriented buildings could be eligible for additional support under the SURCE project.

### 13.1 Project Complementary Activities

The use of affordability diagnostics as well as of household attitudes and knowledge, including among poorer and vulnerable households, will be critical for identifying barriers in transitioning towards cleaner and more efficient energy, and improve the program targeting as well as communication to its beneficiaries. In addition to the targeting embedded in the design, the project will also assess the possibility to put in place specific instruments (e.g., larger grant shares) to enable investments by the most vulnerable household. The Project will support the effort in creation of a Citizens Engagement platform to facilitate information sharing and stakeholder engagement in the situation of COVID -19.

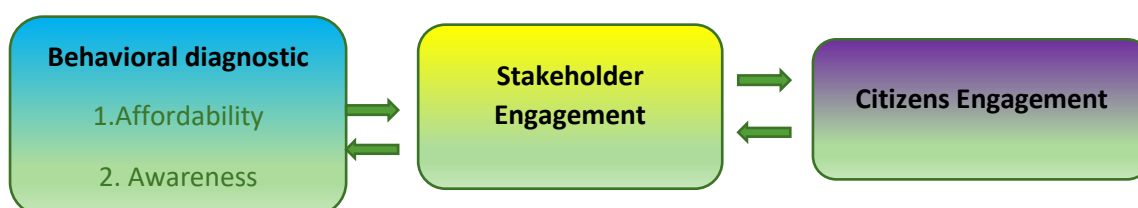
**During project preparation, a survey on air quality and energy efficiency will be conducted in several Western Balkans countries, including Serbia,** to probe knowledge and attitudes towards energy efficiency and air quality, current practices regarding energy consumption and efficiency in the household, financial ability to upgrade the energy sources in the household, knowledge of subsidies and support programs available, and the most effective communication channels to reach residents. The survey will also test the effectiveness of possible messages among respondents. The gender disaggregated findings from the survey will enable the Project to develop a set of actions aimed at addressing the gender gap in knowledge and awareness of clean energy and energy efficiency, i.e., the design of an awareness campaign with dedicated messaging targeted at women, including recommendations on energy investments and behaviour changes that help save energy.

Women have strong incentives and the potential to change behaviours toward greater energy efficiency, but often don't know how to be more engaged in such efforts.

To measure the impact of these actions, the Project will monitor the following quantitative intermediate result indicator - Share of female headed households that implement energy efficiency measures (boiler, window replacement, thermal insulation) in their homes.

The interaction of complementary activities is presented in the diagram below:

Diagram 2: Interaction between complementary activities



### 13.2 Public Consultations with project stakeholders

ESF and project documents, including this ESMF, LMP, SEP and ESCP will be disclosed electronically on the websites of the MoEM and Local Self Governments. The ESMF, LMP, SEP and ESCP documents will be available in Serbian and English, while other project documents, public calls, decisions, instructions and guidance will be available only in Serbian.

- the website of the MoEM (<http://www.mre.gov.rs/>)
- the websites of Local Self Governments who will be participating in the energy efficiency grant schemes,
- through social media campaigns,
- through the civic engagement platform with program announcements and information materials, a centralized email address for submitting feedback and queries,

As required by WB Environmental and Social Standard 10 (ESS10) – Stakeholder Engagement and Information disclosure, during preparation of ESMF, ESCP, SEP and LMP documents the Borrower carried out consultations with relevant stakeholders.

Complete report from the public consultations held on February 2, 2022. is attached in Annex 12 of this ESMF document.



## 14 Conclusion

The Project has the potential to reduce energy poverty particularly to the most vulnerable of Serbia's population living in residential buildings with low energy performance. The link between energy supply, energy savings, social development and energy security is the one of the country priorities. In this context, this Project with the thermal insulation of the buildings, the replacement of windows and exterior doors in the residential buildings, replacement of coal and biomass-fired boilers with cleaner, more efficient heating technology, and installation of solar collectors for sanitary hot water and rooftop solar photovoltaics (PV) will have positive effect on reducing the energy poverty within the vulnerable population, contribute to reduction of CO2 emission and significantly contribute to the mitigation of the seasonality and exacerbation of air pollution due to winter heating.

The high and substantial adverse risks of the project will be managed by excluding these following the screening tool provided in the ESMF while risk of those activities eligible to be financed under the project will be mitigated and managed through the development of site specific environmental and social instruments (EMSP and ESMP checklist namely) following the guidance provided in this ESMF.

The costs of the environmental measures, totalling USD 240 000 are spread over the five (5) years of the Financing of the Serbia Scaling Up Residential Clean Energy (SURCE) project.

## 15 Reference documents

- The World Bank Environmental and Social Framework, 2017 International Bank for Reconstruction and Development/The World Bank<sup>54</sup>
- WBG EHS Guidelines<sup>55</sup>
- Concept note on a proposed loan in the amount of 50 US\$M to Republic of Serbia for Serbia Residential Clean Energy and Energy Efficiency Scale-Up Project (P176770)
- Local Green Infrastructure Annex
- Concept Environmental and Social Review Summary Concept Stage (ESRS Concept Stage) Date Prepared/Updated: 10/21/2021 | Report No: ESRSC02382
- SOFIA DECLARATION ON THE GREEN AGENDA FOR THE WESTERN BALKANS
- The typology of the residential building stock in Serbia and modelling its low-carbon transformation Support for Low-Emission Development in South Eastern Europe (SLED) (December 2015)
- Baseline Assessment and Gap analysis of climate change framework, EIA and SEA requirements, with a particular focus on road infrastructure (FOCUS REPOR, Prepared by Danijela Bozanic, June 2020)
- Annual report questions chapter 15 answers PG15 FINAL (MoME)
- CLIMATE CHANGE IN THE WESTERN BALKAN REGION, Regional climate analysis and existing climate change information, Project ClimaProof – Deliverable 1.1.4

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<sup>54</sup> <https://documents1.worldbank.org/curated/en/383011492423734099/pdf/The-World-Bank-Environmental-and-Social-Framework.pdf>

<sup>55</sup> [https://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/sustainability-at-ifc/policies-standards/ehs-guidelin](https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelin)

## ANNEX 1: EXCLUSION LIST OF PROJECTS / ACTIVITIES

The IFC Exclusion List defines the types of projects that IFC does not finance. IFC does not finance the following projects:

Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone depleting substances, PCB's, wildlife or products regulated under CITES.

- Production or trade in weapons and munitions.
- Production or trade in alcoholic beverages (excluding beer and wine).
- Production or trade in tobacco.
- Gambling, casinos and equivalent enterprises.
- Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where IFC considers the radioactive source to be trivial and/or adequately shielded.
- Production or trade in unbounded asbestos fibres. This does not apply to purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.
- A reasonableness test will be applied when the activities of the project company would have a significant development impact, but circumstances of the country require adjustment to the Exclusion List.
- All financial intermediaries (FIs), except those engaged in activities specified below\*, must apply the following exclusions, in addition to IFC's Exclusion List:
- Production or activities involving harmful or exploitative forms of forced labour /harmful child labour.
- Production or trade in wood or other forestry products other than from sustainably managed forests.
- \*When investing in microfinance activities, FIs will apply the following items in addition to the IFC Exclusion List:
- Production or activities involving harmful or exploitative forms of forced labour<sup>2</sup>/harmful child labour.
- Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial scale usage of hazardous chemicals. Hazardous chemicals include gasoline, kerosene, and other petroleum products.
- Production or activities that impinge on the lands owned, or claimed under adjudication, by Indigenous Peoples, without full documented consent of such peoples.
- Trade finance projects, given the nature of the transactions, FIs will apply the following items in addition to the IFC Exclusion List:
- Production or activities involving harmful or exploitative forms of forced labour<sup>2</sup>/harmful child labour.



## ANNEX 2: LIST I – PROJECTS REQUIRING A MANDATORY ENVIRONMENTAL IMPACT ASSESSMENT

Projects Requiring a Mandatory Environmental Impact Assessment defined by the Regulation on the determination of the List of projects for which environmental impact assessment is mandatory, and the List of projects for which the environmental impact assessment may be required (“Official Gazette of the RS” no. 114/08) – LIST I

### 1. Plants for:

- 1) Refining oil, oil derivatives and natural gas;
- 2) Gasification and melting of coal or oil seal shale, heavy crude oil residues.

### 2. Plants:

- 1) For the production of electricity, water steam, hot water, technological steam or heated gases, by using all types of fuel, as well as plants for driving working machinery (thermal power plants, heating plants, gas turbines, internal combustion engine plants and other devices for combustion, including steam boilers) with 50 MW or more power;
- 2) Nuclear reactors, including the disassembly or removal from operation of such Reactors<sup>1</sup>, other than scientific research plants for the production and conversion of fission and enriched materials with a total power not exceeding 1 kW of constant thermal load.

### 3. Plants:

- 1) For the treatment of spent nuclear fuel;
- 2) Envisaged:
  - For the production or enrichment of nuclear fuel;
  - For the treatment of spent nuclear fuel or highly radioactive nuclear waste;
  - For the permanent disposal of spent nuclear fuel;
  - For the permanent disposal of nuclear waste;
  - For the treatment, storage and disposal of radioactive waste.

### 4. Plants:

- 1) For roasting or sintering metal ore (including sulphide ore);
- 2) For the production of raw iron or steel (primary or secondary melting) including continuous casting, with a capacity exceeding 2.5 t/h;
- 3) For processing in ferrous metallurgy:
  - Hot rolling mills with a capacity of over 20 t/h of raw steel;
  - Forges with automatic hammers with energy exceeding 50 kJ per single hammer, where the used heat power exceeds 20 MW;

- Plants for the application of metal protective layers to metallic surfaces using molten baths, with an input exceeding 2 t/h of raw material;

4) Foundry for ferrous metals with a production capacity of over 20 t per day;

5) Plants:

- For the production of non-ferrous raw metals from ore, concentrates or secondary raw materials through metallurgic and/or chemical processes, and/or electrolytic processes;
- For melting including the production of alloys from non-ferrous metals, as well as the production of by-products (refining, casting, etc.), with a melting capacity of over 4 t per day for lead and cadmium, or 20 t per day for all other metals;

6) For the surface processing of metals and plastic materials using electrolytic or chemical processes, where the volume of the treatment tubs exceeds 30 m<sup>3</sup>.

5. Plants for:

- 1) Extraction, production, refining and processing of asbestos and products containing asbestos;
- 2) Production of cement clinker, cement and lime in rotational or other furnaces with capacities over 500 t per day for the production of cement clinker or lime with a capacity of over 50 t per day in rotational furnaces.

6. Combined chemical plants, i.e. plants for the industrial production of substances where chemical change procedures are applied and where individual plants are located next to one another and are functionally connected, intended for the production of:

- Basic organic chemicals;
- Basic non-organic chemicals;
- Phosphorus, nitrogen or potassium-based artificial fertilizers (simple or complex fertilizers);
- Basic plant protection products, as well as biocides;
- Basic pharmaceutical products with the application of chemical or biological procedures;
- And/or refining and/or processing of explosives.

7. Construction of:

- 1) Main railway lines including ancillary facilities (bridges, tunnels and stations);
- 2) Main highways and roads with four or more lanes, or the reconstruction and/or expansion of an existing road with two lanes or fewer, with the aim of producing a road with four or more lanes, in case such a new road or a reconstructed and/or expanded section has a continuous length of over 10 km or more, including ancillary facilities, other than the supporting content of the main road;
- 3) Airports for engaging in public air transport<sup>2</sup> with a take-off runway longer than 2,100 m.

8. Interior waterways whereupon the international or interstate navigational regime is in force, as well as ports and docks located on an interior waterway whereupon the international or interstate navigational regime is in force, regulation works on interior waterways enabling the passage of vessels over 1350 t.

9. Plants for the treatment of hazardous waste by burning, thermal and/or physical, physical-chemical, chemical procedures, as well as central storage and/or landfills for depositing hazardous waste.
10. Plants for the treatment of non-hazardous waste by burning or chemical procedures with a capacity exceeding 70 t per day; communal waste landfills for over 200,000 population equivalents.
11. Exploitation of ground water or enrichment of ground water where the annual volume of exploited or enriched water is equal to the amount of 10 million m<sup>3</sup> or more.
12. Facilities:
  - 1) Hydro-technical facilities for transferring waters between river basins intended to prevent potential water shortages where the amount of transferred water exceeds 100 million cubic metres annually;
  - 2) In all other cases, facilities intended for transferring waters between river basins where the multi-annual average of the flow in the basin where the water is captured exceeds 2,000 million m<sup>3</sup> per year and where the amount of transferred water exceeds 5% of this flow, except in case of transfer of potable water by pipelines.
13. Plants for cleaning waste water in settlements with populations over 100,000.
14. Extraction of oil and natural gas.
15. Dams and other facilities intended for holding and accumulating waters where the water arriving, or additionally retained, or accumulated exceeds the amount of 10 million m<sup>3</sup>.
16. Pipelines for the transport of gas, liquid gas, oil and oil derivatives or chemicals with a diameter exceeding 800 mm and a length exceeding 40 km.
17. Facilities for the intensive breeding of poultry or pigs with a capacity exceeding:
  - 85,000 places for the production of broilers;
  - 40,000 places for poultry in breeding and exploitation;
  - 2,000 places for the production of pigs (over 30 kg of weight);
  - 750 places for sows.
18. Industrial plants for the production of:
  - 1) Cellulose from wood pulp, hay or similar fibrous materials;
  - 2) Paper and cardboard with a production capacity exceeding 20 t/day.
19. Open pit mines for mineral resources with a surface exceeding 10 ha, or the extraction of peat when the surface area of the exploitation terrain exceeds 100 ha.
20. Construction of overhead power lines with voltages amounting to 200 kV or more and lengths exceeding 15 km.
21. Facilities intended for the storage of oil, petrochemical or chemical products, natural gas, flammable liquids and fuels with a capacity of 100,000 t or more.



22. Activities and plants that are issued integrated permits in accordance with the Regulation on the types of activities and plants that are issued an integrated permit ("Official Gazette of RoS", no. 84/05).

### ANNEX 3: LIST II – PROJECTS THAT MAY REQUIRE ENVIRONMENTAL IMPACT ASSESSMENT

Projects that may require Environmental Impact Assessment defined by the Regulation on the determination of the List of projects for which environmental impact assessment is mandatory, and the List of projects for which the environmental impact assessment may be required (“Official Gazette of the RS” no. 114/08) – LIST II

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
1. Agriculture, aquaculture and forestry	
1) Irrigation and drainage systems - meliorative systems	The surface area they encompass exceeds 20 ha
2) Facilities for the intensive breeding and keeping of livestock	Capacity of 30,000 to 85,000 places for broilers
	Capacity of 10,000 to 40,000 places for poultry (including hunting birds)
3) Facilities for the intensive breeding of cattle	Capacity of 200 places or more for cattle
4) Facilities for the intensive breeding of:	
- pigs	Capacity of 1,000 to 2,000 places for pigs

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
- sows	Capacity of 450 to 750 places for sows
5) Facilities for the intensive breeding of animals with noble fur	Capacity of over 1000 places for animals with noble fur
6) Intensive breeding of fish in pools and fisheries	For salmonidae an annual production of 10t or more
	- For ciprinidae a surface area of 5 ha or more
7) Clearing forests for transitioning to another type of land use	The surface area it encompasses exceeds 10 ha
2. Extractive industry	
1) Open pit mines for mineral resources	All projects not listed under List I
2) Peat extraction	Surface area of exploitation terrain from 20 ha to 100 ha
3) Underground exploitation of mineral resources	All projects

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
4) Exploitation of mineral resources through All projects the procedure of river or lake dredging	All projects
5) Drilling for exploration and exploitation of All projects oil and natural gas	All projects
3. Energy production	
1) Plants for the production of electricity, water steam, hot water, technological steam or heated gases (thermal power plants, heating plants, gas turbines, internal combustion engine plants, other devices for combustion), including steam boilers, in combustion plants using all types of fuel	With a power of 1to 50 MW
2) Plants for energy production from hydropotential	With a power of over 2 MW
3) Devices for using wind power to produce energy (wind farms)	With a total power of over 10 MW
4. Pipelines with ancillary facilities for the transport of gas, oil, chemicals, water steam, hot water or without ancillary facilities, as well as lines for the transmission of electricity by overhead power lines	
1) Pipelines for the transport of gas, other than internal factory pipelines	Length of over 10 km and diameter over 150 mm
2) Pipelines for the transport of chemicals, other than pipelines representing part of a plant for handling such chemicals	Length of over 2 km and diameter over 150 mm

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
3) Pipelines for the transport of steam or hot water from the plants listed under item 3.1 other than internal factory pipelines	Length of over 20 km.
4) Pipelines for waste water transport	Length of over 10 km.
5) Pipelines for the transport of oil and oil derivatives	All projects not listed under List I
6) Overhead high voltage power lines	Nominal voltage of 110 kV or more
5. Storage of flammable liquids and gases, natural gas, fossil fuels, oil and oil derivatives and chemicals	
1) Storage of flammable gases or products containing flammable gases	Total capacity of over 50 m <sup>3</sup>
2) Storage of flammable liquids	Total capacity of over 500 m <sup>3</sup>
3) Storage of chlorine	All projects
4) Storage of sulphur-dioxide	All projects
5) Storage of ammonium nitrate or substances containing ammonium nitrate	All projects

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
6) Storage of ammonia	All projects
7) Storage of other chemicals	Capacity of over 10 t
8) Surface (above-ground) storage of natural gas	Capacity of over 50 m3
9) Storage of coal or lignite	Capacity of over 20,000 t
10) Storage of oil or oil derivatives	Capacity of over 5,000 m3
6. Production and processing of metals	
1) Plants for the production of raw iron or steel (primary or secondary melting) including the continuous casting procedure	All projects not listed under List I
2) Plants for processing in ferrous metallurgy:	All projects not listed under List I
- Hot rolling mills	
- Foundries with one or several hammers or mallets	

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
- For applying surface protective metal layers in melted condition	
3) Ferrous metallurgy foundries	All projects not listed under List I
4) Plants for melting including the production of alloys comprised of nonferrous metals, as well as the production of useful by-products (refining, casting, etc.)	All projects not listed under List I
5) Plants for the surface processing of metals and plastic materials using electrolytic or chemical procedures	All projects not listed under List I
6) Plants for the manufacture or assembly of motor vehicles and production of engines for motor vehicles (cars, buses, freight vehicles, agricultural, construction and mining machinery, as well as other engine-driven vehicles)	All projects
7) Plants for the manufacture of batteries and accumulators	All projects
8) Shipyards (production and/or repair of ship hulls or engines or ship parts)	Ship lengths 20 m or more
9) Manufacture and repair of aircraft	All projects except regular aircraft maintenance works
10) Manufacture of rail vehicles	All projects

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
11) Plants for explosive deformation of metals	All projects
12) Plants for the preparation, enrichment, baking and sintering of metal ores, as well as utilization of tailings	All projects
7. Industrial processing of minerals	
1) Plants for the dry distillation of coal (gasworks, smouldering furnaces, etc.)	All projects
2) Plants for the production of cement clinker, cement and lime in rotational or other furnaces	All projects not listed under List I
3) Plants for the production of glass and glass fibres, including the production of glass obtained by processing old glass	Capacity of up to 20 t per day*
4) Plants for melting mineral matter, including the production of mineral fibres	Capacity of up to 20 t per day*
5) Plants for the production of ceramic products by baking (tiles, bathroom accessories, household items from ceramics and porcelain, etc.) as well as the production of construction materials by baking (roof tiles, bricks, etc.)	Capacity of 40 t to 75 t per day*
6) Plants for the production of asphalt mixtures, including mobile plants	Capacity of over 50 t per hour



Project	Criteria for deciding on the need for drafting the environmental impact assessment study
8. Chemical industry	
1) Processing of intermediate products and production of chemicals	All projects not listed under List I
2) Independent plants for the production, processing, forming and packaging of basic organic and inorganic chemicals, phosphorous, nitrogen and potassium-based artificial fertilizers (simple and complex chemical fertilizers), plant protection products, as well as biocides, pharmaceutical and cosmetic products, plastic mass, explosives, paint and varnish, detergents and chemicals for maintaining hygiene and cleaning, etc.	All projects not listed under List I
3) Plants for the production of mineral oils and lubricants (by distillation, refining, or other methods	All projects
9. Food industry	
1) Plants for the production, treatment or processing of products from:	
- Animal-based raw materials (except milk)	Capacity of 10 t to 75 t per day*
- Plant-based raw materials	Capacity of 30 t to 300 t per day*
2) Plants for the processing, packaging and canning of meat, vegetables and fruit	Capacity of over 10 t per day

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
3) Plants for the production of animal fodder, except for cattle fodder mixers for own use	Capacity of over 5 t per day
4) Plants for the processing, treatment and refining of milk	Capacity of 5,000 litres to 200,000 litres per day*
5) Plants for the capture and processing of ground water, filling and packaging	All projects
6) Plants for the production of beer	Capacity of over 3,000,000 litres per year
7) Plants for the production of malt and yeast	Capacity of over 200 t per year
8) Plants for the production of confectionery or syrup	Capacity of over 5,000 t per year
9) Plants for the production of:	Capacity:
- Alcoholic beverages	- Over 10,000 litres per day for alcoholic beverages;
- Non-alcoholic beverages	- Over 20,000 litres per day for nonalcoholic beverages;
- Vinegar	- Over 10,000 litres per day for vinegar.

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
10) Plants for animal slaughter	Capacity of 3 t to 50 t per day*
11) Plants for fish processing	Capacity of over 1t per day
12) Plants for the production of fish meal or fish oil	All projects
13) Plants for the production and processing of starch	Capacity of over 100 t per day
14) Plants for the production or refining of sugar using sugar beet or raw sugar	All projects
15) Mills and hot houses	Capacity of over 200 t per day
16) Refrigerators (without a raw material processing plant)	Capacity of over 10 t of cooling fluid in the system
17) Production of molasses	All projects
10. Textile, leather, wood and paper industry	
1) Plants for the production of paper and cardboard	All projects not listed under List I

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
2) Plants for the production of cellulose based products (chipboard, hardboard, MDF and plywood)	All projects
3) Plants for the refining, processing and cultivation of wood	All projects
4) Plants for the preliminary treatment of fibres, fabric and paper (washing, bleaching, mercerising, printing, chemical treatment) or colouring fibres or fabric	Capacity of up to 10 t per day*
5) Plants for tanning and processing leather	Capacity of up to 12 t per day*
11. Rubber industry	
1) Plants for the production and processing of rubber and india rubber	All projects
2) Plants for the vulcanization of natural or synthetic india rubber using sulphur or sulphur compounds	All projects
12. Infrastructural projects	
1) Urban development projects:	
- Commercial, business and sales centres;	- Total usable surface area of over 60,000 m2

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
- Stadiums with ancillary facilities;	- Capacity of over 25,000 visitors
- Above-ground or underground parking.	- Capacity of 1,000 places or more
2) Railway lines including ancillary facilities and devices	All projects not listed under List I
3) Lifts and cable-cars, except for ski-lifts	All projects
4) Airports	All projects not listed under List I
5) Regional roads including ancillary facilities, except for supporting contents of the road	All projects
6) Interior waterways whereupon the international or interstate navigational regime is not in force, as well as ports and docks located on an interior waterway whereupon the international or interstate navigational regime is not in force, including ports, and/or docks intended for the loading and unloading of passengers or goods.	All projects
7) Channels, embankments and other flood- defence facilities	All projects
8) Dams and other facilities intended to retain or accumulate water	All projects

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
9) Public water supply facilities- sources of water supply at water capture points, transport of potable water, water processing plants	All projects
10) Hydro-technical facilities for transferring water between river basins (except for the transfer of potable water by pipelines)	All projects
11) Transformer stations and switchgears	Voltage of 220 kV or more
12) Telecommunications transmitter radio- relay systems	Effective radiated power of over 250 W
13) Mobile telephony telecommunications facilities (radio base stations)	Effective radiated power of over 250 W
13. Tourism and recreation	
1) Ski paths, ski lifts and cable cars with ancillary facilities	The surface area of scope extends across over 5 ha
2) Marinas with ancillary facilities	The surface area of enclosed water surface exceeds 1,000 m <sup>2</sup> or has at least 100 berths

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
3) Tourist settlements and hotel complexes	Capacity of 1500 beds or more
4) Purpose-built parks (fun, sports, recreation, golf terrains, etc.) including zoos and safari parks, with ancillary facilities	Total surface area of over 20 ha
14. Other projects	
1) Car tracks for races or testing motor vehicles with ancillary facilities	The surface area it extends over exceeds 10 ha
2) Plants for waste management:	
- Disposal and storage of hazardous waste;	- Capacity of up to 10 t per day*
- Disposal and storage of non-hazardous waste;	- Capacity of up to 50 t per day*
- Treatment of non-hazardous waste;	All projects not listed under List I
- Communal waste landfills;	- Capacity of up to 10 t per day or total capacity of up to 25,000 t*
- Waste treatment using mechanical and/or biological procedures	All projects

Project	Criteria for deciding on the need for drafting the environmental impact assessment study
- Mobile waste treatment plants	All projects
3) Waste water processing plants:	
- Communal waste waters	All projects not listed under List I
- Technological waste waters	All projects
4) Plants and devices for testing	
- Internal combustion engines	- With a heat energy exceeding 10 MW
- Gas turbines or jet engines	- With a heat energy exceeding 100 MW
5) Plants for the production of artificial mineral fibres	All projects
6) Plants for the briquetting of coal	All projects
7) Plants for the production of concrete - concrete plants, including mobile plants	Capacity of over 30 t per hour
8) Plants for recycling, regeneration or destruction of explosive matter	All projects



Project	Criteria for deciding on the need for drafting the environmental impact assessment study
9) Plants for disposal, processing or destruction of animal carcasses or animal based waste	Capacity of 1 t to 10 t per day*
10) Plants for tobacco processing	Capacity of over 10,000 t per year
11) Plants for the production of biogas	All projects
12) Graveyards and crematoriums	For settlements with populations of 40,000 or more
13) Facilities for supplying motor vehicles with fuel (gas stations)	With a storage capacity of:
	- over 100m3 in settlements
	- over 500 m3 outside settled areas
15. Projects listed under List I and List II being implemented within a protected natural asset and the protected vicinity of an immovable cultural asset, as well as other special purpose areas.	All projects
* Note: Item no. 22 from List I shall apply to projects marked separately in List II, with capacities exceeding those given under column no. 2 (Criteria for deciding on the need for drafting the environmental impact assessment study).	

## ANNEX 4: LMP COMPLIANCE REPORT / FORMAT

For third parties engaging contracted workers

### LABOUR AND WORKING CONDITIONS COMPLIANCE REPORT – Contents

Assignment name: \_\_\_\_\_  
Contract ref. No: \_\_\_\_\_  
Contract period: Start date (M/D/Y) End date (M/D/Y)  
Contractor/Service Supplier: \_\_\_\_\_  
Reported period: \_\_\_\_\_  
Date of report: M/D/Y  
Signature of authorized person: \_\_\_\_\_

- Company employees<sup>56</sup> statistics:
- Total number of employee's gender disaggregated: Male \_\_\_\_\_ Female \_\_\_\_\_
- Number of employees with an employment contract out of total number of employees
- Number of employees without an employment contract out of total number of employees
- Number of employees with access to social security, pension and health insurance out of total number of employees
- Number of employees who receives wages/salaries at least once a month out of total number of employees
- Number of employees who left the company in the reported period out of total number of employees
- Number of employees hired in the reported period
- Number of hours worked per employee (monthly average)
- Total overtime (monthly average per employee)
  - Number of injuries at work (in reporting period and cumulative since contract start) out of total no. of employees
  - Number of fatalities at work (in reporting period and cumulative) out of total nr. of employees
  - Number of reported violence out of total nr. of employees
  - Number of reported harassment/ abuses out of total nr. of employees
- Availability of an accessible and functioning employee grievance mechanism (Y/N)
- Number of grievances raised with the GM (in reporting period and cumulative since contract start)
- Number of grievances resolved by GM (in reporting period and cumulative since contract start)
- Number of suits filed with regard to labour, employment and OHS issues
- Number of disputes brought to peaceful settlement/ voluntary arbitration procedure
- Number of visits by labour/ OHS inspection

<sup>1</sup> The number of employees refers to the actual number/headcount on the date of the report.

<sup>56</sup> The employee is any natural person employed or engaged to work or perform service for the employer

<sup>2</sup> The numbers imply the total number of incidents in the reported period.

- Project workers statistics:
  - Total number of project workers:
  - Number of project workers with an employment contract:
  - Number of project workers without an employment contract:
  - Number of project workers with access to social security, pension and health insurance verified by confirmation from registry

WORKING AND LABOUR CONDITIONS SCREENING CHECK LIST			
	Terms and conditions	Yes/No	Notes
1	All project workers have an employment contract or engagement agreement in writing.	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "No" please specify and explain
2	All project workers are paid at least once a month	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "No" please specify and explain
3	All project workers worked 8 hours a day, 40 hours a week	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "No" please explain and specify the hours worked
4	All project workers had a regular daily and weekly rest	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "No" please specify and explain
5	Number of project workers were terminated from employment with termination in line with national labour law and <b>ESS2</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "Yes" please specify number and explain conditions of termination
6	Number of project workers attended OHS related training programme	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "Yes" please specify number and explain
7	Project workers were granted leaves they are entitled to	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "Yes" Please specify the type and number of leaves
8	Project workers were involved in accidents at work resulting in injuries or fatalities	Yes <input type="checkbox"/> No <input type="checkbox"/>	If "Yes" please specify and explain

9	Project workers reported on cases of discrimination, harassment, sexual harassment or non-compliance with law	Yes <input type="checkbox"/> No <input type="checkbox"/>	If “Yes” please specify and explain
10	1Project workers raised grievances or started voluntary arbitration / legal proceedings to settle a dispute	Yes <input type="checkbox"/> No <input type="checkbox"/>	If “Yes” please specify and explain
11	In the reported period there were some incidents on noncompliance with the LMP	Yes <input type="checkbox"/> No <input type="checkbox"/>	If “Yes” please specify and explain

## ANNEX 5: STATEMENT OF LEGAL AND REGULATORY COMPLIANCE

Date and place of issuance: \_\_\_\_\_

Name and address of the issuer: \_\_\_\_\_

### STATEMENT OF LEGAL AND REGULATORY COMPLIANCE

Hereby we declare that<sup>57</sup>

- We are aware of, and comply with, the standards laid down in the Labour Management Procedures;
- We conform to all national laws\* and applicable regulations concerning employment, labour and employee relations, and labour and working conditions;
- We are committed to providing a safe and healthy environment for our employees and to implementing all occupational health and safety requirements as stipulated by national legislation;
- We do not tolerate any form of child, forced or slavery work.
- We prohibit any form of harassment, abuse and violence at work and forbid direct or indirect discrimination against any employee or groups of employees on any ground and for whatever reason.
- We confirm that a worker GM is available
- We confirm that no worker GM is available but will be established by the time the contract is signed.

We hereby state that should we be awarded with the contract; we shall adopt the Labour Management Procedures applicable to the project and incorporate them in our practice.

We understand that the failure to respect any of the above stated commitments could lead to termination of the contract and exclusion from the project.

\_\_\_\_\_  
Signature:

Name:

Position:

\*National Laws refers both to the Laws of Republic of Serbia and the domicile Law of the country in case the Bidder is foreign

<sup>57</sup> The Applicant should mark adequate commitment

## ANNEX 6: ESMP / MITIGATION PLAN AND MONITORING PLAN / TEMPLATES

An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during different phases of the Project - planning and design, construction, and operation, to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures.

The Borrower will

- (a) identify the set of responses to potentially adverse impacts;
- (b) determine requirements for ensuring that those responses are made effectively and in a timely manner and
- (c) describe the means for meeting those requirements.

Contents of the ESMP:

- Executive Summary
- Project description
- Policy, legal and administrative framework
- Baseline conditions assessed during site survey
- Summary of predicted adverse environmental and social impacts related to project in:
  - o design/preparation phase
  - o construction phase
  - o operation phase
- Description of mitigation measures and implementation plan for:
  - o design/preparation phase
  - o construction phase
  - o operation phase
- ESMP implementation Budget
- Description of monitoring activities and plan
- Institutional arrangements and reporting procedures
- Stakeholder engagement – information disclosure, public consultations, and participation.

ANNEX 7 : ENVIRONMENTAL AND SOCIAL SCREENING QUESTIONNAIRE ( only for MABs):

Name of the Project / subproject:		
Basic information on proposed project		
Project ref no:		
Location of the subproject/activity:		
Responsible person and contact:		
PROJECT ELIGIBILITY CRITERIA	YES	NO
Is FULL Environmental Impact Assessment as per the Serbian Law on Environmental Impact Assessment (list of Projects for which full EIA is mandatory/decided is annexed to this ESMF) needed?		
Are serious adverse cumulative or transboundary impacts:		
<ul style="list-style-type: none"> <li>- H: Expected?</li> <li>- S: Expected, but less severe and more readily avoided or mitigated?</li> <li>- M: Not expected? Project impact is site-specific, unlikely to go beyond project footprint?</li> <li>- L: Minimal or negligible?</li> </ul>		
Is it likely that this project will affect adversely on: Sensitive and valuable ecosystems and habitats?		
Legally protected and internationally recognized high biodiversity value areas?		
Vulnerable groups?		
Lands or rights IP or other vulnerable groups?		
cultural heritage?		
Densely populated urban areas?		
Will the project create solid or liquid waste or gaseous emissions that could adversely affect local soils, vegetation, rivers, streams, ground water or air?		
Is there a history of unrest in Project areas or sectors? S: Issues such as above are relevant but to a lower extent?		
M: Located away from environmentally or socially sensitive areas		
Reversibility of Project risk and impacts.		
Are the Project social and environmental risk and impacts:		
H: Long-term, permanent, and irreversible?		
S: Mostly temporary, predictable and/or reversible?		

M: Predictable and expected to be temporary and/or reversible?		
L: Minimal or negligible?		
CRITERIA		
Will the activity consume, use or store, produce hazardous materials that are outlawed or banned in EU?		
Has the local population or any NGOs expressed concern about the proposed activity's environmental aspects or expressed opposition?		
Is there any other aspect of the activity that would – through normal operations or under special conditions – cause a risk or have an impact on the environment, the population or could be considered as a nuisance?		

Sample of the Social Screening Questionnaire:

SOCIAL SCREENING FORM AND TRIGGERS FOR SUBCOMPONENTS		
Screening indicators related to Land acquisition, assets and access to resources		
	YES	NO
Is the scale of the r population adversely affected by the Project?: H: Large to very large? M: Medium to large? S: Low?		

Will the project reduce peoples' access (due to roads, location etc) to the pasture, water, public services or other resources that they depend on ?		
Will the project have human health and safety risks, during construction or later?		
Do children or other vulnerable groups stay in households during construction work?		
Does the Project implementation require land (private) to be acquired (temporarily or permanently)?		
If yes please explain: _____		
Does the Project implementation envisage the use of land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests)?		
If yes indicate current land use _____		



<p>Does the subproject require physical displacement of individuals, families or businesses? Specify the number of persons affected by economic displacement?</p> <p>(if not known at this stage please provide the best estimate and explain what the estimation is based on)</p>		
<p>Will the subproject implementation have a negative impact on any vulnerable individuals or groups?</p> <p>(Please specify what the drivers of vulnerability are, how would these be adversely impacted, or the vulnerability exacerbated?</p> <p>Specify or estimate the number of persons/groups affected and their characteristics.</p>		
<p>Will the subproject implementation have negative impact to informal side road shops, traders, or any nomadic type of commercial activity</p>		
<p>Community Health and Safety.</p> <p>What is the probability of subproject impacts to human health and/or the environment (due to accidents, toxic waste disposal, etc.):</p> <p>H: High?</p> <p>S: Medium to low?</p> <p>M: Low?</p> <p>L: Minimal or negligible?</p>		
<p>Scale of risks and impacts.</p> <p>What is the scale of the geographical area or population affected by the Project?</p> <p>H: Large to very large</p> <p>S: Medium to large</p> <p>M: Low</p> <p>L: Minimal or negligible</p>		

Checked by PIU Environmental and Social Specialist				
Project category:	H	S	M	L
Date				
Name				
Title				
Signature				

Checked by Head of PIU				
Project category:	H	S	M	L
Date				
Name				
Title				
Signature				

Subprojects classified as H/S will not be considered for this project

## ANNEX 7 a: SAMPLE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FORMAT

### SAMPLE – MITIGATION PLAN

Phase	Issue	Mitigating Measure	Cost of Mitigation (If Substantial)	Responsibility*	Supervision observation and comments (to be filled out during supervision)
Project Preparation/ Design	- - -				
Project Construction	- - -				
Project Operation	-				

\* Items indicated to be the responsibility of the contractor shall be specified in the bid documents

**Table A1. Sample of completed ESMP - Mitigation Plan – small-scale construction / reconstruction - use of solar panels in electrical power production**

PHASE	ACTIVITY	POTENTIAL IMPACTS	PROPOSED MITIGATION MEASURE	INSTITUCIONAL RESPONSIBILITY	SUPERVISIO N OBSERVATIO N AND COMMENTS
<b>PREPARATION PHASE</b>					
Preparation phase	ESMP provisions not included in works contracts	ESMP requirements not applied	Incorporate ESMPs provisions into the works contracts for each sub-project (in the safeguard clauses of the technical specifications in the contracts and commitment to comply with tender requirements). All permits must be obtained prior to commencement of works.	MoME/PIU	
Preparation phase	Documentation not compliant with relevant construction legislation	Technical standards not fulfilled	Obtain necessary construction permit.	MoME/PIU	
Preparation phase	Adequate outreach and engagement provisions are not in place for vulnerable groups.	Certain segments of the population, especially vulnerable groups are excluded from the benefits of the project.	Apply project measures and mitigation activities defined via ES instruments, primary SEP, which provide guidance for vulnerable groups engagement.	Construction contractor	
<b>CONSTRUCTION/INSTALLATION PHASE</b>					
Construction/ Installation	Works contractors not aware of ES requirements	ESMF/SEP/LMP requirements not fulfilled	Checking if all works are carried out in line with the national legislation and ESF	MoME/PIU	
Construction/ Installation	Improper disposal of waste	Water and soil polluted	Storage of wastes according to international best practice (IFC EHS General Guideline) and national legislation. Waste shall be managed and disposed/processed by licensed facilities only. Training of drivers in handling and disposal of their cargo and the documentation of the transport describing the nature of the waste and its degree of hazard.	Construction contractor	

PHASE	ACTIVITY	POTENTIAL IMPACTS	PROPOSED MITIGATION MEASURE	INSTITUCIONAL RESPONSIBILITY	SUPERVISIO N OBSERVATIO N AND COMMENTS
Construction/Installation	Waste not properly managed	polluted soil and groundwater, scattering by wind/animals and pose a health risk	<p>All waste, including construction debris will be regularly and timely transported off site and managed through an authorized agency or disposed of at a site that was officially designated by the local authorities.</p> <p>Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</p> <p>The records of waste disposal will be maintained as proof for proper management as designed.</p> <p>All oily wastes will be separately collected, in bins which are leak-proof, and will be handled over to the authorized management and disposal company, receipts for which shall be kept.</p> <p>The records of waste disposal will be maintained as proof for proper management as designed.</p> <p>Whenever feasible the contractor will reuse and recycle appropriate and available materials</p>	Construction contractor	
Construction/Installation	improper maintenance and fuelling of the equipment	Contamination of soil and water from improper maintenance and fuelling of the equipment	Apply best engineering practice in safe storage and handling of lubricants, fuel and ensure proper loading of fuel and maintenance of equipment.	Construction contractor	
Construction/Installation	Improper material storage and use	air, soil / water polluted	<p>Ensure workers are familiar with safety regulations and storage requirements for each product. Store all materials in original containers in adequate locations, which allow for leak-proof storage</p> <p>Do not dispose of paint and other waste containers except through adequate handling procedures</p>	Construction contractor	
Construction/	Dust emissions from the	effected air quality and health of workers and	During demolition/dismantling works dust shall be suppressed by	Construction	

PHASE	ACTIVITY	POTENTIAL IMPACTS	PROPOSED MITIGATION MEASURE	INSTITUCIONAL RESPONSIBILITY	SUPERVISIO N OBSERVATIO N AND COMMENTS
Installation	site	neighbours	dust screen enclosures at site. There will be no open burning of construction / waste material at the site. All materials will be supplied/transported in a manner which minimizes dust – including covered truck loads or closed off truck loads, with dust suppressing measures through water spraying. Maintenance and attests of vehicles and machinery.	Contractor	
Construction/ Installation	likelihood of GBV due to influx of construction and other workers for construction in the project area	Increased GBV due to influx of construction and other workers for construction in the project area	Code of Conduct is to be signed and understood by all contractors and consultant staff During works, separate facilities for women & men	Contractor	
Construction/Installation	Increased number of accidents due to increased traffic	Traffic accident occurred, injured workers and inhabitants	Pedestrian crossing to be provided; Road safety measures to be implemented.	Contractor	
Construction/Installation	Construction site accessibility (relation between the Site and public transportation options)	Construction site accessibility (relation between the Site and public transportation options)	Agree on new bus stops in the vicinity of STA HQ respecting relevant safety regulations; Early in the cycle consult with relevant stakeholders to identify relevant permitting needed; Consult with national road safety agency and relevant ministry to enhance road safety.	Contractor	
Construction/Installation	Occurrence of public transportation disturbance	public transportation disturbed	Pedestrian crossing; Ramp for disabled people; Ramp for access to facility with strollers. Adequate lighting for female pedestrians	Contractor	

PHASE	ACTIVITY	POTENTIAL IMPACTS	PROPOSED MITIGATION MEASURE	INSTITUCIONAL RESPONSIBILITY	SUPERVISIO N OBSERVATIO N AND COMMENTS
Construction/Installation	Noise emissions from execution of works and movement of vehicles	Noise out of limits	Work should be performed within regular working hours as much as possible (restricted times agreed to in the permit in respect with Serbian environmental legislation). Where this is impossible, the persons affected should be given special notification. Local community will be informed through adequate communication channels about purpose of the construction work, and expected duration Use modern equipment wherever possible. Such equipment normally has better noise and vibration attenuation than older machines. Modern vehicles also have reduced emissions, etc.	Construction Contractor	
Construction/Installation	Workers' safety disrupted	Workers' not safe	Provide workers with safety instructions and protective equipment	Construction Contractor	
Construction/Installation	risks of unauthorized and undesired access to construction site	The overall safety disrupted	The inhabitants leaving close to construction site will be notified of the works, and temporary expected negative impacts through appropriate communication channels; All legally required permits will be acquired for construction and/or rehabilitation. Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment. Workers will be employed by respecting Serbian legislation, and all hygienic and safety rules, conditioned by Serbian legislation, should be respected. Life insurance of workers and technical security measures will be provided by the employer. Emergency safety kit should be placed close to the working place for intervention in case of accidents. Emergency contacts and numbers should be clearly posted on site.		

PHASE	ACTIVITY	POTENTIAL IMPACTS	PROPOSED MITIGATION MEASURE	INSTITUCIONAL RESPONSIBILITY	SUPERVISIO N OBSERVATIO N AND COMMENTS
			Appropriate warning signs will be placed on the working sites,		
Construction	COVID 19 pandemic occurrence	Impossibility / delay in performing construction works	Applying appropriate measures for prevention of infection	Construction Contractor	
Construction	Accidents during construction works	unintentional damage to the local infrastructure or power supply net	Ensure all adequate permits from local utilities have been obtained Ensure familiarity with networks in the proximity of the site. In case of accidental disruption, immediately stop all works, notify proper authorities and emergency remediation of damaged network in line with the legal requirements	Construction Contractor	
Construction	Improper solid waste collection and management	soil and water quality disturbed	Set up proper waste management procedures, including separation of waste into oily and hazardous waste, regular municipal and green waste which can be composted. Ensure sufficient waste collection bins are available on site and that regular collection of wastes is ensured Isolate the space of collection been and ensure frequent sanitation from authorized entities.	Site operator and local waste management authority	
Construction	Risk of Sexual harassment and abuse	Occurrence of sexual harassment	The LMP includes measures to address such risks. Labour-related laws in Serbia comply with ILO conventions and are most regularly enforced The LMP will be a part of tendering documents making them binding for the contractor. Adequate training will be carried on with contractors and workers. Code of the conduct will be integral part of the workers contract.	PIU	
<b>OPERATION PHASE</b>					
Operation	Improper maintenance of installed equipment	Serious damage of equipment	Manuals to be prepared and trainings for the householders to be organized	Construction	

PHASE	ACTIVITY	POTENTIAL IMPACTS	PROPOSED MITIGATION MEASURE	INSTITUCIONAL RESPONSIBILITY	SUPERVISIO N OBSERVATIO N AND COMMENTS
				Contractor	
Operation	Missing Spare parts	Equipment out of work	Selected equipment of good quality with required guaranties	MoME/PIU/Contr actors	
Operation	Rising complaints about the quality of small construction works	Beneficiaries are not satisfied as the equipment and/or installation works doesn't satisfy acceptable quality criteria	Apply prepared SEP that defines the establishment of GRM at the project level to enable local community residents and affected stakeholders to file complaints and seek redress in case they see a negative impact resulting from the project activities.	MoME/PIU	



## ANNEX 7 b: ESMP Checklist / Template

### SAMPLE – MONITORING PLAN

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring?	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
Project Preparation						
Project Construction						
Operation						

**Table A2. Sample of completed ESMP - Monitoring Plan – small-scale construction / reconstruction use of solar panels in electrical power production**

<b>Phase</b>	<b>What</b> parameter is to be monitored?	<b>Where</b> is the parameter to be monitored?	<b>How</b> is the parameter to be monitored/ type of monitoring equipment?	<b>When</b> is the parameter to be monitored- frequency of measurement or continuous?	<b>Monitoring Cost</b> What is the cost of equipment or contractor charges to perform monitoring?	<b>Supervision observation and comments</b> (to be filled out during supervision with reference to adequate measuring reports)
Design phase	Environmentally friendly production process of panels	Through tech. specifications of panels	Through receiving and keeping all specifications	Prior to procurement	May have an overall cost increase effect	
Design phase	Placement of solar panels needs to be approved by the designated and responsible local authority and the power distribution of Serbia.	Through adequate supporting paperwork and permits	Through receiving and keeping all of the necessary permits and conditions	Prior to construction works and preferably prior to application for grants. If possible	None	
Construction	Dust, noise, emissions and vibrations	On Project site	Periodically check sound levels at the work site to ensure it is within legal limits and as per local permitting. Through complaints (if area is populated)	During construction works constantly	Minor – should be included in contract for works.	
Construction	Leaks or spills from Machinery	On Project site	Visually on surrounding areas, log of all accidents on site to be filled out	During construction works – constantly	Minor – should be included in contract for works	

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring?	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
Construction	Proper waste collection and management	On Project site	Daily supervision of waste collection Ensure no open burning is taking place Keep receipts from authorized landfill	Daily	Minor – should be included in contract for works	
Construction	Collection and transport as well storage of hazardous waste (if any occur).	On safety temporary Storage	Review the transportation on list and conditions at the storage facility	Before the transportation of The hazardous waste (if there is any)	Minor - Authorized Contractor for collection and transportation of hazardous waste (if there is any occur) subcontracted by the Contractor- Bidder	
Construction	Notification and Worker Safety	On Project site	Inspectorate Supervision Work Supervision	Daily	Minor – should be included in contract for works	
Construction	Work safety/protective equipment;	On Project site	Inspection	Regular inspections during implementation of works	Minor- should be included in contract for works	
Construction	COVID related measures	On Project site	Relevant information placed in visible places (provided in a language that workers understand)	All time	Minor- should be included in contract for works	

Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring?	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
Construction	Number, nature and status of resolution of grievance requests recorded	Before and during planning and construction works	Documentary review	Monthly	To ensure full compliance with the GM established for this project	
Construction	Code of Conduct is to be signed and understood by all contractors and consultant staff	Before/during planning of construction works	Document review	Beginning of facility operation	To ensure complete compliance with the Code of Conduct for contractors and consultants	
Construction	Universal facilities access	On facility site	Visual checks	At beginning of facility operation	To ensure full compliance with lenders and RS regulations	
Operation	Use of less hazardous chemicals to treat or to clean the solar panels	On Project site	Visual inspection of the work site to ensure adequate protection from chemicals to be used is in place, safety data sheets reviewed and kept	Visual inspection of site after maintenance Records kept	It may have a minor overall cost increase effect	
Decommissioning	Hazardous materials contained within the panels may be released during decommissioning	On Project site	Ensure no breaks or spills In case of spills ensure spill management procedure is followed	Visual, log of all breaks and spills	Minor – should be included in contract for works	

## ANNEX 7c: CATALOGUE OF MATERIALS AS CONSTRUCTION AND DEMOLITION WASTE

Catalogue of construction and demolition waste according Rulebook of categories, testing and classification of waste ("Official Gazette of RS", Nos. 56/2010, 93/2019 and 39/2012) in accordance with chapter 8 Law on Waste Management ("Official Gazette of RS", Nos. 36/2009, 88/2010, 14/2016 and 95/2018).

17 xx xx*	The index number of dangerous waste – dangerous no matter of the content or concentration of dangerous or toxic substances.
17 xx xx*	Conditional index number of dangerous waste – dangerous if contains dangerous or toxic substances above MLQ (maximum limited quantity/concentration)
<b>17</b>	CONSTRUCTION & DEMOLITION WASTE (EXCAVATED SOIL FROM CONTAMINATED LOCATIONS ARE INCLUDED IN THE LIST)
<b>17 01</b>	CONCRETE, BRICKS, TILES AND CERAMICS
17 01 01	Concrete
17 01 02	Bricks
17 01 03	tiles and ceramics
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
<b>17 02</b>	WOOD, GLASS AND PLASTIC
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
17 02 04*	glass, plastic and wood containing or contaminated with dangerous substances
<b>17 03</b>	BITUMINOUS MIXTURES, COAL TAR AND TARRED PRODUCTS
17 03 01*	bituminous mixtures containing coal tar
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 03 03*	coal tar and tarred products
<b>17 04</b>	METALS (INCLUDING THEIR ALLOYS)
17 04 01	copper, bronze, brass
17 04 02	aluminum
17 04 03	lead

17 04 04	zinc
17 04 05	iron and steel
17 04 06	tin
17 04 07	mixed metals
17 04 09*	metal waste contaminated with dangerous substances
17 04 10*	cables containing oil, coal tar and other dangerous substances
17 04 11	cables other than those mentioned in 17 04 10
<b>17 05</b>	<b>SOIL (included excavated soil from contaminated locations), stone and excavation</b>
17 05 03*	soil and stone which contains dangerous substances
17 05 04	soil and stone different than those given in 17 05 03
17 05 05*	excavation with dangerous substances
17 05 06	excavation different than those given in 17 05 05
17 05 07*	Track ballasts containing dangerous materials
17 05 08	Track ballasts with exception of that under 17 05 07
<b>17 06</b>	<b>INSULATION MATERIALS AND ASBESTOS-CONTAINING CONSTRUCTION MATERIALS</b>
17 06 01*	insulation materials containing asbestos
17 06 03*	other insulation materials consisting of or containing dangerous substances
17 06 04	insulation materials other than those mentioned in 17 06 01 and 17 06 03
17 06 05*	construction materials containing asbestos
<b>17 08</b>	<b>GYPSUM-BASED CONSTRUCTION MATERIAL</b>
17 08 01*	gypsum-based construction materials contaminated with dangerous substances
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
<b>17 09</b>	<b>OTHER CONSTRUCTION AND DEMOLITION WASTES</b>
17 09 01*	construction and demolition wastes containing mercury
17 09 02*	construction and demolition wastes containing PCB (for example PCB containing sealants, PCB-containing resin-based floorings, PCB-containing sealed glazing units, PCB-containing capacitors)
17 09 03*	other construction and demolition wastes (including mixed wastes) containing dangerous substances
17 09 04	mixed construction and demolition of waste other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

## ANNEX 8: ESMP CHECKLIST / TEMPLATE

PART 1: INSTITUTIONAL & ADMINISTRATIVE			
Country	Serbia		
Project title			
Subproject title			
Scope of subproject activity			
Institutional arrangements (name and contact details)	Project management		
	WB Republic of Serbia		Local party / beneficiary (LSG) – Responsible for the preparation of the Checklist ESMP, public consultation of the Checklist ESMP and procurement of works and site supervision (the works and supervising contracts/appointments include tabular parts of the Checklist ESMP)  Contractor (name / contact details) – Responsible for the implementation of mitigation measures and monitoring according to Part 2 of Checklist ESMP
Implementation arrangements (name and contact details)	Supervision		
	WB Safeguards supervision (name)	Site supervisor – Responsible for contracted site; supervising engineer or responsible person appointed by the MoME/PIU  Site engineer (name /contact details) – Responsible for implementation of the Checklist ESMP from constructor side	Local Inspectorate – Responsible for occasional visits to the site or upon public complaint  MCTI/PIU – Responsible for supervision of the overall project (name and contact details)
SITE DESCRIPTION			

Name of the site	
Address of the site location	
Who owns the land? Who uses the land (formal/informal)?	
Description of physical and natural environment, and of the socio-economic context around the site	
LEGISLATION	
Identify national & local legislation & permits that apply to project activity	
PUBLIC CONSULTATION	
Identify when / where the public consultation process took place	
INSTITUTIONAL CAPACITY BUILDING	
Will there be any capacity building?	<input type="checkbox"/> N or <input type="checkbox"/> Y If Yes, please provide capacity building information
ATTACHMENTS	
Attachment 1: Site plan / photo	
Attachment 2: Construction permit (as required)	



Attachment 3: Agreement for construction waste disposal

Other permits/agreements – as required

PART 2: ENVIRONMENTAL AND SOCIAL SCREENING			
Will the site activity include/involve any of the following?	Activity/Issue	Status	Triggered actions
	Building rehabilitation	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', see Sections A and E below
	Small-scale construction at the existing facilities	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', see Sections A and E below
	Wastewater management	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', see Sections B and E below
	Acquisition of land	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', activity is excluded
	Hazardous material management	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', see Section C below
	Traffic and pedestrian safety	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', see Section D below
	Social risks (i) occupational health and safety (OHS), (ii) labor and working conditions	<input type="checkbox"/> Yes <input type="checkbox"/> No	If 'Yes', see Section E below

Historic building(s) and districts

Impacts on forests and/or protected areas

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
<b>Section A.</b> General Rehabilitation and	Notification	<ul style="list-style-type: none"> <li>The local construction and environment inspectorates and communities have been notified of upcoming activities.</li> <li>The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites.</li> </ul>	Contractors	

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
/or construction activities	Air Quality	<ul style="list-style-type: none"> <li>All legally required permits have been acquired prior commencement of the work.</li> <li>All work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.</li> <li>Use debris-chutes during interior demolition above the first floor</li> <li>Keep demolition debris in controlled area and sprayed with water mist to reduce debris dust</li> <li>Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site</li> <li>Keep the surrounding environment (sidewalks, roads) free of debris to minimize dust</li> <li>Do not allow open burning of construction / waste material at the site</li> <li>Do not allow excessive idling of construction vehicles at sites</li> </ul>		
	Noise	<ul style="list-style-type: none"> <li>Limit construction noise to daytime unless extreme urgency. Notify health workers on the works schedule if it deviates from standard working hours</li> <li>Ensure that during operation, engine covers of generators, air compressors and other powered mechanical equipment are closed, and equipment placed as far away from residential areas as possible</li> </ul>		
	Water Quality	<ul style="list-style-type: none"> <li>Establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.</li> </ul>		
	Waste management	<ul style="list-style-type: none"> <li>Identify waste collection and disposal pathways for all major waste types expected from demolition and construction activities</li> </ul>		

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
		<ul style="list-style-type: none"> <li>• Separate mineral construction and demolition wastes from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</li> <li>• Collect construction waste and dispose properly to the designated locations</li> <li>• Whenever feasible, reuse and recycle appropriate and viable materials (except asbestos)</li> <li>• Once works are finalized, no waste will be left on the site. Historical waste will be removed prior to works;</li> </ul>		
<b>Section B.</b> Wastewater management	Water quality	<ul style="list-style-type: none"> <li>• Ensure that the approach of handling sanitary wastewater and surface run off is approved by relevant authorities</li> <li>• Ensure that before discharging into receiving waters, effluents from construction site are treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment</li> <li>• Undertake regular monitoring of wastewater collection and discharge</li> <li>• Wash construction vehicles and machinery only in designated areas where runoff will not pollute natural surface water bodies.</li> </ul>		
<b>Section C.</b> Hazardous materials	Hazardous waste management	<ul style="list-style-type: none"> <li>• Temporarily store all hazardous or toxic substances on site in safe containers labeled with details of composition, properties, and handling information</li> <li>• Place containers of hazardous substances in leak-proof containers to prevent spillage and leaching</li> <li>• Transport waste by licensed operator to official landfills and dispose excess excavated material at sites agreed with the local authorities.</li> <li>• Do not use paints with toxic ingredients or solvents, or lead-based paints</li> </ul>		

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
	Asbestos management	<ul style="list-style-type: none"> <li>• If asbestos is located on the subproject site, mark it clearly as hazardous material</li> <li>• appropriately contain and seal asbestos to minimize exposure</li> <li>• Treat asbestos prior to removal (if removal is necessary) with a wetting agent to minimize asbestos dust</li> <li>• Handle and disposed asbestos using skilled &amp; experienced professionals</li> <li>• If asbestos material is being stored temporarily, securely enclosed it inside closed containments and mark appropriately. Take security measures against unauthorized removal from the site</li> <li>• Do not reuse the removed asbestos</li> </ul>		
<b>Section D.</b> Traffic and Pedestrian Safety	Direct or indirect impact to public traffic and pedestrians by construction activities	<ul style="list-style-type: none"> <li>• Signpost, place warning signs, arrange barriers and traffic diversions so that the work site is clearly visible, and the public is warned of all potential hazards</li> <li>• Establish traffic management system and conduct staff training, especially for site access and near-site heavy traffic.</li> <li>• Provide safe passages and crossings for pedestrians where construction traffic interferes.</li> <li>• Adjust working hours to local traffic patterns, e.g. avoid major transport activities during rush hours or times of livestock movement</li> <li>• Actively manage traffic if required for safe and convenient passage for the public.</li> <li>• Ensure safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.</li> </ul>	Contractors	

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
<b>Section E.</b>  Social and Labor Risk Management	Public relationship management	<ul style="list-style-type: none"> <li>Implement and update as needed the project-based Stakeholder Engagement Plan</li> <li>Assign local focal points who is in charge of communication with and receiving requests/complaints from local population at the district and regional level</li> <li>Consult local communities to identify and proactively manage potential conflicts between an external workforce and local people.</li> <li>Raise local community awareness about sexually transmitted disease risks associated with the presence of an external workforce and include local communities in awareness activities.</li> <li>Scheduled works beyond irrigation season to the extent possible in order to avoid/minimize service disruption. Inform local population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.</li> <li>Limit construction activities at night. When necessary, carefully schedule night work and inform affected community beforehand.</li> <li>Properly mark and fence work site</li> <li>No temporary storage of construction materials and waste occurs within cultivated land plots or any type of private property</li> <li>Allocate areas for temporary storage of construction materials and waste so that free movement of traffic and pedestrians is not hindered.</li> </ul>	PIU  Contractors	
	Public Safety	<ul style="list-style-type: none"> <li>Ensure quarantine procedures for COVID-19 patients are maintained;</li> <li>Share information on project activities and construction schedule prior to the start of works;</li> </ul>	PIU  Contractors  Healthcare facilities	

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
		<ul style="list-style-type: none"> <li>• Notify local construction and environment inspectorates and communities on the upcoming activities</li> <li>• Notify public on the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works)</li> <li>• Acquire all legally required permits for construction and/or rehabilitation</li> <li>• Formally agree with Employer that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.</li> <li>• Appropriately signpost construction site to inform workers on key rules and regulations.</li> <li>• Inform the community about the established grievance mechanisms and share contact numbers of focal points</li> </ul>		
	Labor issues management	<ul style="list-style-type: none"> <li>• Include the ESMP Checklist into the bidding documents;</li> <li>• Ensure contractors and subcontractors comply with labor laws and standards and implement fair work practices;</li> <li>• Inform the contractors about the established Project grievance mechanisms and share contact numbers of focal points;</li> <li>• Instruct and train contractor assigned staff on SEA/SH monitoring, GM, no child/forced labor use, code of conduct and other labor requirements as per ESS2 and Serbian Labor Code;</li> <li>• To the extent possible, do not locate work camps in close proximity to local communities.</li> <li>• Locate and operate workers' camps in consultation with neighboring communities.</li> </ul>	PIU Contractors	

PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
		<ul style="list-style-type: none"> <li>Recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, worker skills training, should be provided to enhance participation of local people.</li> <li>Ensure all workers have written contracts describing terms and conditions of work;</li> <li>Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale.</li> <li>Ensure neither child (up 18 years old) labor nor forced labor applied; and</li> <li>Inform the workers about the established labor grievance mechanism and share contact numbers of focal points.</li> </ul>		
	Worker health and safety requirements	<ul style="list-style-type: none"> <li>Ensure contractors and subcontractors comply with occupational safety local laws and requirements as per ESS 2;</li> <li>Provide detailed information to the personnel about the activities foreseen in the project;</li> <li>Conduct safety trainings carried out by specialists in different fields;</li> <li>Ensure that workers' PPE complies with international good practice (masks, gloves and safety glasses, for civil works also hardhats, harnesses and safety boots);</li> <li>Provide adequate sanitary conditions (lavatories and washing areas) in the work site with adequate supplies of running water, soap, antiseptics and hand drying devices;</li> </ul>	PIU Contractors Healthcare facilities	



PART 3: MITIGATION MEASURES CHECKLIST				
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST	RESPONSIBILITY	BUDGET
		<ul style="list-style-type: none"> <li>Secure working conditions meeting health and safety standards required by the Serbian legislation;</li> <li>Ensure regular delivery and proper storage of goods, including samples, pharmaceuticals, disinfectant, reagents, other hazardous materials, PPEs, etc.;</li> <li>Ensure protocols for regular disinfection of public rooms, wards, ICUs, equipment, tools, and waste are in place and followed;</li> <li>Ensure handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant;</li> <li>Ensure equipment such as autoclaves are in working order; and</li> <li>Provide regular testing to healthcare workers routinely in contact with COVID-19 patients</li> </ul>		
<b>Section F.</b> Affects forests and/or protected areas	Protection			
<b>Section F.</b> Historic building(s)	Cultural Heritage			

PART 3: MONITORING PLAN					
<b>What</b> <i>parameter is to be monitored?</i>	<b>Where</b> <i>is the parameter to be monitored?</i>	<b>How</b> <i>is the parameter to be monitored (what should be measured and how)?</i>	<b>When</b> <i>is the parameter to be monitored (timing and frequency)?</i>	<b>By Whom</b> <i>is the parameter to be monitored— (responsibility)?</i>	<b>How much</b> <i>is the cost associated with implementation of monitoring</i>
<b>Preparatory phase</b>					
1.					
2.					
3					
<b>Construction phase</b>					
<b>Operation phase</b>					

## ANNEX 9: GRIEVANCE REGISTRATION FORM

Reference No: \_\_\_\_\_

Full Name \_\_\_\_\_

Note: you can remain anonymous if you prefer, or request not to disclose your identity to the third parties without your consent. In case of anonymous grievances, the decision will be disclosed at the Projects website

<https://www.mre.gov.rs/>

First name \_\_\_\_\_

Last name \_\_\_\_\_

☐ I wish to raise my grievance anonymously

Gender of complainant (completion of this field is optional)

☐ Male ☐ Female ☐ Other \_\_\_\_\_ (please indicate)

☐ I request not to disclose my identity without my consent Contact Information Please mark how you wish to be contacted (mail, telephone, e-mail).

☐ By Post: Please provide mailing address: \_\_\_\_\_

☐ By Telephone: \_\_\_\_\_

☐ By E-mail \_\_\_\_\_

☐ I will follow up on the resolution at the website as I want to remain anonymous

Preferred language for communication ☐ Serbian ☐ Other (indicate)

Description of Incident or Grievance (What happened? Where did it happen? Who did it happen to? What is the result of the problem? Date of Incident/ Grievance)

☐ One-time incident/grievance (date \_\_\_\_\_)

☐ Happened more than once (how many times? \_\_\_\_\_)

☐ On-going (currently experiencing problem) What would you like to see happen to resolve the

problem? Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Template for Grievance redress log

Ref. No.	Priority	Date Feedback Received	Feedback Channel	Category of feedback	Summary Description	Anonymous (Yes/No)	Person assigned to address feedback	Status (resolved, pending, escalated)	Date of resolution of feedback	Communication about resolution
1										
2										
3										
4										
5										
6										

## ANNEX 10: WB INTERIM NOTE: COVID-19 CONSIDERATIONS IN CIVIL WORKS PROJECTS

This note was issued on April 7, 2020 and includes links to the latest guidance as of this date (e.g. from WHO). Given the COVID-19 situation is rapidly evolving, when using this note it is important to check whether any updates to these external resources have been issued.

### Introduction

The COVID-19 pandemic presents Governments with unprecedented challenges. Addressing COVID-19 related issues in both existing and new operations starts with recognizing that this is not business as usual and that circumstances require a highly adaptive responsive management design to avoid, minimize and manage what may be a rapidly evolving situation. In many cases, we will ask Borrowers to use reasonable efforts in the circumstances, recognizing that what may be possible today may be different next week (both positively, because more supplies and guidance may be available, and negatively, because the spread of the virus may have accelerated).

This interim note is intended to guide teams on how to support Borrowers in addressing key issues associated with COVID-19 and consolidates the advice that has already been provided over the past month. As such, it should be used in place of other guidance that has been provided to date. This note will be developed as the global situation and the Bank's learning (and that of others) develops. This is not a time when 'one size fits all'. More than ever, teams will need to work with Borrowers and projects to understand the activities being carried out and the risks that these activities may entail. Support will be needed in designing mitigation measures that are implementable in the context of the project. These measures will need to take into account the capacity of the Government agencies, availability of supplies, and the practical challenges of operations on-the-ground, including stakeholder engagement, supervision, and monitoring. In many circumstances, communication itself may be challenging, where face-to-face meetings are restricted or prohibited, and where IT solutions are limited or unreliable.

This note emphasizes the importance of careful scenario planning, clear procedures and protocols, management systems, effective communication and coordination, and the need for high levels of responsiveness in a changing environment. It recommends assessing the current situation of the project, putting in place mitigation measures to avoid or minimize the chance of infection, and planning what to do if either project workers become infected or the workforce includes workers from proximate communities affected by COVID-19. In many projects, measures to avoid or minimize will need to be implemented at the same time as dealing with sick workers and relations with the community, some of whom may also be ill or concerned about infection. Borrowers should understand the obligations that contractors have under their existing contracts (see Section 3), require contractors to put in place appropriate organizational structures (see Section 4) and develop procedures to address different aspects of COVID- 19 (see Section 5).

### Challenges with construction/civil works

Projects involving construction/civil works frequently involve a large workforce, together with suppliers and supporting functions and services. The workforce may comprise workers from international, national, regional, and local labour markets. They may need to live in on-site accommodation, lodge within communities close to work sites, or return to their homes after work. There may be different contractors permanently present on site, carrying out different activities, each with their dedicated workers. Supply chains may involve international, regional, and national suppliers facilitating the regular flow of goods and services to the project (including supplies essential to

the project such as fuel, food, and water). As such there will also be a regular flow of parties entering and exiting the site; support services, such as catering, cleaning services, equipment, material and supply deliveries, and specialist sub-contractors, brought in to deliver specific elements of the works.

Given the complexity and the concentrated number of workers, the potential for the spread of infectious disease in projects involving construction is extremely serious, as are the implications of such a spread. Projects may experience large numbers of the workforce becoming ill, which will strain the project's health facilities, have implications for local emergency and health services, and may jeopardize the progress of the construction work and the schedule of the project. Such impacts will be exacerbated where a workforce is large and/or the project is in remote or under-served areas. In such circumstances, relationships with the community can be strained or difficult and conflict can arise, particularly if people feel they are being exposed to disease by the project or are having to compete for scarce resources. The project must also exercise appropriate precautions against introducing the infection to local communities.

#### **Does the construction contract cover this situation?**

Given the unprecedented nature of the COVID-19 pandemic, it is unlikely that the existing construction/civil works contracts will cover all the things that a prudent contractor will need to do. Nevertheless, the first place for a Borrower to start is with the contract, determining what a contractor's existing obligations are, and how these relate to the current situation.

The obligations on health and safety will depend on what kind of contract exists (between the Borrower and the main contractor; between the main contractors and the sub-contractors). It will differ if the Borrower used the World Bank's standard procurement documents (SPDs) or used national bidding documents. If a FIDIC document has been used, there will be general provisions relating to health and safety. For example, the standard FIDIC, Conditions of Contract for Construction (Second Edition 2017), which contains no 'ESF enhancements', states (in the General Conditions, clause 6.7) that the Contractor will be required:

to take all necessary precautions to maintain the health and safety of the Contractor's Personnel

to appoint a health and safety officer at site, who will have the authority to issue directives to maintain the health and safety of all personnel authorized to enter and or work on the site and to take protective measures to prevent accidents to ensure, in collaboration with local health authorities, that medical staff, first aid facilities, sickbay, ambulance services and any other medical services specified are available at all times at the site and any accommodation to ensure suitable arrangements are made for all necessary welfare and hygiene requirements and the prevention of epidemics

These requirements have been enhanced through the introduction of the ESF into the SPDs (edition dated July 2019). The general FIDIC clause referred to above has been strengthened to reflect the requirements of the ESF. Beyond FIDIC's general requirements discussed above, the Bank's Particular Conditions include some relevant requirements on the Contractor, including:

- to provide health and safety training for Contractor's Personnel (which include project workers and all personnel that the Contractor uses on-site, including staff and other employees of the Contractor and Sub- contractors and any other personnel assisting the Contractor in carrying out project activities)
- to put in place workplace processes for Contractor's Personnel to report work situations that are not safe or healthy
- gives Contractor's Personnel the right to report work situations which they believe are not safe or healthy, and to remove themselves from a work situation which they have a reasonable justification to believe presents an imminent and serious danger to their life or health (with no reprisal for reporting or removing themselves)
- requires measures to be in place to avoid or minimize the spread of diseases including measures to avoid or minimize the transmission of communicable diseases that may be associated with the influx of temporary or permanent contract-related labour
- to provide an easily accessible grievance mechanism to raise workplace concerns

Where the contract form used is FIDIC, the Borrower (as the Employer) will be represented by the Engineer (also referred to in this note as the Supervising Engineer). The Engineer will be authorized to exercise

authority specified in or necessarily implied from the construction contract. In such cases, the Engineer (through its staff on-site) will be the interface between the PCU and the Contractor. It is important therefore to understand the scope of the Engineer's responsibilities. It is also important to recognize that in the case of infectious diseases such as COVID-19, project management – through the Contractor/sub-contractor hierarchy – is only as effective as the weakest link. A thorough review of management procedures/plans as they will be implemented through the entire contractor hierarchy is important. Existing contracts provide the outline of this structure; they form the basis for the Borrower to understand how proposed mitigation measures will be designed and how adaptive management will be implemented and to start a conversation with the Contractor on measures to address COVID-19 in the project.

#### **WHAT PLANNING SHOULD THE BORROWER BE DOING?**

Task teams should work with Borrowers (PCUs) to confirm that projects (i) are taking adequate precautions to prevent or minimize an outbreak of COVID-19, and (ii) have identified what to do in the event of an outbreak. Suggestions on how to do this are set out below:

The PCU, either directly or through the Supervising Engineer, should request details in writing from the Main Contractor of the measures being taken to address the risks. As stated in Section 3, the construction contract should include health and safety requirements, and these can be used as the basis for identification of, and requirements to implement COVID-19 specific measures. The measures may be presented as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures. The measures may be reflected in revisions to the project's health and safety manual. This request should be made in writing (following any relevant procedure set out in the contract between the Borrower and the contractor).

In making the request, it may be helpful for the PCU to specify the areas that should be covered. This should include the items set out in Section 5 below and take into account current and relevant guidance provided by national authorities, WHO, and other organizations. See the list of references in the Annex to this note.

The PCU should require the Contractor to convene regular meetings with the project health and safety specialists and medical staff (and where appropriate the local health authorities), and to take their advice in designing and implementing the agreed measures.

Where possible, a senior person should be identified as a focal point to deal with COVID-19 issues. This can be a work supervisor or a health and safety specialist. This person can be responsible for coordinating the preparation of the site and making sure that the measures taken are communicated to the workers, those entering the site, and the local community. It is also advisable to designate at least one back-up person; in case the focal point becomes ill; that person should be aware of the arrangements that are in place.

On sites where there are several contractors and therefore (in effect) different workforces, the request should emphasize the importance of coordination and communication between the different parties. Where necessary, the PCU should request the main contractor to put in place a protocol for regular meetings of the different contractors, requiring each to appoint a designated staff member (with back up) to attend such meetings. If meetings cannot be held in person, they should be conducted using whatever IT is available. The effectiveness of mitigation measures will depend on the weakest implementation, and therefore all contractors and sub- contractors must understand the risks and the procedure to be followed.

The PCU, either directly or through the Supervising Engineer, may provide support to projects in identifying appropriate mitigation measures, particularly where these will involve interface with local services, in particular health and emergency services. In many cases, the PCU can play a valuable role in connecting project representatives with local Government agencies and helping coordinate a strategic response, which takes into account the availability of resources. To be most effective, projects should consult and coordinate with relevant Government agencies and other projects in the vicinity.

Workers should be encouraged to use the existing project grievance mechanism to report concerns relating to COVID-19, preparations being made by the project to address COVID-19 related issues, how procedures are being implemented, and concerns about the health of their co-workers and other staff.

### **What should the contractor cover?**

The Contractor should identify measures to address the COVID-19 situation. What will be possible will depend on the context of the project: the location, existing project resources, availability of supplies, the capacity of local emergency/health services, the extent to which the virus already exists in the area. A systematic approach to planning, recognizing the challenges associated with rapidly changing circumstances, will help the project put in place the best measures possible to address the situation. As discussed above, measures to address COVID-19 may be presented in different ways (as a contingency plan, as an extension of the existing project emergency and preparedness plan or as standalone procedures). The PCUs and contractors should refer to guidance issued by relevant authorities, both national and international (e.g. WHO), which is regularly updated (see sample References and links provided in the references).

Addressing COVID-19 at a project site goes beyond occupational health and safety and is a broader project issue which will require the involvement of different members of a project management team. In many cases, the most effective approach will be to establish procedures to address the issues and then to ensure that these procedures are implemented systematically. Where appropriate given the project context, a designated team should be established to address COVID-19 issues, including PCU representatives, the Supervising Engineer, management (e.g. the project manager) of the contractor and sub-contractors, security, and medical and OHS professionals. Procedures should be clear and straightforward, improved as necessary, and supervised and monitored by the COVID-19 focal point(s). Procedures should be documented, distributed to all contractors, and discussed at regular meetings to facilitate adaptive management. The issues set out below include a number that represents expected good workplace management but is especially pertinent in preparing the project response to COVID-19.

### **Assessing workforce characteristics**

Many construction sites will have a mix of workers e.g. workers from the local communities; workers from a different part of the country; workers from another country. Workers will be employed under different terms and conditions and be accommodated in different ways. Assessing these different aspects of the workforce will help in identifying appropriate mitigation measures:

The Contractor should prepare a detailed profile of the project workforce, key work activities, schedule for carrying out such activities, different durations of contract, and rotations (e.g. 4 weeks on, 4 weeks off).

This should include a breakdown of workers who reside at home (i.e. workers from the community), workers who lodge within the local community and workers in on-site accommodation. Where possible, it should also identify workers that may be more at risk from COVID-19, those with underlying health issues, or who may be otherwise at risk.

Consideration should be given to ways in which to minimize movement in and out of the project site. This could include lengthening the term of existing contracts, to avoid workers returning home to affected areas, or returning to site from affected areas.

Workers accommodated on-site should be required to minimize contact with people near the site, and in certain cases be prohibited from leaving the site for the duration of their contract, so that contact with local communities is avoided.

Consideration should be given to requiring workers lodging in the local community to move to site accommodation (subject to availability) where they would be subject to the same restrictions.

Workers from local communities, who return home daily, weekly or monthly, will be more difficult to manage. They should be subject to health checks at the entry to the site (as set out above) and at some point,



circumstances may make it necessary to require them to either use accommodation on-site or not to come to work.

### **Entry/exit to the worksite and checks on commencement of work**

Entry/exit to the work site should be controlled and documented for both workers and other parties, including support staff and suppliers. Possible measures may include:

Establishing a system for controlling entry/exit to the site, securing the boundaries of the site, and establishing designating entry/exit points (if they do not already exist). Entry/exit to the site should be documented.

Training security staff on the (enhanced) system that has been put in place for securing the site and controlling entry and exit, the behaviours required of them in enforcing such system, and any COVID -19 specific considerations.

Training staff who will be monitoring entry to the site, providing them with the resources they need to document entry of workers, conducting temperature checks, and recording details of any workers that are denied entry.

Confirming that workers are fit for work before they enter the site or start work. While procedures should already be in place for this, special attention should be paid to workers with underlying health issues or who may be otherwise at risk. Consideration should be given to the demobilization of staff with underlying health issues.

Checking and recording temperatures of workers and other people entering the site or requiring self-reporting before or on entering the site.

Providing daily briefings to workers before commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene, and distancing measures, using demonstrations and participatory methods.

During the daily briefings, reminding workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor or the COVID-19 focal point if they have symptoms or are feeling unwell.

Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such workers for 14 days.

Preventing a sick worker from entering the site, referring them to local health facilities if necessary, or requiring them to isolate at home for 14 days.

### **General hygiene**

Requirements on general hygiene should be communicated and monitored, to include:

Training workers and staff on-site on the signs and symptoms of COVID-19, how it is spread, how to protect themselves (including regular handwashing and social distancing), and what to do if they or other people have symptoms (for further information see WHO COVID-19 advice for the public).

Placing posters and signs around the site, with images and text in local languages.

Ensuring handwashing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout the site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces. Where handwashing facilities do not exist or are not adequate, arrangements should be made to set them up. Alcohol-based sanitizer (if available, 60-95% alcohol) can also be used.

Review worker accommodations and assess them in light of the requirements set out in IFC/EBRD guidance on Workers' Accommodation: processes and standards, which provides valuable guidance as to good practice for accommodation.

Setting aside part of worker accommodation for precautionary self-quarantine as well as more formal isolation of staff who may be infected (see paragraph (f)).

### **Cleaning and waste disposal**

Conduct regular and thorough cleaning of all site facilities, including offices, accommodation, canteens, common spaces. Review cleaning protocols for key construction equipment (particularly if it is being operated by different workers). This should include:

Providing cleaning staff with adequate cleaning equipment, materials, and disinfectant.

Review general cleaning systems, training cleaning staff on appropriate cleaning procedures, and appropriate frequency in high use or high-risk areas.

Where it is anticipated that cleaners will be required to clean areas that have been or are suspected to have been contaminated with COVID-19, providing them with appropriate PPE: gowns or aprons, gloves, eye protection (masks, goggles or face screens) and boots or closed work shoes. If appropriate PPE is not available, cleaners should be provided with the best available alternatives.

Training cleaners in proper hygiene (including handwashing) before, during, and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials).

Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., national, WHO). If incineration of medical wastes are necessary, this should be for a limited duration as possible. Waste should be reduced and segregated, so that only the smallest amount of waste is incinerated (for further information see WHO interim guidance on water, sanitation, and waste management for COVID-19).

### **Adjusting work practices**

Consider changes to work processes and timings to reduce or minimize contact between workers, recognizing that this is likely to impact the project schedule. Such measures could include:

Decreasing the size of the work teams.

Limiting the number of workers on-site at any one time.

Changing to a 24-hour work rotation.

Adapting or redesigning work processes for specific work activities and tasks to enable social distancing, and training workers on these processes.

Continuing with the usual safety training, adding COVID-19 specific considerations. Training should include the proper use of normal PPE. While as of the date of this note, the general advice is that construction workers do not require COVID-19 specific PPE, this should be kept under review (for further information see WHO interim guidance on the rational use of personal protective equipment (PPE) for COVID-19).

Reviewing work methods to reduce the use of construction PPE, in case of supplies become scarce or the PPE is needed for medical workers or cleaners. This could include, e.g. trying to reduce the need for dust masks by checking that water sprinkling systems are in good working order and are maintained or reducing the speed limit for haul trucks.

Arranging (where possible) for work breaks to be taken in outdoor areas within the site.

Consider changing canteen layouts and phasing mealtimes to allow for social distancing and phasing access to and/or temporarily restricting access to leisure facilities that may exist on-site, including gyms.

At some point, it may be necessary to review the overall project schedule, to assess the extent to which it needs to be adjusted (or work stopped completely) to reflect prudent work practices, potential exposure of

both workers and the community and availability of supplies, taking into account Government advice and instructions.

### **Project medical services**

Consider whether existing project medical services are adequate, taking into account existing infrastructure (size of clinic/medical post, number of beds, isolation facilities), medical staff, equipment and supplies, procedures, and training. Where these are not adequate, consider upgrading services where possible, including:

Expanding medical infrastructure and preparing areas where patients can be isolated. Guidance on setting up isolation facilities is set out in WHO interim guidance on considerations for quarantine of individuals in the

context of containment for COVID-19). Isolation facilities should be located away from worker accommodation and ongoing work activities. Where possible, workers should be provided with a single well-ventilated room (open windows and door). Where this is not possible, isolation facilities should allow at least 1 meter between workers in the same room, separating workers with curtains, if possible. Sick workers should limit their movements, avoiding common areas and facilities, and not be allowed visitors until they have been clear of symptoms for 14 days. If they need to use common areas and facilities (e.g. kitchens or canteens), they should only do so when unaffected workers are not present, and the area/facilities should be cleaned before and after such use.

Training medical staff, which should include current WHO advice on COVID-19 and recommendations on the specifics of COVID-19. Where COVID-19 infection is suspected, medical providers on-site should follow WHO interim guidance on infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected.

Training medical staff in testing, if testing is available.

Assessing the current stock of equipment, supplies, and medicines on-site, and obtaining additional stock, where required and possible. This could include medical PPE, such as gowns, aprons, medical masks, gloves, and eye protection. Refer to WHO guidance as to what is advised (for further information see WHO interim guidance on the rational use of personal protective equipment (PPE) for COVID-19).

If PPE items are unavailable due to worldwide shortages, medical staff on the project should agree on alternatives and try to procure them. Alternatives that may commonly be found on construction sites include dust masks, construction gloves, and eye goggles. While these items are not recommended, they should be used as a last resort if no medical PPE is available.

Ventilators will not normally be available on worksites, and in any event, intubation should only be conducted by experienced medical staff. If a worker is extremely ill and unable to breathe properly on his or her own, they should be referred immediately to the local hospital (see (g) below).

Review existing methods for dealing with medical waste, including systems for storage and disposal (for further information see WHO interim guidance on water, sanitation and waste management for COVID-19, and WHO guidance on the safe management of wastes from health-care activities).

### **Local medical and other services**

Given the limited scope of project medical services, the project may need to refer sick workers to local medical services. Preparation for this includes:

Obtaining information as to the resources and capacity of local medical services (e.g. number of beds, availability of trained staff, and essential supplies).

Conducting preliminary discussions with specific medical facilities, to agree on what should be done in the event of ill workers needing to be referred to.

Considering ways in which the project may be able to support local medical services in preparing for members of the community becoming ill, recognizing that the elderly or those with pre-existing medical conditions require additional support to access appropriate treatment if they become ill.

Clarifying how an ill worker will be transported to the medical facility and checking the availability of such transportation.

Establishing an agreed protocol for communications with local emergency/medical services.

Agreeing with the local medical services/specific medical facilities the scope of services to be provided, the procedure for in-take of patients, and (where relevant) any costs or payments that may be involved.

A procedure should also be prepared so that project management knows what to do in the unfortunate event that a worker ill with COVID-19 dies. While normal project procedures will continue to apply, COVID-19 may raise other issues because of the infectious nature of the disease. The project should liaise with the relevant local authorities to coordinate what should be done, including any reporting or other requirements under national law.

### **Instances or spread of the virus**

WHO provides detailed advice on what should be done to treat a person who becomes sick or displays symptoms that could be associated with the COVID-19 virus (for further information see WHO interim guidance on infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected). The project should set out risk-based procedures to be followed, with differentiated approaches based on case severity (mild, moderate, severe, critical) and risk factors (such as age, hypertension, diabetes) (for further information see WHO interim guidance on operational considerations for case management of COVID-19 in health facility and community). These may include the following:

If a worker has symptoms of COVID-19 (e.g. fever, dry cough, fatigue) the worker should be removed immediately from work activities and isolated on site.

If testing is available on site, the worker should be tested on-site. If a test is not available at the site, the worker should be transported to the local health facilities to be tested (if testing is available).

If the test is positive for COVID-19 or no testing is available, the worker should continue to be isolated. This will either be at the worksite or home. If at home, the worker should be transported to their home in transportation provided by the project.

Extensive cleaning procedures with high-alcohol content disinfectants should be undertaken in the area where the worker was present, before any further work being undertaken in that area. Tools used by the worker should be cleaned using disinfectant and PPE disposed of.

Co-workers (i.e. workers with whom the sick worker was in close contact) should be required to stop work, and be required to quarantine themselves for 14 days, even if they have no symptoms.

Family and other close contacts of the worker should be required to quarantine themselves for 14 days, even if they have no symptoms.

If a case of COVID-19 is confirmed in a worker on the site, visitors should be restricted from entering the site and working groups should be isolated from each other as much as possible.

If workers live at home and have a family member who has a confirmed or suspected case of COVID-19, the worker should quarantine themselves and not be allowed on the project site for 14 days, even if they have no symptoms.

Workers should continue to be paid throughout periods of illness, isolation, or quarantine, or if they are required to stop work, following national law.

Medical care (whether on-site or in a local hospital or clinic) required by a worker should be paid for by the employer.

#### Continuity of supplies and project activities

Where COVID-19 occurs, either in the project site or the community, access to the project site may be restricted, and the movement of supplies may be affected.

Identify back-up individuals, in case key people within the project management team (PCU, Supervising Engineer, Contractor, sub-contractors) become ill, and communicate who these are so that people are aware of the arrangements that have been put in place.

Document procedures, so that people know what they are, and are not reliant on one person's knowledge.

Understand the supply chain for necessary supplies of energy, water, food, medical supplies, and cleaning equipment, consider how it could be impacted, and what alternatives are available. Early pro-active review of international, regional, and national supply chains, especially for those supplies that are critical for the project, is important (e.g. fuel, food, medical, cleaning, and other essential supplies). Planning for a 1-2 month interruption of critical goods may be appropriate for projects in more remote areas.

Place orders for/procure critical supplies. If not available, consider alternatives (where feasible).

Consider existing security arrangements, and whether these will be adequate in the event of an interruption to normal project operations.

Consider at what point it may become necessary for the project to significantly reduce activities or to stop work completely, and what should be done to prepare for this, and to re-start work when it becomes possible or feasible.

#### Training and communication with workers

Workers need to be provided with regular opportunities to understand their situation, and how they can best protect themselves, their families, and the community. They should be made aware of the procedures that have been put in place by the project, and their responsibilities in implementing them.

It is important to be aware that in communities close to the site and amongst workers without access to project management, social media is likely to be a major source of information. This raises the importance of regular information and engagement with workers (e.g. through training, town halls, toolboxes) that emphasize what management is doing to deal with the risks of COVID-19. Allaying fear is an important aspect of workforce peace of mind and business continuity. Workers should be allowed to ask questions, express their concerns, and make suggestions.

Training of workers should be conducted regularly, as discussed in the sections above, providing workers with a clear understanding of how they are expected to behave and carry out their work duties.

Training should address issues of discrimination or prejudice if a worker becomes ill and provide an understanding of the trajectory of the virus, where workers return to work.

Training should cover all issues that would normally be required on the worksite, including the use of safety procedures, use of construction PPE, occupational health and safety issues, and code of conduct, taking into account that work practices may have been adjusted.

Communications should be clear, based on fact, and designed to be easily understood by workers, for example by displaying posters on hand washing and social distancing, and what to do if a worker displays symptoms.

#### Communication and contact with the community

Relations with the community should be carefully managed, with a focus on measures that are being implemented to safeguard both workers and the community. The community may be concerned about the presence of non-local workers, or the risks posed to the community by a local worker's presence on the project site. The project should set out risk-based procedures to be followed, which may reflect WHO guidance (for further information see WHO Risk Communication and Community Engagement (RCCE) Action Plan Guidance COVID-19 Preparedness and Response). The following good practice should be considered:

Communications should be clear, regular, based on fact, and designed to be easily understood by community members.

Communications should utilize available means. In most cases, face-to-face meetings with the community or community representatives will not be possible. Other forms of communication should be used; posters, pamphlets, radio, text messages, electronic meetings. The means used should take into account the ability of different members of the community to access them, to make sure that communication reaches these groups.

The community should be made aware of procedures put in place at the site to address issues related to COVID-

19. This should include all measures being implemented to limit or prohibit contact between workers and the community. These need to be communicated clearly, as some measures will have financial implications for the community (e.g. if workers are paying for lodging or using local facilities). The community should be made aware of the procedure for entry/exit to the site, the training being given to workers, and the procedure that will be followed by the project if a worker becomes sick.

If project representatives, contractors, or workers are interacting with the community, they should practice social distancing and follow other COVID-19 guidance issued by relevant authorities, both national and international (e.g. WHO).

### **Emergency powers and legislation**

Many Borrowers are enacting emergency legislation. The scope of such legislation, and the way it interacts with other legal requirements, will vary from country to country. Such legislation can cover a range of issues, for example:

Declaring a public health emergency

Authorizing the use of police or military in certain activities (e.g. enforcing curfews or restrictions on movement)

Ordering certain categories of employees to work longer hours, not to take holiday or not to leave their job (e.g. health workers)

Ordering non-essential workers to stay at home, for reduced pay or compulsory holiday

Except in exceptional circumstances (after referral to the World Bank's Operations Environmental and Social Review Committee (OESRC)), projects will need to follow emergency legislation to the extent that these are mandatory or advisable. The Borrower must understand how mandatory requirements of the legislation will impact the project. Teams should require Borrowers (and in turn, Borrowers should request Contractors) to consider how the emergency legislation will impact the obligations of the Borrower set out in the legal agreement and the obligations set out in the construction contracts. Where the legislation requires a material departure from existing contractual obligations, this should be documented, setting out the relevant provisions.

## ANNEX 11: Annual E&S REPORT / TEMPLATE

1. APPLICANT'S DETAILS
Company Name:
Company Address:
Country:
Town/Location:
Company authorized representative Title: Date: ,202..
Contact Details Telephone:
Mobile:
E-mail:

2. GENERAL		
Is the project materially compliant with all relevant WB ESS (taking account of agreed action plans, exemptions or derogations)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If No, please provide details of any material non-compliances:
Is the project materially compliant with all applicable environmental and social laws and regulations?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If No, please provide details of any material non-compliances:
Have there been any accidents or incidents that have caused damage to the environment, brought about injuries or fatalities, affected project labour or local communities, affected cultural property, or created liabilities for the company?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe, including details of actions to repair and prevent reoccurrence:
Have there been any changes to environment, social, labour or health and safety laws or regulations that have materially affected the company?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe:
How many inspections did you receive from the environmental authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
How many inspections did you receive from the health and safety authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found
How many inspections did you receive from the labour authorities during the reporting period?	Number:	Please provide details of these visits, including number and nature of any violations found:



Have these visits resulted in any penalties, fines and/or corrective action plans?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe, including status of implementing corrective actions to address any violations found:
Has the Company engaged any Applicants for project-related work in the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state for which types of work, and how the company has monitored the compliance of Applicants with WB ESS and the Environmental and Social Management Plan:
Were any of the violations stated above the responsibility of Applicants?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details, including how the Company is ensuring that corrective actions are implemented by the Applicant?
Have any operations been reduced, temporarily suspended or closed down due to environmental, health, safety or labour reasons?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe:
<p>Please describe any environment or social programs, initiatives or sub-projects undertaking during the reporting period to improve the company's environmental or social performance and/or management systems:</p> <p>Please indicate the level of associated expenditure (capital expenditure and operating expenditure), and whether this relates to the requirements of the Environmental and Social Management Plan, or to any other initiative:</p>		

### 3. STATUS OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Please provide information on the status of each item in the Environmental and Social Management Plan (ESMP) agreed with WB. If the ESMP has been updated during the reporting period, please attach a copy of the new plan.

### 4. ENVIRONMENTAL MONITORING DATA

Please provide the name and contact details for your environmental manager:

### 5. RESOURCE USAGE AND PRODUCT OUTPUT

Parameter	Value	Unit	Comments <sup>58</sup>
Fuels used			
Oil (diesel)		l	
Gas		m3	
Coal		t	

<sup>58</sup> In addition to any other relevant comments, please indicate whether the measurements reported apply to all or only some process operations at the facility. Please include any relevant fuel quality parameters (e.g. calorific value)



Lignite		t	
Grid Electricity		KW	
Heat Purchased			
Feedstocks and raw materials consumed			
Name 1			
Name 2			
Product output			
Product 1			
Product 2			

6. HUMAN RESOURCES MANAGEMENT			
Please provide the name and contact details for your Human Resources manager:			
	Total	Recruited in this reporting period	Dismissed in this reporting period
Number of direct employees:			
Number of contracted workers:			
Were there any collective redundancies during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, how they were selected, consultation undertaken, and measures to mitigate the effects of redundancy:	
Are there any planned redundancies to the workforce in the next year?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please describe the redundancy plan, including reasons for redundancies, number of workers involved, and selection and consultation process:	
Were there any changes in trade union representation at Company facilities during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details, and summarize engagement with trade unions during reporting period:	
Were there any other worker representatives (e.g. in the absence of a trade union)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details and summarize engagement with them during reporting period:	
Were there any changes in the status of Collective Agreements?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please provide details:	

Have employees raised any grievances with the project during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state how many, split by gender, summarize the issues raised in grievances by male and female staff and explain how the Company has addressed them:
Have employees raised any complaints about harassment or bullying during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please state how many, split by gender, summarize the issues raised by male and female staff and explain how the Company has addressed them:
Have there been any strikes or other collective disputes related to labour and working conditions at the Company in the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please summarize nature of, and reasons for, disputes and explain how they were resolved
Have there been any court cases related to labour issues during the reporting period?	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please summarize the issues contested and outcome:
<p>Have there been any changes to the following policies or terms and conditions during the reporting period in any of the following areas:</p> <ul style="list-style-type: none"> <li>- Union recognition</li> <li>- Collective Agreement</li> <li>- Non-discrimination and equal opportunity</li> <li>- Equal pay for equal work</li> <li>- Gender Equality</li> <li>- Bullying and harassment, including sexual harassment</li> <li>- Employment of young persons under age 18</li> <li>- Wages (wage level, normal and overtime)</li> <li>- Overtime</li> <li>- Working hours</li> <li>- Flexible working / work-life balance</li> <li>- Grievance mechanism for workers</li> <li>- Health &amp; safety</li> </ul>	Yes <input type="checkbox"/> No <input type="checkbox"/>	If yes, please give details, including of any new initiatives:

## 7. OCCUPATIONAL HEALTH AND SAFETY DATA

Please provide the name and contact details for your Health and Safety manager:					
	Direct employees	Contracted workers		Direct employees	Contracted workers
Number of man-hours worked this reporting period:			Number of Fatalities <sup>59</sup> :		
Budget spent on OHS in this period (total amount and currency):	RSD		Number of disabling injuries:		
OHS training provided in this period in person-days:			Number of Lost Time Incidents (including vehicular) <sup>60</sup> :		
Number of lost workdays <sup>61</sup> resulting from incidents:			Number of cases of occupational disease:		
Number of sick days:					
Accident causes (falling, heavy loads, struck by object, contact with energy source etc.):					
Please provide details of any fatalities or major accidents that have not previously been reported to WB, including total compensation paid due to occupational injury or illness (amount and currency):					
Please summarize any emergency prevention and response training that has been provided for company personnel during the report period:					

8. STAKEHOLDER ENGAGEMENT	
Please provide the name and contact details for your external relations or community engagement manager:	
<p>Please provide information on the implementation of the stakeholder engagement plan agreed with WB and summarize interaction with stakeholders during the reporting period, including:</p> <ul style="list-style-type: none"> <li>- Meeting or other initiatives to engage with members of the public or public organizations during the report period,</li> <li>- information provided to members of the public and other stakeholders during the report period relating to environmental, social or safety issues</li> </ul>	

<sup>59</sup> If you have not already done so, please provide a separate report detailing the circumstances of each fatality.

<sup>60</sup> Incapacity to work for at least one full workday beyond the day on which the accident or illness occurred.

<sup>61</sup> Lost workdays are the number of workdays (consecutive or not) beyond the date of injury or onset of illness that the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

- coverage in media,
- and interaction with any environmental or other community groups.

Please describe any changes to the Stakeholder Engagement Plan agreed with WB:

#### 9. GRIEVANCE MECHANISM

How many complaints or grievances did the project receive from members of the public or civil society organisations during the reporting period? Please split by stakeholder group. Summarise any issues raised in the complaints or grievances and explain how they were resolved:


#### 10. COMMUNITY INTERACTION AND DEVELOPMENT

Please summarize any social or community development initiatives undertaken by the company during the reporting period, and any associated expenditure:

## ANNEX 12: REPORT ON PUBLIC CONSULTATIONS

As required by WB Environmental and Social Framework (ESF) and Environmental and Social Standard 10 (ESS10) – Stakeholder Engagement and Information disclosure, during preparation of ESMF, ESCP, SEP and LMP documents the Borrower carried out consultations with relevant stakeholders.

Starting from 19 January 2022, The Ministry of Mining and Energy (MoME) disclosed the ESMF, ESCP, SEP and LMP documents on its web site and announced invitation for Public Consultations for the public, bodies and organizations interested in subject documents for the Project. The announcement was published in daily newspaper “Politika” on 19 January 2022. All interested parties and organizations were invited to participate online public consultation on ESMF, ESCP, SEP and LMP documents.

ESMF and other E&S documents and Call for Public Consultations were placed on the web site of the Ministry of Mining and Energy: <https://www.mre.gov.rs/aktuelnosti/oglasna-tabla>

On February 02, 2022, at 11:00 AM (local time), public consultations and presentation of the ESMF, ESCP, SEP and LMP for interested parties and key stakeholders were held. The consultations were organized online due to COVID 19 pandemic.

The meeting was attended by the representatives of the MoME and other interested parties who expressed their interest to attend ESMF consultations till 1. February 2022.

The World Bank Scaling Up Residential Clean Energy (SURCE) Project (P176770). has been classified as project with Moderate risks both from environmental and social perspective. Environmental and Social Management Framework (ESMF), Stakeholder Engagement Plan (SEP), Labor Management Procedure (LMP) and Environmental and Social Commitment Plan (ESCP) were created to ensure the implementation of project in accordance with the World Bank standards related to environmental and social protection

The meeting began as planned at 11:00 AM. The opening speech was given by Antonela Solujić, representative of MoME, who welcomed the participants and introduced them to meeting agenda and topics to be discussed (ESMF, SEP, LMP and ESCP). The participants were invited to discuss the existing problems, express their requests and provide suggestions and recommendations for solving problems regarding environmental and social issues.

The public discussion ended at 12:30 PM local time.

There were 24 attendees on public consultation. Most of them were key Project stakeholders – Ministry of Mining and Energy (20), representatives of potential suppliers and construction companies (2) and Consultants (2).

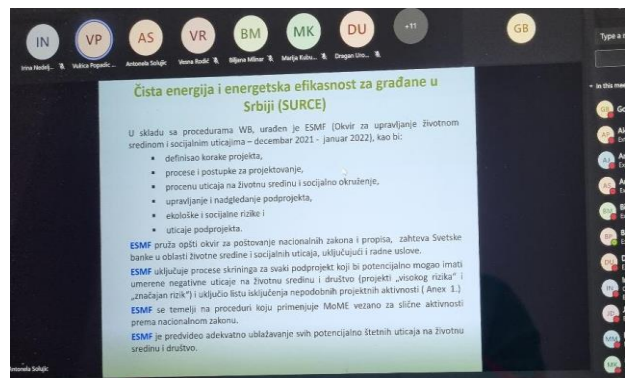
The names and titles of the participants, due to protection of personal data requirements, will not be publicly disclosed.

The consultations were presented by:

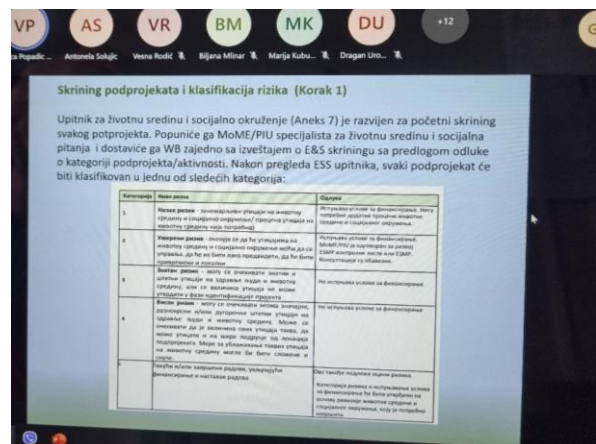
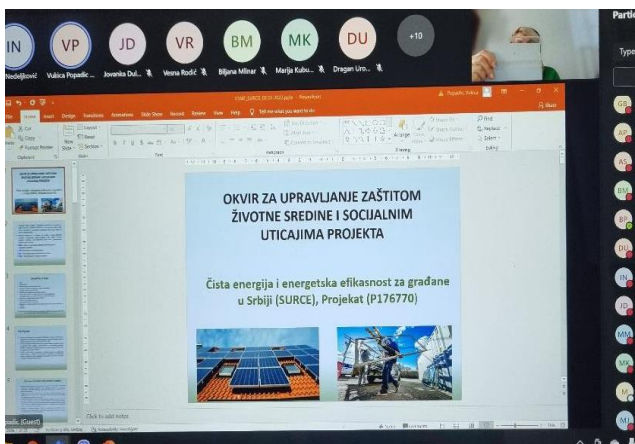
1. Ms. Vukica Popadic Environmental Specialist, engaged by MoME
2. Ms. Gordana Bajic Social Specialist, engaged by MoME



Picture 1 and 2. Public consultation, Belgrade, 02 February 2022



Picture 3 and 4: Public consultation, Belgrade, 02 February 2022



Picture 5 and 6: Public consultation, Belgrade, 02 February 2022

The discussion was held in the form of a participatory discussion, and all stakeholders were introduced to the Project.

Environmental and Social Consultants informed participants about the necessity of preparing an ESMF, SEP, LMP and ESCP documents in accordance with World Bank procedures related to Project approval.

Potential environmental and social impacts of the Project, risk classification, legal and administrative framework, previous experiences from similar projects, monitoring and evaluation of project, screening forms, development of environmental and social management plans during Project implementation and ways of public involvement during Project implementation were presented and explained.

The importance of Labor management and most important provisions of WB Environmental and Social Standard ESS2 (Labor and Working Conditions) were also explained to the public during presentation.



It was emphasized that all activities supported under the Project shall be environmentally and socially sound, sustainable, and consistent with WB ESS and Serbian national legislation.

During the public consultations, there were no questions, comments/remarks related to presented ESMF, SEP, LMP and ESCP.

After the presentation was completed, the participants were asked if there were some specific issues they are interested in or some topics they want to get more information about.

Also, participants were asked to say their impression about the project and presentation.

There were no comments / remarks / complains about the presentation and project.

Since there were no questions, comments and suggestions, the final version of the ESMF, SEP, LMP and ESCP is prepared according to latest approved versions approved by the WB and the Borrower.

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Kriterijumi	Opis
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Vrednost za organizaciju	za finansiranje. zorani za razvoj liste ili ESMP. obavezne.
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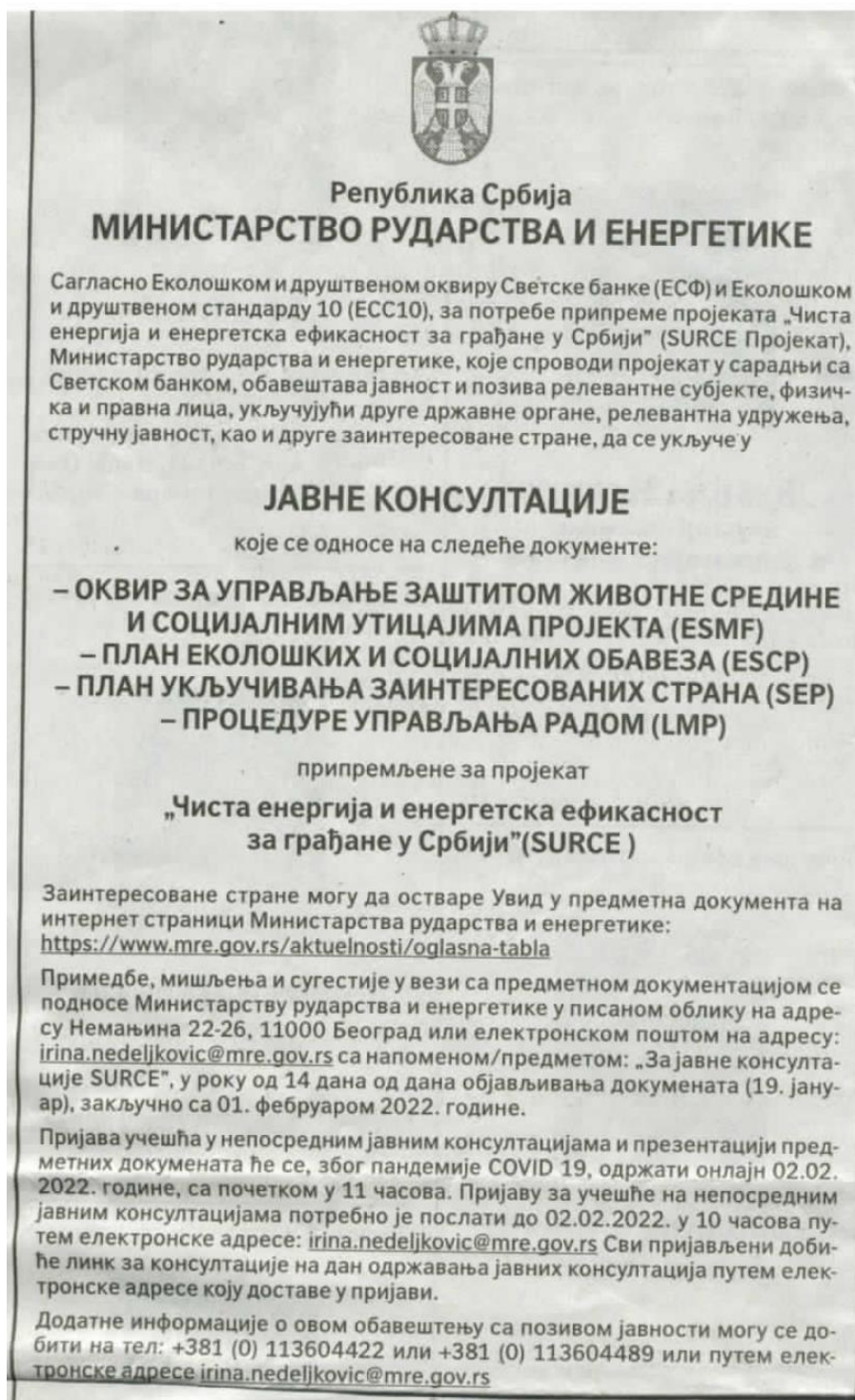
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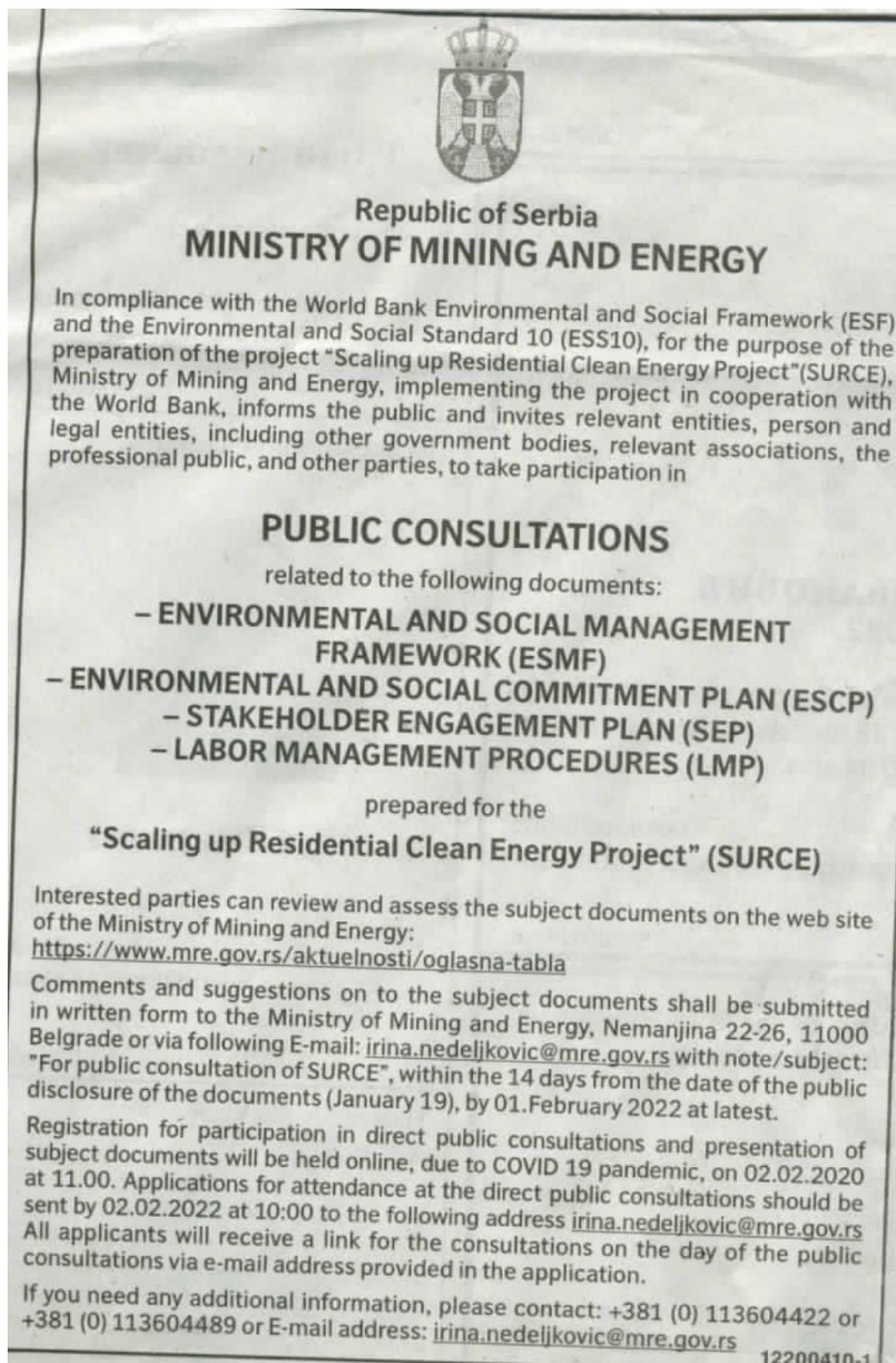
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### Pictures 7 and 8 - List of participants

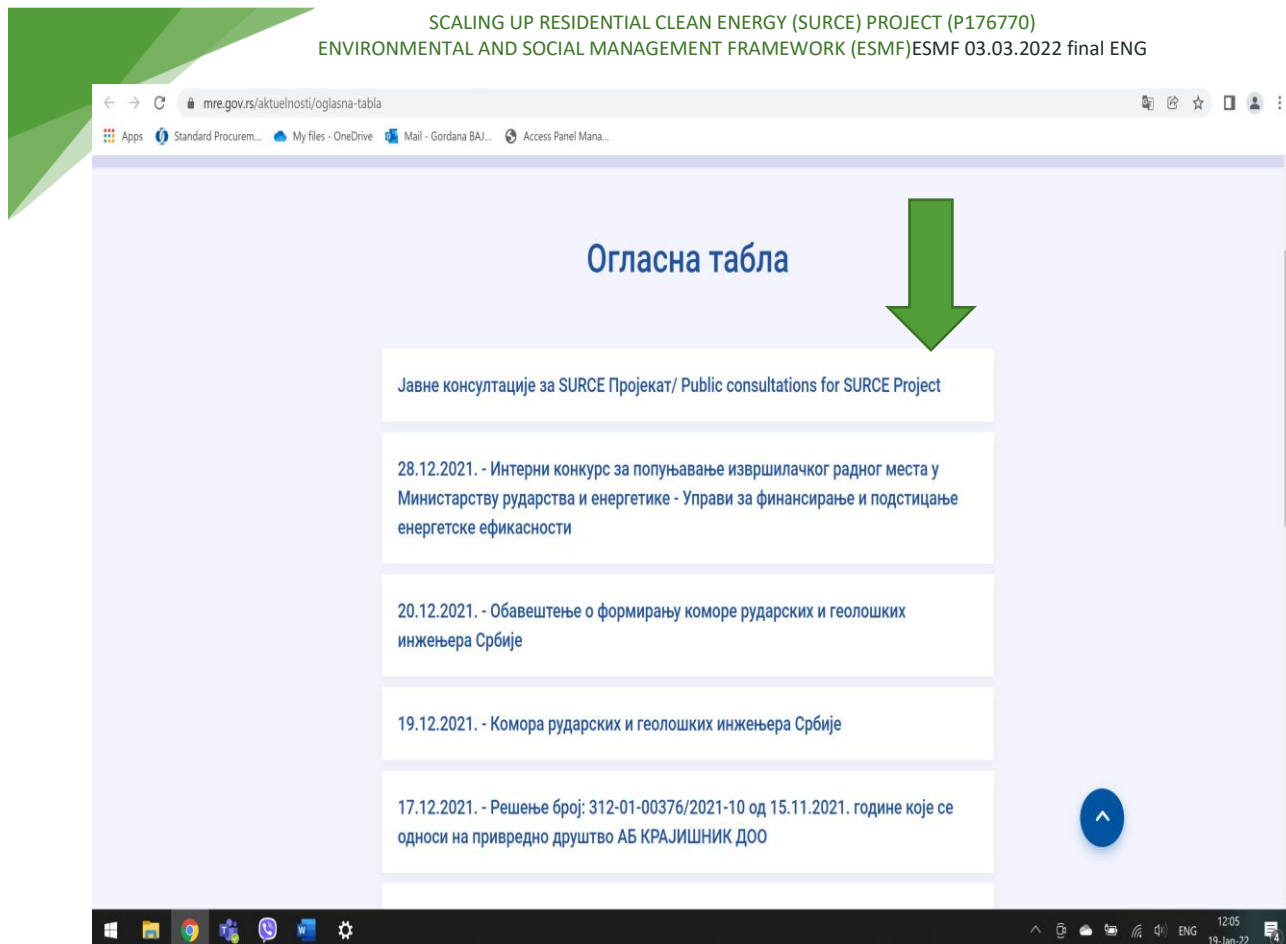


Picture 9: Announcement of public consultation in daily newspaper, in Serbian language (“Politika”, 19 Jan 2022)

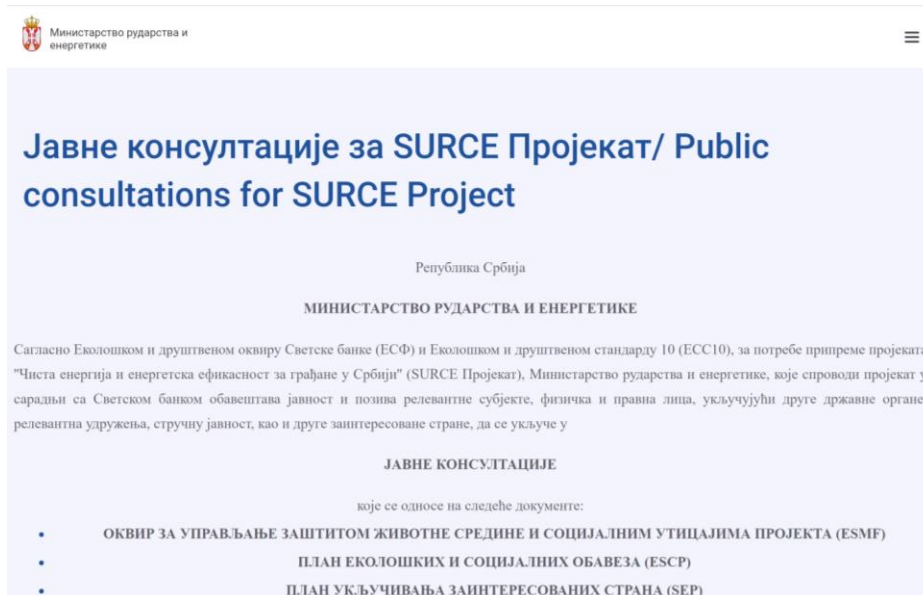




**Picture 10:** Announcement of public consultation in daily newspaper, in English, ("Politika", 19 Jan 2022)



Picture 11: Public disclosure of ESMF document, English and Serbian language, Ministry web site



• - ПРОЦЕДУРЕ УПРАВЉАЊА РАДОМ (LMP)

припремљене за пројекат

"Чиста енергија и енергетска ефикасност за грађане у Србији" (SURCE )

Заинтересоване стране могу да остваре Увид у предметна документа на интернет страници Министарства рударства и енергетике:

<https://www.mre.gov.rs/aktuelnosti/oglasna-tabla>

Примедбе, мишљења и сугестије у вези са предметном документацијом се подносе Министарству рударства и енергетике у писаној форми (у облику на адресу Немањина 22-26, 11000 Београд или електронском поштом на адресу: [irina.nedeljkovic@mre.gov.rs](mailto:irina.nedeljkovic@mre.gov.rs) са напоменом /предметна јавна јавне консултације SURCE", у року од 14 дана од дана објављивања документа (19. јануар), закључно са 01. фебруаром 2022. године.

Пријава учешћа у непосредним јавним консултацијама и презентацији предметних документа ће се, због пандемије COVID 19, одржати онлајн 02.02.2022. године, са почетком у 11:00 часова. Пријаву за учешће на непосредним јавним консултацијама потребно је послати до 02.02.2022 у 10:00 часова путем електронске адресе: [irina.nedeljkovic@mre.gov.rs](mailto:irina.nedeljkovic@mre.gov.rs). Сви пријављени добиће линк за консултације на дан одржавања јавне расправе путем електронске адресе коју доставе у пријави.

Додатне информације о овом обавештењу са позивом јавности могу се добити на тел: +381 (0) 113604422 или +381 (0) 113604489 или путем електронске адресе [irina.nedeljkovic@mre.gov.rs](mailto:irina.nedeljkovic@mre.gov.rs).

Republic of Serbia

MINISTRY OF MINING AND ENERGY

In compliance with the World Bank Environmental and Social Framework (ESF) and the Environmental and Social Standard 10 (ESS10), for the purpose of the preparation of the project "Scaling up Residential Clean Energy Project"(SURCE), Ministry of Mining and Energy, implementing the project in cooperation with the World Bank, informs the public and invites relevant entities, person and legal entities, including other government bodies, relevant associations, the professional public, and other parties, to take participation in

PUBLIC CONSULTATIONS

related to the following documents:

- ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)
- ENVIRONMENTAL AND SOCIAL COMMITMENT PLAN (ESCP)
- STAKEHOLDER ENGAGEMENT PLAN (SEP)
- LABOR MANAGEMENT PROCEDURES (LMP)

prepared for the

"Scaling up Residential Clean Energy Project" (SURCE)

Interested parties can review and assess the subject documents on the web site of the Ministry of Mining and Energy: <https://www.mre.gov.rs/aktuelnosti/oglasna-tabla>.

Comments and suggestions on to the subject documents shall be submitted in written form to the Ministry of Mining and Energy, Nemanjina 22-26, 11000 Belgrade or via following E-mail: [irina.nedeljkovic@mre.gov.rs](mailto:irina.nedeljkovic@mre.gov.rs) with note/subject: "For public consultation of SURCE", within the 14 days from the date of the public disclosure of the documents (January 19), by 01. February 2022 at latest.

Registration for participation in direct public consultations and presentation of subject documents will be held online, due to COVID 19 pandemic, on 02.02.2020 at 11.00. Applications for attendance at the direct public consultations should be sent by 02.02.2022 at 10:00 to the following address [irina.nedeljkovic@mre.gov.rs](mailto:irina.nedeljkovic@mre.gov.rs). All applicants will receive a link for the consultations on the day of the public hearing via e-mail address provided in the application.

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Оквир за управљање заштитом животне средине и социјалним утицајима пројекта (ESMF)



Environmental and Social Management Framework (ESMF)



**Picture 12:** Ministry web site, the announcement published in English and Serbian language



Republic of Serbia  
**MINISTRY OF MINING AND ENERGY**

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**PUBLIC CONSULTATIONS**

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- **STAKEHOLDER ENGAGEMENT PLAN (SEP)**
- **LABOR MANAGEMENT PROCEDURES (LMP)**

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**Picture 13:** Announcement of public consultation on ESMF document, English language, MoME web site





Република Србија

## МИНИСТАРСТВО РУДАРСТВА И ЕНЕРГЕТИКЕ

Сагласно Еколошком и друштвеном оквиру Светске банке (ЕСФ) и Еколошком и друштвеном стандарду 10 (ЕСС10), за потребе припреме пројекта "Чиста енергија и енергетска ефикасност за грађане у Србији" (SURCE Пројекат), Министарство рударства и енергетике, које спроводи пројекат у сарадњи са Светском банком обавештава јавност и позива релевантне субјекте, физичка и правна лица, укључујући друге државне органе, релевантна удружења, стручну јавност, као и друге заинтересоване стране, да се укључе у

### ЈАВНЕ КОНСУЛТАЦИЈЕ

које се односе на следеће документе:

- **ОКВИР ЗА УПРАВЉАЊЕ ЗАШТИТОМ ЖИВОТНЕ СРЕДИНЕ И СОЦИЈАЛНИМ УТИЦАЈИМА ПРОЈЕКТА (ESMF)**
- **ПЛАН ЕКОЛОШКИХ И СОЦИЈАЛНИХ ОБАВЕЗА (ESCP)**
- **ПЛАН УКЉУЧИВАЊА ЗАИНТЕРЕСОВАНИХ СТРАНА (SEP)**
- **ПРОЦЕДУРЕ УПРАВЉАЊА РАДОМ (LMP)**

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**Picture 14:** Call for Public Consultations on ESMF document, Serbian lang, MoME web site