The Republic of Bulgaria

Program for Results

National Program for Energy Efficiency of Multifamily Buildings

Environmental and Social Systems Assessment

March 2016
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<tbody>
<tr>
<td>BDB</td>
<td>Bulgarian Development Bank</td>
</tr>
<tr>
<td>BHCS</td>
<td>Batch-Hoisted Concrete Slabs</td>
</tr>
<tr>
<td>BNS</td>
<td>Bulgarian National Standard</td>
</tr>
<tr>
<td>CDW</td>
<td>Construction and Demolition Wastes</td>
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<tr>
<td>CIW</td>
<td>Construction and Implementation Works</td>
</tr>
<tr>
<td>DHW</td>
<td>Domestic Hot Water</td>
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<tr>
<td>EA</td>
<td>Environmental Assessment</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>ECF</td>
<td>Environmental Component and Factors</td>
</tr>
<tr>
<td>EEA</td>
<td>Energy Efficiency Act</td>
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<tr>
<td>EEA</td>
<td>Executive Environment Agency</td>
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<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<td>EED</td>
<td>Energy Efficiency Directive</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<tr>
<td>EMAS</td>
<td>Eco-Management and Audit Scheme</td>
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<td>EMS</td>
<td>Environmental Management System</td>
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<tr>
<td>EPA</td>
<td>Environmental Protection Act</td>
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<td>EPI</td>
<td>Environmental Policy Integration</td>
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<tr>
<td>ERA</td>
<td>Environmental Risk Assessment</td>
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<td>ESA</td>
<td>Environmental System Assessment</td>
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<tr>
<td>ETA</td>
<td>European Technical Assessment</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Products</td>
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<tr>
<td>HP</td>
<td>Heating Plant</td>
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<tr>
<td>HUH</td>
<td>Household Utility Holdings</td>
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<tr>
<td>IPPC</td>
<td>Integrated Pollution, Prevention and Control</td>
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<tr>
<td>ISO</td>
<td>International Standards Organization</td>
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<tr>
<td>LAF</td>
<td>Large-Area Formwork</td>
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<tr>
<td>LAS</td>
<td>Large Area Shuttering</td>
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<tr>
<td>LCA</td>
<td>Life Cycle Assessment</td>
</tr>
<tr>
<td>LED</td>
<td>Light-Emitting Diode</td>
</tr>
<tr>
<td>LSCT</td>
<td>Lift Slab Construction Technology</td>
</tr>
<tr>
<td>MoEW</td>
<td>Ministry of Environment and Water</td>
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<tr>
<td>MoF</td>
<td>Ministry of Finance</td>
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<tr>
<td>MRDPW</td>
<td>Ministry of Regional Development and Public Works</td>
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<tr>
<td>NPEEMB</td>
<td>National Program for Energy Efficiency of Multifamily Buildings</td>
</tr>
<tr>
<td>NPFA</td>
<td>National Priority Framework for Action</td>
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<tr>
<td>NPWM</td>
<td>National Plan for Waste Management</td>
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<tr>
<td>NRDS</td>
<td>National Regional Development Strategy</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>OPRD</td>
<td>Operational Program “Regional Development 2014-2020”</td>
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<tr>
<td>PA</td>
<td>Protected Areas</td>
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<tr>
<td>PAP</td>
<td>Program Action Plan</td>
</tr>
<tr>
<td>PCC</td>
<td>Policy on Climate Change</td>
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<tr>
<td>PCPC</td>
<td>Prefabricated Concrete Panels Construction</td>
</tr>
<tr>
<td>PforR</td>
<td>Program for Results</td>
</tr>
<tr>
<td>PM</td>
<td>Particulate Matter</td>
</tr>
<tr>
<td>PPA</td>
<td>Public Procurement Act</td>
</tr>
<tr>
<td>PPHC</td>
<td>Prefabricated Panel House Construction</td>
</tr>
<tr>
<td>PT</td>
<td>Protected Territories</td>
</tr>
<tr>
<td>RIEW</td>
<td>Regional Inspectorate of Environment and Water</td>
</tr>
<tr>
<td>SPA</td>
<td>Spatial Planning Act</td>
</tr>
<tr>
<td>SG</td>
<td>State Gazette</td>
</tr>
<tr>
<td>ToR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>TPP</td>
<td>Thermal Power Plant</td>
</tr>
<tr>
<td>TRPA</td>
<td>Technical Requirements to Products Act</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
<tr>
<td>WMA</td>
<td>Waste Management Act</td>
</tr>
<tr>
<td>WMS</td>
<td>Waste Management System</td>
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1 SECTOR CONTEXT AND PROGRAMME DESCRIPTION

Bulgaria is the second most energy-intensive economy in the EU (after Estonia - a specific case due to climatic conditions and unique fuel mix). Emission intensity (tCO2 per unit of GDP) is also over 20% higher than the EU average due to a high carbon intensive energy mix –coal accounts for about 38% of total primary energy supply.

To address these challenges, the Government made energy efficiency a cornerstone of its energy policy. In line with the EU’s climate and energy package (20/20/20 by 2020), Bulgaria adopted its third National Energy Efficiency Action Plan (2014-2020) which sets specific energy savings targets. The country aligned its legal and regulatory framework with relevant EU Directives and established a suitable institutional framework to support its implementation. The Ministry of Regional Development and Public Works (MRDPW) is responsible for the implementation of EE programs in the buildings sector. Since 2007, MRDPW has implemented two residential buildings EE programs, funded by EU structural funds and United Nations Development Program.

The residential sector accounts for about one fourth of the final energy consumption. Energy is used mainly in buildings, primarily for space heating (around 70% of energy use). The efficiency potential in space heating is significant. The pre-1990 buildings which account for 90% of the building stock, are in very poor condition due to lack of maintenance, and their energy consumption is at least twice as high as in those buildings built according to current standard mostly due to the low quality of insulation. As a result, about 45% of households report that could not keep the home ‘adequately warm’ and 34% indicate that they were facing arrears on energy utility bills. These are by far the highest figures within the EU, where the respective averages were 11% and 10%.

The Government’s National Program for Energy Efficiency of Multifamily Buildings (NPEEMB) was launched during February, 2015 to help address the difficulties above. The program builds upon past efforts aiming at much higher results. The program is fully in line with the country’s and EU climate and energy strategy. It aims at: (i) improving energy efficiency (EE) of multifamily residential buildings thus reducing energy expenditures, (ii) extending the lifetime of buildings; and (iii) contributing to a reduction in local and global air pollution. The Program has an overall budget of BGN 1 billion (about €500 million) financed by the State Budget with an announced potential prolongation, involving another BGN 1 billion. MRDPW is responsible for the overall Program design and coordination among Government entities.

Building on the experience of several EE schemes implemented since 2007, the program includes two new features: 1) 100% grant support for eligible buildings (no co-financing requirement); and 2) decentralized implementation, whereby each municipality is responsible for preparing applications, technical oversight, procurement, reviews/approvals, etc. The program design tackles barriers by: (a) providing incentives for homeowners, forming homeowners associations (HoAs) and taking collective decisions, to undertake comprehensive thermal and structural refurbishments of their buildings; and (b) ensuring a financial support to help kick-start EE renovations in multifamily buildings throughout the country.

**The Program Development Objective** is to secure better living conditions for citizens at multifamily buildings, heat comfort and better quality of the living environment through implementation of energy efficiency measures.
The Bank-financed Program for Results\(^1\) will be fully in line with the Government’s National Program for Energy Efficiency of Multifamily Buildings program. Therefore, the eligibility criteria, geographic coverage, eligible expenses and program period will be the same. The key characteristics of the Program include the following:

i. **Targeting:** Residential buildings constructed industrially to three or more floors of a minimum six (6) separate objects with residential use up to 36 separate objects with residential use and massive buildings, designed before April 26, 1999 of three or more floors with six (6) or more separate objects with residential use. Eligible buildings will have to have a registered HoA and reach 95% agreement of the owners to participate in the Program. HoAs would sign a contract with their respective municipalities authorizing them to manage the renovation process. All 265 Bulgarian municipalities are eligible to participate in the Program. HoAs will be selected on a “first-come first serve” basis.

ii. **Financial support:** Up to 100% grant support for eligible expenditures covering mainly measures to: (i) improve the EE of the buildings (thermal insulation of building envelope improvements of the heating, electrical work, etc.) and common spaces; and (ii) measures to improve the structural soundness of the buildings to, amongst other things, comply with the current building code, if needed. Measures to be implemented should bring the energy consumption of buildings to at least Class C (energy use of 191 kWh/m\(^2\) to 240 kWh/m\(^2\))\(^7\) at the lowest cost.

iii. **Implementation mechanisms:** The Program is administered mainly through municipalities. They not only approve project application and sign the contracts, but also are responsible for all procurement and acceptance of the energy and structural audits, approval of detailed designs and issuing of construction permits and perform construction supervision. Procurements are done in accordance with the Bulgarian Public Procurement Law. Supervision and oversight are done in line with existing national legislation and auditing and construction standards. Regional Governors in their capacity of representatives of the state have an oversight role of the Program in their respective Region.

iv. **Financing of the Program:** In the state budget for 2016, a state guarantee has been included in the amount of BGN 1 billion. The Bulgarian Development Bank (BDB) is responsible for mobilizing the financing for the Program and channeling the resources to Municipalities according to signed contracts with the municipalities and Regional Governors. In practice, BDB would cover the costs for all contractor invoices once approved by the municipalities, acting as a paying agent.

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\(^{1}\) The unique features of the Program for Result (PforR) includes the use of the institutions and processes in the candidate country and the establishment of a direct connection between the means and the achievement of specific results. www.worldbank.org/en/programs/program-for-results-financing
ENVIRONMENTAL AND SOCIAL SYSTEM ASSESSMENT

At the World Bank financial instrument PforR developed concept stage, the initial environmental and social screening was done to identify and envisage potentially the most significant environmental and social impacts of the National Program, as well as to identify any potential risks that could hinder the success of the Program. The initial screening associated with the National Energy Efficiency Program for Multifamily Buildings was made in June 2015 and also examined opportunities to enhance benefits that may be associated with the Program. The initial screening was focused on:

- Identification of environmental and social risks;
- Analysis of the Program Strategy;
- Analysis of institutional complexity and capacity for the implementation of the Program, and
- Identification of the reputational and political risk context.

These, identified in the screening process, serve as a basis for further assessment through the Environmental and Social System Assessment (ESSA). The World Bank conducted a comprehensive ESSA of the existing country environmental and social management systems in order to achieve informed preparation of the World Bank PforR operation.

The main objective of the ESSA is to carry out an assessment of the institutional/regulatory framework and organizational capacity and effectiveness of the relevant institutions in Bulgaria, involved in the National Energy Efficiency Program for Multifamily Buildings for the identification, avoidance, minimization and mitigation of any potential adverse environmental and social impacts and to enhance any positive impacts while ensuring the participation of relevant stakeholders in the process. The ESSA is based on already conducted screening of key potential environmental and social risks and impacts of the National Energy Efficiency Program for Multifamily Buildings. The ESSA includes specific recommendations as well as actions that were agreed between the Ministry for Regional Development and Public Works and the World Bank on how to mitigate any key risks and impacts and how to address any gaps related to the institutional/regulatory framework or organizational capacity. These recommendations and agreed actions should be articulated in the Environmental and Social Sections of the Program Action Plan (PAP) to be prepared for the financial instrument of the World Bank Program-for-Results (PforR) operation. The recommendations aim to:

1. Promote environmental and social sustainability in the Program design;
2. Avoid, minimize or mitigate adverse impacts; and
3. Promote informed decision-making in relation to the Program’s environmental and social effects.

This report presents the findings and recommendations of the ESSA exercise. The report is organized in seven sections, as follows:

Section I presents the general background to the Program and the ESSA exercise as well as provides a description of the proposed Program for Results Operation.

Section II describes the scope and methodology of the ESSA process conducted.

Section III provides the Program description.

Section IV provides a mapping of key stakeholders, including their roles and responsibilities.
Section V examines the potential environmental risks of the proposed Program.

Section VI examines the potential social effects of the proposed Program.

Section VII describes existing environmental and social management systems currently in use to address the environmental and social effects of the proposed Programme for Results.

Section VIII describes Program capacity and performance assessment.

Section IX presents the ESSA actions proposed for inclusion in the overall Program Action Plan.

Section X brings Conclusions of the ESSA exercise.

Section XI provides overview of ESSA disclosure and Public consultations.

2.1 Scope

The Program for Results financing instrument of the World Bank is a relatively new form of World Bank financing that aims to help countries design and deliver their own development programs. To do this, PforR links disbursement to verified achievement of results.

Associated with the PforR financing modality is a different approach to assessing and addressing environmental and social effects related to the Program. With standard Bank investment lending operations, the Borrower is required to comply with the set of World Bank Safeguard Policies applicable to the project or program and prepare the relevant safeguard instruments to avoid, mitigate and manage the environmental and social impacts of a project or program.

For PforR operations, the Bank task team is responsible for conducting a comprehensive assessment of the country systems in place for managing environmental and social effects (defined as benefits, impacts and risks) associated with the proposed set of Program related investments in relation to the following six aspects, as defined in the World Bank’s Operational Policy 9.00 OP/BP 9.00, Program-for-Results Financing (April 2013):

<table>
<thead>
<tr>
<th>Core Principle PforR</th>
<th>Relevance for the EE Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Environmental and Social Management: promote environmental and social sustainability in Program design; avoid, minimize, or mitigate adverse impacts, and promote informed decision-making relating to the Program’s environmental and social impacts.</td>
<td>The NPEEMB will involve some activities that promote environmental and social sustainability in Program design. The assessment of this aspect is discussed in in sections 5 and 6 (pages 32-48) below.</td>
</tr>
<tr>
<td>2: Natural Habitats and Physical Cultural Resources: avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the NPEEMB.</td>
<td>The NPEEMB will not lead to any damage or loss of natural habitats and/ or species of the wild flora and fauna as discussed in section 5.2.1. (page 33) below.</td>
</tr>
<tr>
<td>3: Public and Worker Safety: protect public and worker safety against the potential risks associated with: (i) construction and/or operation of facilities or other operational</td>
<td>The NPEEMB will not involve any activities that affect public and worker safety.</td>
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practices under the NPEEMB; (ii) exposure to toxic chemicals, hazardous wastes, and other dangerous materials, used under the NPEEMB realization; and (iii) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazards.

**4: Land Acquisition:** manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assist affected people in improving, or at the minimum restoring, their livelihoods and living standards.

All activities under the NPEEMB will be conducted on existing buildings and footprint will involve mostly retrofitting of existing equipment, building elements and systems, and there will be no land acquisition or resettlement necessary in connection with the NPEEMB, and no negative impacts related to land acquisition are expected. It must be highlighted that participation in the NPEEMB is voluntary and people will be informed about the nature and schedule of works allowing them to plan accordingly. This issue is further detailed and discussed in section 6.2.1 on page 46.

**5: Vulnerable Groups:** give due consideration to the cultural appropriateness of, and equitable access to, NPEEMB benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups.

The NPEEMB ensured 100% grant financed and therefore all population groups of Bulgaria will have equitable access to the NPEEMB. There are additional opportunities to enhance access to vulnerable groups under the NPEEMB with municipalities providing targeted technical support with complying with administrative procedures related to the Program as discussed in section 6.2.2, page 46-47.

**6: Social Conflict:** avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.

This principle is not applicable as the NPEEMB is not likely or expected to create or exacerbate social conflict.

This assessment, called the Environmental and Social System Assessment (ESSA) and its findings contributes to preparation of the Program Action Plan that government will use to bridge any significant gaps in the existing environmental and social management system with respect to the sustainability principles of the PforR Operating Policy (OP/BP 9.00)². The Bank provides implementation support as warranted for the implementation of agreed program action plan.

In analysing a program for consistency with the sustainability principles of OP/BP 9.00 of the World Bank, the ESSA is intended to ensure that programs supported by PforR financing are implemented in a manner that maximizes potential environmental and social benefits and avoids, minimizes or mitigates any and if possible all adverse environmental and social impacts and risks. Essentially, the ESSA process of the WB seeks to improve institutional performance related to the NPEEMB’s development objectives.

The ESSA describes the potential environmental and social effects associated with the PforR supported activities. The ESSA also assesses institutional roles and responsibilities as related to Residential Energy Efficiency PforR implementation and describes current capacity and performance to carry out those roles and responsibilities. The ESSA also considers public participation, social inclusion, and grievance redress mechanisms in place and as applied in PforR activities.

It is important to note that the ESSA will get updated based on the feedback received from stakeholders and public consultation\(^3\) and implementation experiences of the NPEEMB. The following sections present steps undertaken in the ESSA preparation process to date.

### 2.2 Methodology

In order to assess the existing systems as well as to analyse how these systems are applied in practice, the process of preparing the ESSA has drawn on a wide range of data.

Inputs analysed for this ESSA have included the following elements:

1. **Desk Review of policies, legal framework and program documents**
   
   The review examined the set of national policy and legal requirements related to environment and social management in the sector. The review also included documents from previous and ongoing World Bank activities, including qualitative research on the impact on energy tariff reforms on the Bulgarian population. More in-depth desk research was carried out for the practice of implementation of the NPEEMB in 13 (thirteen) municipalities, including Dobrich, Ivaylovgrad, Simeonovgrad, Pazardzhik, Smyadovo, Nova Zagora, Sliven, Botevgrad, Pravets, Nova Zagora, Gorna Oryahovitsa, Belogradchik and Bolyarovo.

2. **Institutional Analysis**

   An institutional analysis was carried out to identify the roles, responsibilities and structure of the relevant institutions responsible for implementing the PforR funded activities, including coordination between different entities at the national, regional and local levels. Sources included: existing assessments of key institutions focusing on environmental and social assessment and management processes. Available literature, documents and legislations were also consulted to assess capacity and performance of the relevant institutions.

3. **Interviews and Consultations**

   The ESSA process includes stakeholder consultations and disclosure of the ESSA Report following the World Bank's Access to Information Policy\(^4\). The PforR team has developed a consultation process for the ESSA report which will take place in May 2016. Main aspects of the planned process include:

   (i) for social aspects: a stakeholder workshop with participants drawn from civil society, implementers of the NPEEMB at different levels and NPEEMB development partners.

   (ii) for environmental aspects: At national level, interviews with the main implementing agency – the Ministry of Regional Development and Public Works (MRDPW) and the Sustainable Energy Development Agency (SEDA) were carried out with a specific focus on M&E arrangements. For the consultations at municipal level relevant stakeholders in nine municipalities— Blagoevgrad, Bourgas, Dolna Banja, Laki, Lovech, Plovdiv, Sevlievo, Gorna Oryahovitsa, and Bolyarovo.

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\(^3\) Formally, the PforR review and approval process requires that the Bank team consult with key stakeholders on the draft ESSA, including proposed measures to strengthen Program risk management capacity if any have been identified prior to or at appraisal.

Sopot and Stara Zagora - were identified. The nine municipalities were selected based on several criteria: (i) municipal population (urban and rural), (ii) the number of potential buildings and (iii) the HoA registered for the NPEEMB.

Consultations with the stakeholders (key target beneficiaries of the Program) have been conducted, based on already done identification of the relevant stakeholders. In-depth interviews (site visits) have been carried on in 9 (nine) municipalities: Dolna Banya, Blagoevgrad, Sevlievo, Lovech, Sopot, Plovdiv, Luki, Stara Zagora and Burgas. They are presented in details in Annex 1 to the current Report – Public Consultation Plan. The same annex 1 (Annex 1 Public Consultation Plan), provides also information for the municipalities, subject of a desk review. Their total number is 11 (eleven): Nova Zagora, Dobrich, Ivaylovgrad, Simeonovgrad, Pazardzhik, Smyadovo, Sliven, Botevgrad, Stolichna, Gorna Oryahovitsa and Bolyarovo. As annexes to the current Report the following documents are presented: finalized and agreed risk screening form (Annex 1 Public Consultations Plan), approved question form (Annex 2 Question Form) and minutes of the already conducted public consultations (Annex 3 MoMs).

4. Preparation of ESSA Report
The ESSA Report is developed, based on analysis of the national and international environmental, health and safety, social and technical legislation, as well as the policies of the World Bank and results of the in-depth interviews (site visits) and desk reviews, conducted by the environmental and social expert. It includes the information concerning the main topics, enshrined in the ESSA Terms of Reference (ToR) for PforR of the NPEEMB.

5. Description of the PforR
The information, presented in the current section, comprises clear description of the scope of the proposed to support the NPEEMB PforR and the institutional context, including findings from the initial screening (i.e. assessment of the likely environmental and social risks, associated with the NPEEMB, subject of the initial screening process).

6. Applicable Environmental Management Systems (EMS)
The information, concerning the applicable Environmental Management Systems, is based on existing analytical work such as Use of Country Environmental Management System Assessment, ESMFs, or assessments carried out by other development partners and Government, and information provided by the borrower.

7. Program Capacity and Performance Assessment
The assessment summarizes the reviewed capacity of PforR and NPEEMB institutions in order to effectively implement the PforR in line with environmental and social legislation, policies, rules, procedures, implementing guidelines, including PforR core principles, and so on (all based on the system description).

8. Suggested Area of Improvements and Inputs to the Pfor Action Plan
The information includes an identification of approach differences between the Bulgarian environmental and social management systems and the PforR core principles. In addition, it identifies areas of improvement for the Program implementation for full conformity with the national legislation, environmental sustainability principles and for mitigation of identified environmental risks. It also presents a summary of the key organizational, technical institutional measures, agreed to be taken during the implementation of the PforR.

3 PROGRAM DESCRIPTION
3.1 Overview of the Program

3.1.1 Eligible financing activities according to the requirements of the Program


The NPEEMB aims to carry out renovation of multifamily residential buildings through the implementation of energy efficiency measures and aims to ensure better living conditions for citizens in multifamily buildings, better thermal comfort and higher quality of the living environment.

Activities under the National Program will be implemented within the settlements of the municipalities with existence of multifamily buildings, which have been built using one of the following methods of construction: PPHC (Prefabricated Panel House Construction); LSCT (Lift Slab Construction Technology); LAF (Large-Area Formwork); sliding formwork and their varieties, with at least 36 separate objects with residential use.

The Council of Ministers Decree № 23/04.02.2016 complemented the Methodological guidelines of the National Programme for Energy Efficiency of Multifamily Buildings, adopted with Council of Ministers Decree 18/02.02.2015, on eligibility criteria of the buildings under the Program. As of 2016 the following are eligible:

- multifamily residential buildings constructed industrially: PPHC (Prefabricated Panel House Construction); LSCT (Lift Slab Construction Technology); LAF (Large-Area Formwork); sliding formwork and their varieties - to three or more floors of a minimum six (6) separate objects with residential use up to 36 separate objects with residential use;

- multifamily residential buildings (massive buildings) designed before April 26, 1999 of three or more floors with six (6) or more separate objects with residential use. Above mentioned buildings are eligible for funding only in cases where these fall outside of the scope of the project proposals of municipalities under Priority Axis 1 and Priority Axis 2 of the Operational Programme "Regions for Growth" 2014-2020.

Investments for the buildings should be prioritized giving preference to the oldest and most large panel buildings, buildings with proven serious structural problems endangering the lives of residents in them. It is also necessary to look for compact impact of activities - such target group- based buildings in certain districts, etc.

3.1.2 Identification of the environmental aspects of the program

For the identification of the environmental aspects of the Program, its territorial scope should be taken into account as well as the activities that are envisaged, namely:

- Activities of construction rehabilitation/ enhancement/ overhaul of the multifamily residential buildings, scale of which depends on the building’s condition. These -activities will come out as a result technical investigation carried out prior to any rehabilitation;

- Renovation of the common areas / premises of multifamily residential buildings (roof repairs, facade, refreshing the staircase, cellar, etc.);

- Implementation of energy efficiency measures that are prescribed as mandatory for the energy efficiency investigation of the buildings, as follows:
✓ For outer building covering components:
- Replacement of window and door frames (windows, doors, storefronts, etc.);
- Thermal insulation of the outer covering components (exterior walls, roofs, floors, etc.).
✓ In microclimate maintaining systems:
- Overhaul, modernization or replacement of local heat sources/boiler farms or adjacent facilities, incl. fuel switching with proven energy saving and environmental effect;
- Construction of systems for utilization of renewable energy sources for the needs of the building;
- Repair or replacement of amortized undivided shares of the heating systems, cooling and ventilation of the building for improving the energy efficiency;
- Reconstruction of the vertical heating system in a horizontal way, ensuring individual metering of the heat consumption for each owner of individual site (apartment) in the building;
- Repair or replacement of the electrical installations in undivided shares and implementation of energy saving lighting in the undivided shares of the building;
- Installation of automatic centralized control for the heat supply in local sources owned by the owner of individual site (apartment) in the building;
- Installation of a system for automated centralized control of lighting in the undivided shares of the building;
- Gasification of buildings (gas boiler installation and connection to the urban gas distribution network where it is available near the building);
- Measures, which will lead to increase of the energy efficiency of the elevators.
✓ Supporting construction works, related to the implementation of the energy efficiency measures and the corresponding recovery of the undivided shares of the building as a result of the implemented measures with energy saving effects. Accompanying construction and installation works related solely to restoration of the initial state, impaired as a result of renovation of the undivided shares and the replacement of window and door frames in a separate building.

3.1.2.1 Criteria for selection of residential buildings to be renovated. Criteria, referring to the health, Safety and Environmental Protection Requirements

Buildings meeting the eligibility criteria shall be selected to receive grant financial support, if they comply with the following conditions:

- HoAs has been registered for the whole building following the terms and conditions of Art. 25, para 1 of Condominiums Management Act (CMA) and all the required decisions have been made in compliance with the requirements of the law and these guidelines – document in evidence of the association’s registration in the public register of the respective municipality (as per CMA), in the BULSTAT register and Minutes of the General Assembly meeting;
- The building is eligible in compliance with the requirements of the program;
- Agreement has been achieved from all independent site owner (ISO) that use individual sites or parts thereof for doing business, as well as for renting or trading activities by traders and/or persons with free professions, for receipt of minimum support in compliance with the de
minimis program, and for payment of the relevant costs, whenever applicable (including filling out of the relevant declarations).

In connection with the protection of the people and the environment the Program sets the following requirements in order to finance the renovation of the multifamily residential buildings:

- Construction products securing the implementation of the main requirements to construction sites shall be envisaged in the course of construction design (buildings and construction facilities), and shall be invested in during the implementation stage, as specified in Appendix I of Regulation (EU) № 305/2011 of the European Parliament and of the Council of 9 March 2011 on defining of harmonized conditions for market supply of construction products and for repeal of Directive 89/106/EEC and by Art. 169 of SPA, as follows:
  - Bearing capacity - mechanical resistance and stability of building structures and ground base under loads during the construction and exploitation and seismic loads;
  - Safety in case of fire;
  - Sanitation, health and environment;
  - Accessibility and safety during exploitation;
  - Noise protection;
  - Energy efficiency - saving energy and heat;
  - Sustainable use of natural resources.

3.1.2.2 Technical legal requirements, applicable to the Program and in connection with the protection of the environment


The key secondary legislation defining the technical level of energy consumption in buildings and forming the legal and technical basis for energy efficiency requirements are as follows:

On the grounds of the SDA:
- Ordinance No 7, 2004 on energy efficiency, heat conservation and energy savings in buildings;
- Ordinance No 5, 2006 on technical dossiers of buildings
- Ordinance No 2, 2008 on design, implementation, control and adoption of hydro insulation and hydro insulation systems of buildings and facilities.
- Ordinance No 7 2003 for rules and regulations for development of the different types of territories and development zones

On the grounds of the EEA:

To be developed in addition, following the provisions of Regulation (EU) №1407/2013 of the Commission of December 18, 2013 on application of articles 107 and 108 of the Treaty on the Functioning of the European Union (TFEU) to de minimis aid (OB L 352 of 24.12.2013).
- Ordinance No 16-1594, 2013 energy efficiency investigation, certification and evaluation of energy savings of buildings;
- Ordinance No RD 16-1058, 2009 on energy consumption indicators and energy characteristics of buildings;
- Ordinance No RD 16-932, 2009 on the terms and procedures for inspection of energy efficiency of heat-only-boilers and of air-conditioning installations under Art. 27, para 1 and Art. 28, para 1 of the Energy Efficiency Act and for setting up, maintenance and use of database on them.
- Ordinance № 7 of the 2004 Energy Performance of Buildings

On the grounds of the EA:
- Ordinance No 15, 2005 on the technical rules and standards for design, construction and operation of sites and facilities for production, transmission and distribution of heat energy, and the methodology for their application.

On the grounds of the TRPA:
- Ordinance № RD-02-20-1 dated 5 February 2015 on the terms and conditions for use of construction products in construction works of the Republic of Bulgaria

The main technical legal requirements, connected with the prevention of the human health and safety and the pollution of the environment are established via the following legal requirements and they are as follows:

- **Spatial Planning Act, art. 169, Para. 3**
  It sets an explicit requirement that construction works should be designed, implemented and maintained in accordance with the requirements of the following normative acts:
  ✓ Conservation of protected areas, protected territories and other protected objects and immovable cultural properties;
  ✓ Engineering and technical rules for protection in case of disasters and accidents;
  ✓ Physical protection of the constructions.

- **Technical Requirements towards Products Act (prom. SG 86 dated 1 October 1999, last amended and supplemented in SG 98 dated November 28, 2014) and Ordinance № RD-02-20-1 dated 5 February 2015 on the terms and conditions for use of construction products in construction works of the Republic of Bulgaria (prom. in SG 14 from 20 February 2015)***
  They set/ regulate the provision and use of construction products that meet the requirements of Art. 169, Para. 3 of SPA. According to the requirements of Art. 4, Para 1 of the Ordinance, construction products are used in construction works based on declarations, indicating the intended use and accompanied by instructions and safety information in Bulgarian language. Depending on the technical specifications, according to which construction products are assessed, the declarations are as follows:
  ✓ Declaration on performance, developed in accordance with Regulation (EU) Nº 305/2011 and the specimen, given in Annex III of Regulation (EU) Nº 305/2011, when the construction product is harmonized with European standard or European Technical Assessment (ETA) has been issued for it;
  ✓ Declaration on the characteristics of the construction product, when it is not covered by a harmonized European standard or if ETA is not issued for it, composed as shown in Annex Nº 1 of the above-mentioned Ordinance. The manufacturer or an authorized official should issue the declarations.

The governmental bodies under Art 220-223 of the SPA carry out administrative supervision of the construction products during the processes of design and construction. These bodies are as follows: the Minister of Regional Development and Public Works, the Minister of Interior or authorized officials (control on compliance with the fire safety requirements; for disaster-prone areas), the head of the National Construction Control Directorate or authorized officer (for construction works of first, second
and third category) and the mayor of the municipality (region) or an authorized officer (for construction works of the fourth, fifth and sixth category).

3.1.2.3  **Minimal energy characteristics, necessary to be met in the course of rehabilitation of buildings**

In the course of planning, design, implementation and maintenance of buildings in terms of energy characteristics, the following requirements have to be met as a minimum:

- Not to pose a threat to the hygiene or health of the occupants or neighbours and environmental protection, microclimate parameters to provide norms for thermal environment (comfort), lighting, air quality, humidity and noise;
- Heating, air conditioning and ventilation installations to be designed and built in such a way that the required energy for use is minimized;
- The buildings to be protected with heat and noise insulation, incl. protection against unacceptable impacts due to vibrations, appropriate to their purpose, location and climatic conditions;
- The buildings to be energy efficient in order to use as less energy as possible during their construction, operation and demolition;
- The buildings to comply with the opportunities for utilization of solar energy and other renewable sources, where technically feasible and economically viable.

3.1.2.4  **Requirements for the construction products, used in the implementation of the Program activities**

According to the requirements of the National Energy Efficiency Program for Multifamily Buildings, construction products intended for permanent use in buildings should be suitable for their use and should meet the essential requirements for construction works for an economically reasonable period of operation, and should comply with the relevant technical specifications and national requirements with regard to the intended use. Their characteristics must be appropriate for building, installation, placement or installation when designing the buildings and their upgrades, repairs and reconstructions. The National Energy Efficiency Program for Multifamily Buildings sets up the following technical requirements:

- **Thermo-physical characteristics of building products to achieve energy-saving effect in buildings. Requirements are set for product areas that are covered by Regulation (EU) № 305/2011:**
  - Doors, windows, shutters, gates and related building hardware;
  - Thermal insulation products, composite insulating kits/systems;
  - Wood based panels and elements;
  - Masonry and related products, masonry units, mortars and ancillaries;
  - Roof coverings, roof lights, roof windows, and ancillary products. roof kits;
  - Construction adhesives;
  - Space heating appliances;
  - Building kits, units, and prefabricated elements.

- **Thermo-physical characteristics of building products to achieve energy-saving effect in buildings covered by of Directive 2010/30/EU.** There are also requirements for product areas that are not covered by Regulation (EU) № 305/2011 – energy consuming products, for which in delegated regulations of the European Commission requirements concerning the implementation of Directive 2010/30/EU are specified:
  - Lamps;
  - Autonomous air conditioners;
  - Water boilers for heating and domestic hot water (DHW) (incl. wood and pellet burning);
✓ Solar collectors;
✓ Substations (assemblies);
✓ Water cooling aggregators and air coolers;
✓ Heat pumps (assemblies);
✓ Recuperators of heat.

- Thermo-physical characteristics of the products delivered for the construction of thermal insulation: polystyrene - expanded (EPS) and extruded (XPS) and wools, as well as insulation sets (systems) in such products;

- Waterproofing and waterproofing systems;

- Delivered sets of assembled windows and doors, which to be installed on the facades of buildings;

- The energy characteristics of solar systems, utilizing solar energy to heat water for domestic purposes in the building (flat and vacuum tube solar collectors);

- Some delivered construction products, consuming energy (lighting and appliances), namely: recommended technical requirements for lighting and light output source for incorporation into luminaires – LED (light-emitting diode);

- Heat pumps;

- Water boilers.

The technical requirements have to be taken into account and reflected as a part of the investment designs (part "Energy Efficiency") for the renovation of the buildings under the Program. Apart from the requirements of the Program, this is also regulated by the requirements of the effective legislation in the field of spatial development, namely in the Spatial Planning Act and Ordinance № 7 of 15 December 2004 on the energy efficiency of buildings.

The compliance of the Program activities with the technical requirements is proven by the approval of technical or working investment designs and issuance of a construction permit, in cases where it is necessary and required by the law. For the Program purposes are approved investment designs by the chief architect of the municipality (region).

Based on the above mentioned it can be concluded that according to the Program it is allowed to include in investment design the specification of thermal insulation products. Respectively, the construction will be ensured with products, whose characteristics and indicators correspond to the results of the energy investigation and technical design and which meet all regulatory requirements for their placing on the Bulgarian market and their intended use (purpose) in buildings.

On the other hand the Program recommends and proposes the use of new technologies with proven technical, economic and environmental feasibility, ensuring the achievement of the calculations in the energy investigation (energy saving effect).

According to the Program requirements, monitoring and current control during the construction process is carried out by:

1. An external contractor for carrying out construction supervision and investment control;
2. Technical experts of the municipality in its capacity as an Assignor should implement inspections on the site;

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6 The rehabilitation of the multifamily buildings is a process, related to the process of issuance of construction permit. Issuance of construction permit is a prerequisite for the rehabilitation of each building.
3. A representative of the association of the homeowners.

3.1.2.5 Requirements for the historical buildings included in the Program

Given the ongoing amendments of the NPEEMB, it is possible to include buildings with historical and cultural heritage significance within the scope of the Program. In these cases, the approval of projects, concerning their rehabilitation, will be done according to the Cultural Heritage Act and the secondary legislation thereto, namely:

- According to Art. 83, para. 1 of the Cultural Heritage Act (CHA) (Prom. SG. 19 of March 13, 2009, last amended and supplemented SG. 16 of 26 February 2016) investment projects and requests for interventions in protected areas for the conservation of cultural heritage are approved and construction works are executed under the Spatial Planning Act in coordination pursuant to Art. 84 of the CHA.

- According to Art. 3, para. 83 of the CHA commissioning of the constructions is performed after a positive opinion of the Minister of Culture or authorized thereby public officials and the executive documentation under the Spatial Planning Act is coordinated under Art. 84, para. 1 and 2 of the CHA.

- According to Art. 84, para. 1 of the CHA coordination of technical projects, concerning buildings with historical and cultural heritage significance, is carried out with a written statement and endorsement stamp on graphic materials within two months from the date of receipt of the relevant documentation. According to Art. 2 coordination is carried out by the Minister of Culture or authorized thereby public officials after a written opinion of the National Institute of Immovable Cultural Heritage.

- Account the provisions of Art. 84, para. 1 of the CHA for coordination under par. 1 and 2 are applied in a form approved by the Minister of Culture.

Currently in this respect, the following problems are identified:

- The deadline for approving projects for the rehabilitation of buildings will be extended by more than two months, given the need for further coordination with the Ministry of Culture and the National Institute of Immovable Cultural Heritage;

- Given that the requirement for such buildings is preserving their facade, it is possible to reach to: 1) considerably appreciation of the projects because of the need to carry out specific activities and 2) carrying out activities that are not within the scope of financing of the program and which may need to be financed by homeowners.
4  KEY STAKEHOLDERS MAPPING

4.1  List of the key implementing agencies and partners involved in the Program according to the Methodological Guidelines of the National Energy Efficiency Program for Multifamily Buildings

The organizational and institutional structure of the NPEEMB implementation according to the Methodological Guidelines of the National Energy Efficiency Program for Multifamily Buildings includes the following stakeholders:

1. Ministry of Regional Development and Public Works (MRDPW) - Program Coordinator;
2. Ministry of Finance (MoF);
3. Bulgarian Development Bank (BDB);
4. Municipal administrations;
5. Regional Governors;
6. Homeowners associations (HoAs);
7. External contractors, such as construction companies, which will perform the construction and installation works, companies, which will conduct the investment and construction supervision and suppliers of the different types of construction materials.

The companies, which will do the investment and construction supervision, will be responsible for the conduction of the monitoring and current supervision during the construction process. This particular function they will implement together with the technical experts of the municipalities, which in its capacity as Assignor, should conduct on-site inspections. A representative of the Homeowner association will also participate.

4.2  Roles and responsibilities of the key implementing agencies and partners involved in the program according to the Methodological Guidelines of the National Energy Efficiency Program for Multifamily Buildings

The lead partner and main coordinator of the PforR implementation is Ministry of Regional Development and Public Works (MRDPW). The PforR has however a wide range of stakeholders who are actively involved in program design and implementation.

4.2.1  Ministry of Regional Development and Public Works (MRDPW)

MRDPW coordinates the process, issues the necessary methodological guidelines and develops the necessary forms for submission to the municipality. The Ministry supports municipalities in the implementation of the Program through Directorate "Residential policy".

Key-responsibilities:

- Provides methodological guidance on non-financial aspects of the Program;
- Observes the process of Program implementation;
- In the framework of the budgetary procedure for a given year plans the funds for inclusion in the national budget and in the medium-term budget forecast.

MRDPW is responsible for the development of methodological guidelines and the template of the documents for application under the Program. The structure of the Ministry does not have a specific department, which is responsible for activities related to social or environmental impact and safeguards. There is no provision in the legislation, requiring the existence of such department and the practice of MRDPW under the national legislation is the approval of projects on behalf of MRDPW to
take place in the presence of an opinion from the MoEW and MLSP and their respective structures, when the same is necessary to be done, as well as other relevant agencies with regard to social aspects and environmental impacts of any different program or policy.

4.2.2 The Ministry of Finance (MoF)

MoF is responsible for:
- Methodological guidance regarding the budgetary aspects of the PforR, supporting the NEEPMB;
- The relevant actions by issuing a state guarantee under Art. 100 of the State Budget Law of Republic of Bulgaria (SBLRB), 2015.

Given the responsibilities of the MoF, the institution is not required to have experts, working in the field of social aspects and environmental impact assessment.

4.2.3 Bulgarian Development Bank (BDB)

BDB participates in negotiating the agreement/s to provide loans of BDB to ensure financial resources for the implementation of the NEEPMB, for which a state guarantee will be issued according to Art. 100 of the State Budget Law for 2015. BDB signed contracts for targeted financing (CTF) with the mayor of the municipality and the regional governor. It maintains a public register of the requests for contracts for targeted funding as well as a register of the contracts for targeted funding.

No specific requirements regarding environmental protection are set out in the Contract of Targeted Financing. In Section IV, Declarations and confirmations (art. 9, p. 1), it is declared by the mayor of the municipality that by the date of signing the contract all information, provided to the Bank is actual, accurate, valid and complete, prepared in accordance with applicable regulatory requirements. This is a requirement to the mayors of the municipalities/their authorized representatives to ensure compliance with environmental requirements during the implementation of measures under the NEEPMB. It can be concluded that the Contract of Targeted Financing does not set preconditions for the occurrence of obstacles for the normal implementation of the NEEPMB. The definition of specific requirements for environmental protection in the Contract would contribute to environmental protection.

4.2.4 Municipal administrations

Municipal administrations are responsible for the overall technical and financial administration of the NEEPMB within its territory, including:
- Raising awareness and informing the population of the NEEPMB’s objectives, timelines, procedures, etc.;
- Managing the registration of House Owner Associations (HoAs);
- Maintaining a public register of HoAs;
- Maintaining a register recording applications from HoAs for the financing of renovation works under the NEEPMB. Municipal administrations are accepting applications from the associations of the homeowners and conclusion of a contract with the relevant associations for the provision of funding and assistance. These contracts do not include any environmental clauses;
- Maintaining a database for the implementation of the NEEPMB. According to the requirements of the Program, the mayors shall maintain a record for each funded and renovated building. The file with the original documents for each building is given to the Regional Governor with an acceptance protocol after the commissioning of the buildings. The municipality should maintain a register in which to record applications from homeowner associations, and to maintain a database for the implementation of the NEEPMB;
Approving the received applications and investment proposals, based on the requirements, stipulated in the Methodological Guidelines of the NEEPMB;
Contracting and payment of all renovation activities;
Administering the public procurement procedures related to the NEEPMB; approval of investment proposals, issue building permits (if necessary)
Conclusion of contracts for targeted financing with the Bulgarian Development Bank (BDB) and the Regional Governor for the appropriate funding;
Issue construction permits, necessary for the rehabilitation of multifamily buildings. These permits do not contain environmental clauses. The environmental permits (Environmental Impact Assessment (EIA) permits or permits, by which it is assessed that EIA is not necessary) are precondition for their issuance and they form an integral part thereof. Environmental Impact Assessment procedure, applicable to the rehabilitation of multifamily buildings, is described in details in Subchapter 7.1.2;
In case the municipality owns apartment(s) in buildings where HoAs are being established, the municipalities participate in the HoAs General Assembly Meetings (GAM);
Conduct information / awareness campaigns, following the methodological guidelines, financed out of own budgetary sources. Hence, most of the additional communication, ad hoc consultations or public meetings respecting the needs of the final beneficiaries, especially targeting vulnerable groups stays on the municipal budget as well.
Construction supervision;
Exercise investment control.

4.2.4.1 Role of municipalities in environmental management of the NEEPMB
In accordance with the requirements of the environmental protection legislation the municipality mayors perform the following functions:
Inform the community about the state of the environment and compliance according to the requirements of Environmental Protection Act;
Together with the other authorities elaborate and control plans for elimination of the effects of accidents and pollution outbreak within the territory of the municipality;
Organize waste management within the territory of the municipality;
Oversee the construction, maintenance and proper operation of wastewater treatment plants and adjacent systems in the urbanized areas;
Organize and oversee the maintenance, conservation and expansion of the settlement green structures within the urban settlements and in the country areas, as well as the conservation of biological diversity, the landscape and the natural and cultural heritage therein;
Designate and make public the persons responsible for maintenance of the cleanliness of streets, sidewalks and other areas for public use within the nucleated settlements, and oversee the performance of the duties of the said persons;
Organize the operation of eco-inspectorates, including such functioning on a pro bono basis, established by resolution of the competent Municipal Council, which are empowered to draw up written statements, ascertaining administrative violations;
Designate the officials, empowered to draw up written statements ascertaining administrative violations under EPA;
Exercise the powers vested therein under the special laws regulating the environment;
Designate the persons in the municipal administration, possessing the suitable/appropriate occupational skills to carry out the activities comprehended in environmental management.

The municipality mayors may delegate the performance of the above mentioned functions to the Regional mayors and the municipality mayors.

The municipal administration also play a significant role in the implementation of environmental activities under the NEEPMB.
The municipal administrations, represented by the mayor or by authorized official are responsible for the management of significant environmental aspects identified as a result of the realization of the NPEEMB and listed and assessed in details in the Chapter 5 of this Report. Municipal administrations are responsible for monitoring the enforcement of local regulations on environmental protection (conduction of inspections on construction sites in relation to proper storage of generated waste, with no contamination of the surrounding areas; inspection of the municipal territories for illegal dumping of waste; organization of proper transportation of construction materials and/or waste to provide safe and clean environment for citizens, etc.), implementation of NPEEMB activities in a way that does not impede the achievement of the objectives of the municipal environmental protection programs, and they have also to identify areas for waste disposal and coordination of the routes, which will be used for material delivery and transportation of the waste for disposal.

In addition to the above mentioned the approval of the investment projects for the renovation of buildings and issuing of the required construction permits is done by the municipal administrations. In the course of this process they are also responsible for approving the compliance with the environmental legislation in the project design phase. For example, they must ensure the correct implementation of Ordinance № 4 dated 27 December 2006 for limiting the harmful noise by sound-proofing of buildings during their design and for rules and standards in the performance of construction works in terms of noise emitted during construction (Prom. in SG 6 dated 19 January 2007).

The coordination and approval of the technical designs is also connected with coordination and acceptance of the Construction Waste Management Plans (Waste Management Act and Ordinance on the management of construction waste and use of recycled building materials, Prom. in SG 89 of 13.11.2012, effective from 11.13.2012). The proper implementation of the plan is a subject of control by the mayor or by an authorized officer.

Based on the above mentioned it can be concluded that in connection with the NPEEMB realization the municipal administrations are responsible for the organization of the waste management process within the territory of their municipalities, i.e. by issuing permits for non-hazardous construction wastes landfilling and approving the route for their transportation for disposal.

The implementation of the waste management legislation on the territory of each municipality is supervised by the relevant RIEW and municipal administrations. RIEW issues or participates in the processes of issuing the necessary waste management permits; supervises the compliance with the waste management permit requirements and approves waste classification lists. Municipal administrations are responsible for the organization of the waste management process within the territory of their municipalities, i.e. by issuing permits for non-hazardous construction wastes landfilling and approving the route for their transportation for disposal.

4.2.5 Regional governors

Regional governors are in charge of observing the process of renovation of residential buildings on their territory in compliance with the rules and regulations that are relevant for the NPEEMB including participation in committees for final approval of objects and signs of all protocols during construction. Types of protocols to be signed during construction process are in accordance with the requirements of Ordinance № 3 dated 31 July 2003 on the establishment of acts and protocols during construction (promulgated in SG №72 dated 15 August 2003, last amended in SG № 98 dated 11 December 2012). The main protocols concern: delivery and acceptance of approved projects and effective construction permits, opening construction sites (which mean commencement of construction activities on the site),
establishing the condition of already rehabilitated multifamily buildings, etc. The verification shall be performed by completing a checklist in a standard form.

Regional governors are specifically responsible for signing the contracts for funding under the NPEEMB with the municipality and BDB after verification of the conditions for approval of the building, namely:

- Existence of a building according to the definitions of the NPEEMB;
- Existence of 36 separate apartments with residential use in the building;
- Existence of a house owners association, registered in the municipality and in the BULSTAT Unified Identification Code register;
- Existence of a contract between the HOA and the municipality.

4.2.5.1 Role of regional governors in environmental management of the NPEEMB

The Regional Governors shall perform the following functions, assigned to them by the EPA:

- Ensure the pursuance of the national environmental protection policy within the territory of the administrative region;
- Coordinate the work of the executive authorities and the administrations within the territory of the administrative region in respect of pursuance of the national environmental protection policy;
- Coordinate the activities comprehended in the pursuance of the environmental protection policy amongst the different municipalities within the territory of the administrative region;
- Issue penalty decrees based on written statements drawn up under the requirements of the mayors.

4.2.6 House Owners Associations (HoAs)

Associations of homeowners:

- Submit applications of interest for financial assistance;
- Conclude a contract with the respective municipality;
- Control the implementation of renovation for energy efficiency in the building by an authorized technician or the association representative.

Based on the current legislation and the design of the NPEEMB, there are no specific requirements for establishing specific HoA-led communication mechanisms with the other (local) program administrators and their role in social and environmental protection is not specifically defined. It may be considered that in the process of monitoring the implementation of the renovation for energy efficiency by an authorized technician or a HoA representative, associations of owners could pursue direct control actions to the proper management and implementation of the Program social and environmental aspects and to alert the responsible institutions if gaps are identified. HoA managers and the janitors (who are often one and the same) have de facto key responsibilities connected to the roll out of the public consultation and awareness campaigns, by securing qualitative inputs for the consultation process and securing the support of the beneficiaries for the agreed measures.

4.2.7 External contractors

Contractors are selected by the municipalities according to the terms and conditions of the Public Procurement Act (PPA).

Selected contractors must cover the following activities:

- Development of technical and energy surveys/investigations for establishing the technical characteristics related to the requirements of Art. 169 par. 1 pt. (1-5) and par. 2 of the Spatial Planning Act (SPA);
- Elaboration of an energy efficiency audit and prescribing the necessary energy-saving measures in accordance with the legal requirements for energy efficiency under the Energy Efficiency Act (EEA) and its implementing regulations;
- Preparation of technical/business projects and implementing of author supervision;
- Implementation of the construction and installation works. The quality of the implemented activities under the NPEEMB will be subject to a single monitoring for achieving energy efficiency. It will be carried out after the first heating season, subsequent the repair works, but will collect mainly information about increasing the energy efficiency of the buildings and produced saving in carbon emissions.
- Performing compliance assessments of the investment projects and construction supervision if required;
- Performing investment control partly covered by the implementing agency and the municipal capacities.

For external contractors, specifically those performing construction activities, usually general requirements for environmental protection are underlined. These requirements define the necessity the legal requirements to be met and the same are included in the Contract for awarding construction and installation works. Only in several cases there are explicitly mentioned in the contract requirements, concerning the significant environmental aspects (depending on the practice of the relevant municipal administration). The contractors responsible for the construction works have the obligation to “Securing the necessary safety measures during works” in compliance with the requirements of health and safety working regulations.

4.3 Other relevant stakeholders for the environmental component of the Residential Energy Efficiency Program

According to the current national environmental legislation and in particular Art. 8 of the Environmental Protection Act, in addition to municipality and regional administration, the competent authorities responsible for compliance with environmental requirements are the following institutions:
- Ministry of Environment and Water;
- Executive Environment Agency;
- Regional Inspectorates of Environment and Water (RIEW);
- Basin Directorates;
- Directorates of National Parks;

Competent to take the measures provided by the law actions and activities are:
- On the territory of one municipality - the director of the RIEW or the mayor, and in cities with regional division - the mayor of the area;
- On the territory of one region - the Regional Governor or the director of the RIEW;
- On the territory of several municipalities within one RIEW - the Director of the Inspectorate;
- On the territory of several municipalities within different RIEW - the Minister of Environment and Water.

Based on the fact, that all the activities under the NPEEMB will be conducted within the borders of one municipality (within the borders of the settlements) the authority, competent to take environmental protection measures, provided by the law actions and activities, is the relevant RIEW.

For the purposes of the NPEEMB, the institutions involved in the regulation of the application of national legislation in the sphere of environmental protection (except the mayors of the municipalities, and in cities with regional division - the mayors of regions and Regional governors) are MoEW, EEA and relevant RIEW. Except the risks of indirect impacts on water bodies (as a result of irregular dumping of wastes and usage of malfunctioning equipment), the construction activities under the Program are not connected with direct water intakes or wastewater discharges in water bodies. Based
on this fact the construction activities are not associated with coordination procedures under the Water Act. The Directors of the Basin Directorates have not any functions in the realization of the Program.

4.3.1 Ministry of the Environment and Water (MoEW)

The Minister of Environment and Water shall perform the following functions, according to the EPA:

- Together with the other environmental authorities (incl. RIEW, Basin Directorates, EEA, etc.) develops the environmental protection policy and strategy in the Republic of Bulgaria;
- Directs the National Environmental Monitoring System through the Executive Environment Agency;
- Controls the state of the environment in Bulgaria;
- Coordinates the controlling powers of other executive authorities in respect of the environment;
- Issues orders, permits, instructions and endorse methodologies;
- Jointly with the executive authorities concerned:
  - Issues maximum permissible emission levels by type of pollutant and levels of maximum permissible concentrations of harmful substances by environmental medium and by area;
  - Endorses EIA methods;
  - Issues standards on efficient utilization of renewable and non-renewable natural resources;
  - Ensures the collection and provision of information on the state of the environment;
- Performs other activities associated with environmental protection and management in conformity with the special laws;
- Prepares an Annual Report on the State of the Environment;
- Organizes and coordinates the activities of the solicitation, advance evaluation and forwarding of project proposals to the European Commission bases on the requirements of Regulation (EC) № 614/2007 and exercises the rest of the powers, arising from the implementation of the said Regulation;
- Performs other activities associated with organization and coordination of the Regulation (EC) № 1293/2013;
- Prepares and submits to the European Commission reports on the implementation of statutory instruments of the Acquis Communautaire in the field of Environment.

Relating to the implementation of the NPEEMB the Ministry of Environment and Water (MoEW) is one of the authorities, responsible for the establishment of a program for the monitoring of paints, adhesives, varnishes etc. placed on the market, regarding the contents of VOC, materials that are necessary to be used also in the construction process. Actual control on the market products that can be used in the construction process is implemented by MoEW or the respective RIEW.

4.3.2 Regional Inspectorates of Environment and Water (RIEW)

Regional Inspectorates of Environment and Water (RIEW) ensure the implementation of the national environmental protection policy at the regional level. They are juristic bodies at the Minister of Environment and Water and are represented by the relevant directors or persons authorized respectively. The RIEW directors shall draw up warning statements and memorandums of ascertainment, shall issue prescriptions, orders on application of coercive administrative measures and penalty decrees.

The number, the territorial scope of activity, the functions and the structure of the RIEWs, as well as the powers of the directors is determined by Rules, issued by the Minister of Environment and Water.
Regional Inspectorates of Environment and Water are responsible for the implementation of the environmental impact assessment (EIA) procedures, required by Chapter VI of the Environmental Protection Act. Their final acts are an integral part of the construction permits, issued by the relevant municipal administration.

According to the requirements of Art. 19 of Clean Ambient Air Act they supervise and manage the activities, related to ensuring clean ambient air within their territory (together with the municipal administrations), incl. also compliance with the requirements of the current legislation on air protection and in particular case the monitoring of the implementation of measures for limiting fugitive emissions at construction sites (Art. 70 of Ordinance № 1 of 27.06.2005). In case of air pollution, as a result of any construction activities, the RIEW is the authority, responsible for the conducting of measurements and to order penal provisions.

The respective RIEW is responsible also for the implementation of the national legislation on waste management. Exactly these institutions monitor the correct storage of waste at the site of their generation and subsequent handing for recovery or disposal to companies, which have proper permit. They approve the waste classification work lists and control the proper implementation of the following issues: construction and operation of landfills and other facilities and installations for recovery and disposal of wastes and treatment and transportation of industrial and hazardous wastes.

Concerning the implementation of the waste management legislation in relation to the implementation of the NPEEMB RIEW issues or participates in the processes of issuing the necessary waste management permits; supervises the compliance with the waste management permit requirements and approves waste classification lists.

As a summary of all the above mentioned it can be concluded that the implementation of the waste management legislation on the territory of each municipality is realized by the relevant RIEW and municipal administrations. RIEW issues or participates in the processes of issuing the necessary waste management permits; supervises the compliance with the waste management permit requirements and approves waste classification lists. Municipal administrations are responsible for the organization of the waste management process within the territory of their municipalities, i.e. by issuing permits for non-hazardous construction wastes landfilling and approving the route for their transportation for disposal.

4.3.3 Executive Environment Agency (EEA)

The Executive Environment Agency directs the National Environmental Monitoring System together with the Minister of Environment and Water.

Concerning the NPEEMB, the EEA, together with the MoEW, is the authority, responsible for the establishment of a program for the monitoring of placed on the market paints, adhesives, varnishes etc., regarding the contents of VOC, materials, envisaged to be used in the construction process.

4.4 Other relevant stakeholders for the Residential Energy Efficiency Program’s social dimension

While the following stakeholders have no formal role in the Program, they are key stakeholders for the implementation of Bulgaria’s social policies. In addition, these social stakeholders are among Program’s beneficiaries as they are property owners i.e. the administration in charge for
ensuring that the regulations regarding family-style accommodation and protected houses accommodation for social vulnerable groups are being followed7.

4.4.1 Ministry of Labor and Social Policy (MLSP)

The MLSP is in charge of the implementation of the national and international social policies, (i) National policies for labor; (ii) employment; (iii) pensioners; (iv) work abroad; (v) children and family; (vi) social assistance; (vii) social services; (viii) persons with disabilities; (ix) demographic policy; (x) equal opportunities; (xi) international activity; (xii) public consultation.

No particular role has been assigned to the MLSP under this Program.

4.4.2 General Labor inspectorate executive agency (GLIEA)

GLIEA is a state owned legal entity with headquarters in Sofia. The agency is the secondary authorizing officer to the Minister of Labor and Social Policy. The work of GLIEA is formed from budget funds and own revenues, and is organized in general and specialized administration having control on the observance of labor legislation in all sectors and activities - Art. 399 of the Labor Code (amended. - SG. #97 of 2010).

Overall control over the observance of the legal act for Health and Safety at Work is exercised by the Ministry of Labor and Social Policy - Art. 54 (1) of the Health and safety works act. Specialized inspection on the implementation of this law and other regulations shall be made by the GLIEA through its structures. (Am. - SG. 97 of 2010). Structure and activities of the GLIEA is determined by regulations approved by the Council of Ministers - (Am. - SG. 97 of 10.12.2010).

4.4.3 Municipal departments and structures for social assistance and services

Each of the 22 reviewed municipalities (9 surveys with in-depth interviews) have indicated significant experience and structures for executing different social services towards the local society. At least 40% of them have shown significant experience in projects for introduction of energy efficiency measures to infrastructure for social services and for some of them the experience can be considered as higher than the respective structures, determined to the implementation of the NPEEMB -3 projects for EE in structures for social services provision, towards 2 in the other departments was stated by the municipality of Lovech.

Figure 4-1: Key structures for Program implementation

Elaborated during the initial consultation process for the purpose of the assessment.
5 POTENTIAL ENVIRONMENTAL BENEFITS, IMPACTS AND RISKS OF THE NPEEMB

5.1 Potential environmental benefits as a result of the realization of the NPEEMB

The implementation of activities related to the National Energy Efficiency Program for Multifamily Buildings will lead to a number of direct and indirect environmental benefits, such as:

1. Reducing greenhouse gas emissions, in particular CO2 emissions, which globally impact the climate change

The implementation of energy efficiency measures in multifamily buildings will contribute to a higher level of energy efficiency of buildings and will limit thermal radiation of the environment. This in turn will reduce both directly and indirectly greenhouse gases, in particular CO2, and will have a positive effect on the climate change.

Table 5-1 below shows a summary of the envisaged decline/drop in the quantities of generated CO2 emissions, as a result of the rehabilitation of multifamily residential buildings. The summary covers only the municipalities surveyed for the purposes of the current Report and is based on the data from the researches of energy efficiency performed by now and from prescriptions of the necessary energy saving measures.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Number of registered homeowner associations</th>
<th>Number of signed contracts between a municipality and a homeowner association</th>
<th>Number of buildings with energy efficiency investigations</th>
<th>Assessed reduction of the emissions of CO2 t/y?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blagoevgrad</td>
<td>158</td>
<td>135</td>
<td>12</td>
<td>839,20</td>
</tr>
<tr>
<td>Stara Zagora</td>
<td>93</td>
<td>65</td>
<td>3</td>
<td>510,69</td>
</tr>
<tr>
<td>Sevlievo</td>
<td>10</td>
<td>10</td>
<td>8</td>
<td>223,30</td>
</tr>
<tr>
<td>Burgas</td>
<td>210</td>
<td>223,30</td>
<td>223,30</td>
<td>223,30</td>
</tr>
<tr>
<td>Sopot</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>95,68</td>
</tr>
<tr>
<td>Ivaylovgrad</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>427,7</td>
</tr>
<tr>
<td>Simeonovgrad</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>375,89</td>
</tr>
<tr>
<td>Smyadovo</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>617,81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4 777,65</strong></td>
<td><strong>4 777,65</strong></td>
<td><strong>4 777,65</strong></td>
<td><strong>4 777,65</strong></td>
</tr>
</tbody>
</table>

As it is apparent from the information presented in the table above, only a small part of the buildings that could apply and get financing under the NPEEMB have underwent the process of energy efficiency investigation for the necessary energy saving measures. This number is envisaged to increase significantly during the subsequent years of the implementation of the NPEEMB. On this basis, it can be concluded that in the long term the rehabilitation of multifamily residential buildings will lead to a significant drop/decline/reduction in the generated CO2 emissions at a national level.

?The quantities vary significantly and depend on the number of buildings in each municipality, as well as on their total area and current condition.
2. **Improving the air quality of the municipalities affected by the implementation of the NPEEMB**

3. **Decreasing the dependence on fossil fuels, including oil, coal and natural gas**

4. **Reducing the amount of waste generated as a result of the combustion of solid and liquid fuels**

As a result of the limited surveys conducted in the municipalities, no projects related to fuel switching/replacement of the local heat sources / boiler farms or adjacent facilities were identified to confirm environmental effect. There were also no projects concerning the construction of systems for recovery of energy from renewable sources, or gasification of buildings. Information about only one project (solar panels installation in Burgas municipality) was available. These will be used for water heating. HoAs believe that the intent to construct systems for recovery of energy from renewable sources or gasification, will be expressed only during the technical and energy investigations of the relevant multifamily building. The main sources of heating within the borders of the municipalities are as follows: central (TPP, HP – only for large municipalities, such as Sofia, Plovdiv, Burgas) and local (each apartment, part of multifamily buildings, has its own source of heating, such as: electricity (using air conditioners or other types of electrical equipment for heating), coal and wood or natural gas).

Therefore, the points 1-4, listed above envisage benefits, which will be mainly a result of the reduction of heat-loss, as a result of implemented energy efficiency measures, that inevitably leads to a decrease in fuel and energy quantities used.

5. **Positive visual impact on the urban environment**

On the territory of Blagoevgrad municipality, the renovation of four building has already been finished. One additional building is under construction and will be finalized soon. The conducted site visit confirmed the statement that the rehabilitation of the multifamily buildings will contribute to a positive visual impact on the urban environment.

6. **Achievement of balanced and sustainable development of the affected municipalities as a result of the NPEEMB implementation**

The implementation of measures under the NPEEMB will contribute to achieving and maintaining a balanced and sustainable development by application of the basic principles of sustainable development, mentioned in details in the Initial Environmental Screening Report. The implementation of the NPEEMB is contribute to a consumption of natural resources that does not disturb the ecological balance, which is the primary requirement for achieving and maintaining sustainable development. This statement is also confirmed by the already conducted field studies within the borders of the visited municipalities.

5.2 **Environmental Risks**

5.2.1 **Methodology of the assessment of environmental risks**

This subchapter outlines the methodological approach to environmental assessment, applied in the process of PforR implementation, that the authors call environmental risk assessment (ERA). The approach is designed to be aligned with the applicable in Bulgaria European, i.e. national regulatory

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10 Environmental Risk Assessment: Methodological Framework for Focused Environmental Assessment of IAIA was used (‘IAIA13 Conference Proceedings’: Impact Assessment the Next Generation; 33rd Annual Meeting of the International Association for Impact Assessment 13 – 16 May 2013, Calgary Stampede BMO Centre | Calgary, Alberta, Canada [www.iaia.org](http://www.iaia.org))
requirements currently in force, i.e., Bulgarian Environmental Protection Act (EPA), particularly environmental assessment (EA) and environmental impact assessment (EIA) and the applicable WB environmental policies.

The used for the purposes of PforR elaboration ERA tool provides detailed, systematic assessment of environmental risks by estimating a) the probability or likelihood of occurrence and b) the severity of the consequences from incidents for the proposed PforR or the PforR activities.

The assessment of the environmental risks is focused on components and factors at risk and special areas which have a reasonable potential for interaction with the PforR or separate PforR activities. By concentrating on components and factors of the environment at risk, ERA provides a conservative, key indicator approach by focusing on environment components and factors that are at greatest risk.

5.2.1.1  Environmental Risk Assessment (ERA) under the PforR: Methodological Framework for Environmental Assessment

The Environmental Risk Assessment (ERA) was done in three steps:
1. Review of the proposed Program (NPEEMB), incl. activities under the NPEEMB (the activities, emissions and discharges, planned mitigation, etc.). This step is also connected with a study of the existing state of the impacted by the NPEEMB environment;
2. Identification of potential Environmental Components and Factors (ECFs) that may be affected by the activities under the NPEEMB; and
3. Evaluation of the probability (i.e. likelihood of occurrence) of adverse effects and consequences of the NPEEMB activities - ECFs interactions (i.e. the environmental effects) using a Risk Matrix.

The ERA assesses all environmental effects, including those arising from accidents and malfunctions and cumulative environmental effects, and the effects of the environment on the NPEEMB.

ECFs are assessed by considering potential interactions with activities under the NPEEMB such as operational discharges (e.g. generated wastes) and emissions (e.g. noise and air contaminants), presence of structures (e.g. construction machinery), and accidental releases (e.g. spills). The risk analysis assumes that NPEEMB activities are designed to comply with all regulatory guidelines or limits for discharges and emissions.

The completion of the Risk Matrix of the PforR is used as a planning tool during the identification of the key gaps between the Bulgarian environmental management systems and the PforR core principles. It is also used for identification of area of improvement of the implementation of the NPEEMB to fully comply with the national legislation and mitigate identified environmental risks. It can also be used to propose key organizational, technical or institutional measures for successful implementation of the PforR.

5.2.1.2  Environmental Components and Factors (ECFs) Identification

Considering the fact that the activities under the NPEEMB will be carried out in urbanized areas (mainly towns and rarely villages), the following ECFs have been identified, which are typical for EE and construction activities and they appear to cover most key resources and activities potentially affected by the Program:
1. Air quality;
2. Water;
3. Soils;
4. Landscape;
5. Mineral Resources and Raw Materials;
6. Wastes (including toxic and hazardous ones);
7. Hazardous substances;
8. Harmful Physical Factors, such as noise and vibrations and

The activities under the NPEEMB will not be implemented within the boundaries of Protected Territories (PT), according the requirements of the Protected Territories Act. Independently of the fact that 33% of Bulgarian territory is under Natura 2000, the activities under the Program will not affect these areas, according the requirements of the Biodiversity Act. They will not lead to any damage or loss of natural habitats and/or species of the wild flora and fauna. The realization of the Program might affect historical or cultural heritage buildings. Given the changes in the Project scope (last supplemented of the Methodological Guidelines via Council of Ministers Decree № 23/04.02.2016), it cannot be excluded that single buildings, historical and cultural heritage, could be renovated under this NPEEMB.

The implementation of the Program activities is not associated with any changes of the designation of agricultural land for non-agricultural purposes.

5.2.1.3 Definition of Severity
The method employs tables that describe the level of severity for ‘Consequence’ (i.e. varying levels of consequence that would be adverse to the ECFs) and ‘Considerations’ categories that are defined by the experts to be used for characterizing adverse environmental effects. The significance of the environmental effects is usually expressed by quantitative and qualitative values compared to local, national and international standards. In some cases the evaluation is subjective but based on expert experience and good practice. In case of non-routine events (accidents, natural disasters, incidents), the effects are considered in the context of the likelihood of occurrence and consequences. In general, the significance of the environmental effects can be viewed by following parameters:

1. **Temporal**, e.g. in terms of duration for remediation of the affected environmental components or factors, duration of the expected impacts, etc.;
2. **Geographic**, according the physical scope of the expected impact, which may occur as a result of the risk that has appeared;
3. **Intensity**.

The criteria are specific for each component/factor. For the current assessment a 4-level scale for the severity level of ‘Consequence’ is used: I – high severity, II – medium severity, III – low severity and IV – very low severity.

5.2.1.4 Determining the Likelihood of Occurrence
The environmental risk matrix defines five occurrence likelihood levels from A to E, based on a range of frequencies of potential environmental effects: A - very high likelihood of occurrence, B - high likelihood of occurrence, C - medium likelihood of occurrence, D - low likelihood of occurrence and E - very low likelihood of occurrence.

5.2.1.5 Assigning the Risk Level
The level of environmental risk is based on the severity and the likelihood of occurrence, as estimated using the Risk Matrix for the categorization of the possible combinations of severity and likelihood of occurrence. It can be high, medium or low risk - shown by colour (red, yellow and green) and number (1 to 3):

- Risk level '1' corresponds to a significant adverse environmental effect. Only the higher risk level '1' combinations (with red background) of severity and likelihood represent likely significant adverse effects under the legislation in force, where 'likely' is an important decision-making threshold under the legislation (i.e. choice of other construction method or type of
construction materials, used for rehabilitation of buildings). The level ‘1’ combinations with yellow background represent areas of high risk and, therefore, will require special management to ensure that potentially significant adverse environmental effects are avoided;

- **Risk level '2'** is a residual adverse environmental effect that is not very significant and for which mitigation measures are planned, and
- **Risk level '3'** is an environmental effect that does not need mitigation. It is not significant and/or inconsequential. Green is selected to reflect the acceptability of the potential environmental effects.

The ERA, implemented under the PforR, incorporates also considerations of the cumulative environmental effects. The Environmental Assessment Risk Matrix is presented in the table below.

### Table 5-2 Environmental Assessment Risk Matrix

<table>
<thead>
<tr>
<th>Likelihood of Occurrence</th>
<th>A Very High</th>
<th>B High</th>
<th>C Medium</th>
<th>D Low</th>
<th>E Very Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>I High</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>II Medium</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>III Low</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>IV Very Low</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Overall assessment of the likely environmental risks, including description and assessment of the identified risks, is given in details in **Subchapter 5.2.2** below.

#### 5.2.2 Overall assessment of the likely environmental risks associated with the PforR

The implementation of the activities under the National Energy Efficiency Program for Multifamily Buildings is related mainly to the performance of construction and installation works, which constitute the main source of emissions in the environment. The renovation work will generate construction and household wastes and harmful physical factors, such as noise and vibrations, whose proper control is considered as a prerequisite and a condition for reducing or avoiding environmental impacts. Potential impacts could occur as a result of improper subsequent treatment of generated wastes and the use of malfunctioning construction equipment, excessive noise sources, resulting in an increase of noise levels of the environment.

The expected environmental risks/impacts, incl. also their assessment, are presented in details below:

- **5.2.2.1 Risks of pollution of ambient air as a result of construction and installation activities related to the implementation of the Program measures**
  - **Overall assessment of the risks**

  There are risks of deterioration of the ambient air quality as a result of the construction and installation activities that are related to the implementation of the Program measures and can emit into the environment mainly dust, including particulate matter (PM) and volatile organic compounds (VOCs).
Dust, especially particulate matter smaller than 10 microns (PM10), appears to be the main air pollutant in urban areas. In the current case it can be generated/ emitted as a result of conduction of the rehabilitation activities of the buildings if works conducted are no done in accordance with legal requirements and good engineering practice. Dust emissions above the standards can also be generated also by using malfunctioning construction equipment. The volatile organic compounds (VOCs) generated as a result of using different solvents, paints, varnishes, adhesives, transport and some of the machinery used in the construction process are another air pollutant. Pollution of the ambient air can be caused as a result of their improper use (example use of unlawfully marketed products, containing VOC).

The levels of the above-mentioned risks are assessed as level '3' (medium to low likelihood of occurrence and very low severity/ consequences).

In some cases, the simultaneous implementation of measures under the Program in more than one multifamily residential buildings located in close proximity to one another can lead to a risk of accumulation of the envisaged negative impacts on the ambient air quality. The level of such a risk is assessed as level '3' (very low likelihood of occurrence and very low severity/ consequences).

In case of occurrence of ambient air pollution risks, the impacts will be direct and adverse, short-term and temporary only for the period of the construction. These are limited in space, only within the affected area.

Risk management

Regarding the expected air pollutants from the activities implemented under the Program, Ordinance № 1 dated 27.06.2005 on limit values of harmful substances (pollutants) emitted into the atmosphere from facilities and activities with stationary emission sources (Prom. SG 64 of 5.08.2005, effective from 6.08.2006) regulating the generation of particulate emissions generated as a result of the construction activities will be applied. Art. 70 sets requirements for the measures (use of chutes, screens, etc.) that need to be taken to reduce fugitive dust emissions when dealing with solid powdery substances. The supervision over the implementation of measures is in the range of the competences of the relevant municipality and Regional Inspectorates of Environment and Water (RIEW). They can carry out check-ups at the construction sites.

In case of usage of products, such as certain paints, varnishes and vehicle refinishing products, which fall under the requirements of Ordinance on limiting emissions of volatile organic compounds from the use of organic solvents in certain paints, varnishes and vehicle refinishing products specifies requirements for certain paints, varnishes and vehicle refinishing products it is necessary the contractor to use only those of them, which are legally placed on the market, meeting the requirements of the above mentioned Ordinance. The Ministry of Environment and Water (MoEW), jointly with the Executive Environment Agency (EEA), developed monitoring program and requirements for labelling of these products. The monitoring of the proper implementation of the legal requirements is carried out by the authorized persons of MoEW or of the respective RIEW.

Ordinance № 10 dated 24 February 2004 requires the approval and use of internal combustion engines of construction machinery. Monitoring of the implementation of the ordinance is performed by the Technical Control Inspectorate.

The used construction equipment undergoes systematic checks on its technical suitability (attest). Using attested and sound construction equipment will help prevent air pollution.
5.2.2.2 Risks as a result of the generation of household and construction wastes (including hazardous and toxic ones)

- **Overall assessment of the risks**

The implementation of measures envisaged for financing under the Program and related construction and installation works are a source of various types and amount of wastes. Mainly household and construction wastes will be generated. Their proper management will prevent the risk of negative indirect impact on a number of environmental components, such as air, soil, surface and groundwater and landscape.

According to the current European and national legislation on waste management, they can be classified in group 20, namely municipal waste (household waste and similar waste from commercial, industrial and institutional activities), incl. separately collected fractions.

As a result of the construction work, mainly waste from construction and demolition will be generated, which can be classified in group 17.

Another group of generated wastes is packaging waste; absorbents, wiping cloths, filter materials and protective clothing, classified in group 15, according to the current waste management legislation.

Generated wastes can be non-hazardous and hazardous. Hazardous substances, which are expected to be generated as a result of the realization of the Program, are mainly: oiled clothes and towels; filters; oil-contaminated parts of old boilers; insulation materials and, last but not least, construction materials contaminated with hazardous substances (PCB, different types of oils and paints, etc.) or those containing asbestos. At present we cannot say what the expected amounts of generated wastes are. This might be possible only after a detailed report for the individual buildings to be renovated.

The risks as a result of the generation of household and construction wastes can be brought down mainly to:

1. **Improper storage of the generated hazardous and non-hazardous wastes at the place of their generation, which can lead to indirect contamination of the ambient air, surface and groundwater; soil and visual impact on the landscape in the area of the investment proposal; in case of hazardous waste it can also have health implications;**
2. **Mixing generated hazardous waste with non-hazardous one, resulting in their disposal as non-hazardous waste or other improper manner**
3. **Unregulated disposal of generated wastes, which may indirectly cause contamination of soil, surface and groundwater and a visual impact on the landscape. This might happen with non-responsible contractor trying to get rid of the waste quickly or trying to avoid payments and fees for disposal and treatment of waste;**
4. **Mixing non-hazardous CDW with household or industrial wastes and in some cases also hazardous waste and disposing of these wastes in specialized existing municipal landfills for CDW (classified as landfills for inert waste).**

The levels of all above-mentioned risks (with the exception of the last one) are assessed as '2' (low likelihood of occurrence and medium severity/ consequences). The level of the last risk is assessed as '1' (high to very high likelihood of occurrence and medium severity/ consequences). In case of occurrence of the risks, the impacts on the components of the environment, such as soil and air (and to a lesser extent to the surface and groundwater) and landscapes will be direct and adverse. The impacts will be long- to short-termS and temporary ones. If the latter are mitigated (corrective actions are undertaken) on time, they will be localized and reduced.

**Risk management**
Treatment of generated waste is regulated by the Waste Management Act (Prom. SG 53 of 13 July 2012, amended SG 98 dated 28 November 2014) and the secondary legislative acts.

According to the legal requirements, generated hazardous and non-hazardous wastes must be stored at special locations within the borders of construction sites. Temporary storage of wastes at the site of their generation is not a subject of an authorization scheme under the national legislation. Generated wastes must be taken for recovery or disposal by companies, which own appropriate permits under the Waste Management Act or IPPC permit (Art. 35 of the Waste Management Act). For this purpose, the contractor performing the construction activities must have signed contracts for transportation and utilization/waste disposal with associated companies and sub-contractors, which own the necessary permits.

Wastes containing asbestos are treated in accordance with the requirements of Ordinance № 5 dated 15 April 2003 for prevention and reduction of environmental pollution by asbestos (Prom. SG 39 dated 25 April 2003). The waste needs to be removed in a way to prevent dusting. Preliminary storage of asbestos wastes on their place of generation must be performed in specially assigned sites for storage of hazardous waste and covered. The transportation of asbestos waste to the place of disposal must be done in a way to prevent the release of asbestos fibers or dust in the ambient air as described in Ordinance. Asbestos wastes are handed for subsequent disposal by landfills on sections for inert waste. Same as for other types of wastes, a specialized companies are in charge for handling asbestos waste (removal to disposal).

Record books for all generated wastes are kept by each contractor, responsible for construction and installation works. Their handing for subsequent treatment is through identification documents. Proper waste management is controlled by the RIEW and the relevant municipal administration.

According to the Waste Management Act, the mayor organizes the management of household and construction waste generated on its territory (Art. 19 of the WMA). The Municipal Council adopts an Ordinance establishing the terms and conditions of the disposal, collection, including separation, transportation, transfer, recovery and disposal of household and construction wastes (Art. 22 of the WMA). Regarding the construction waste generated during the performance of the Program activities, the municipal administration should determine sites for their subsequent transport and treatment, as well as define a route for transport. Meeting these requirements is controlled by the municipality.

In accordance with Art. 52 of the Waste Management Act, the municipality mayor adopts a waste management program for the respective municipality, which is an integral part of the program for environmental protection. The program describes waste management plan and measures. There is an annual reporting of implementation of such plan and measures. Construction activities may be subject to control by the municipal administration, also in respect of program measures implementation and implementation of the municipal ordinances in the sphere of waste management.

In addition to the above mentioned, according to the requirements of Art. 11, Para 1 from the Waste Management Act, Construction Waste Management Plans have to be developed by the construction works contractor as a part of the project designs (Ordinance on the management of construction waste and use of recycled building materials, Prom. SG 89 dated 13.11.2012, effective from 11.13.2012). There is an exception of this rule – for reconstruction, overhaul and/or change of use of buildings with a built-up area less than 500 m². Construction Waste Management Plans should include measures connected mainly with handling and recycling or recovering of the generated construction waste. This can be done by signing contracts with companies, which own legal permits for waste management as per Waste Management Act or IPPC permit. Their development and control should also contribute to the "resource efficiency" through waste recovery or recycling, which can reduce the amount of natural resources that are used in the construction process, incl. also via the construction materials.
implementation of the Construction Waste Management Plan will lead to achieve the goals of the National Waste Management Plan 2014 – 2010. The same is controlled by the authorized officer of municipality.

5.2.2.3 Risk of noise pollution

➢ Overall assessment of the risk
This risk can occur in case of using malfunctioning equipment to carry out construction and installation works generating excessive noise. In some cases, the simultaneous implementation of measures under the Program in more than one multifamily residential buildings located in close proximity to one another can lead to a risk of accumulation of the envisaged negative impacts on the noise environment. The level of each one of the risks is '3' (low likelihood of occurrence and very low severity/consequences). The impacts, which the risks can cause, will not be significant and will not lead to a significant noise pollution in the affected areas. It can be concluded that the impact will be short-term and temporary, only for the construction period, and will be localized only within the boundaries of the sites subject to rehabilitation works.

➢ Risk management
Noise pollution resulting from activities under the Program is regulated by the Protection from Environmental Noise Act (Prom. SG 74 dated 13 September 2005, last amended SG. 98 dated 28 November 2014) and Ordinance № 4 dated 27 December 2006 on limiting the harmful noise by sound-proofing of buildings during their design and for rules and standards in the performance of construction works in terms of noise emitted during construction (Prom. SG 6 dated 19 January 2007).

According to the requirements of the above mentioned Ordinance, technical rules and regulations are placed for carrying out construction and installation works in terms of the noise emitted in the environment. The control over compliance with the requirements of the Ordinance for smaller construction works is mainly done by municipal administrative personnel.

Regarding noise pollution within the territories of the municipalities affected by the implementation of the NPEEMB, the mayors assign the development of strategic noise maps that has to be adopted by municipal councils. To manage, prevent and reduce environmental noise in agglomerations, action plans are drawn as part of the noise maps. The control over the implementation of the measures of the noise maps and the overall monitoring and implementation of activities aimed at limiting noise levels in the environment is done on municipal level. In this regard municipal structures have the responsibility to carry out controls by lawful performance of activities under the NPEEMB in terms of generated environmental noise.

The used construction equipment undergoes systematic checks on its technical suitability (daily, prior to the commencement of construction work and in accordance with the requirements of Art. 28 of Ordinance № 2 dated 22 March 2004 on the minimum requirements for health and safety working conditions during performance of construction and installation works). The use of sound construction equipment will prevent the increase of noise pollution of the environment. The used construction equipment must be provided with documents proving its roadworthiness.

5.2.2.4 Risks of pollution of the soils, surface water and groundwater

➢ Overall assessment of the risks
There are risks of contamination of soils, and to a lesser extent surface water and groundwater resulting from construction and installation works. One of the occurrences of risks will lead to indirect impacts due to waste disposal on illegal dumping sites. Proper waste management according to the national regulations will prevent and will not allow any effects on soils in the areas where construction
and installation works are performed. These risks are assessed in the subchapter examining the risks as a result of generation of household and construction wastes (including hazardous and toxic wastes).

Impact on soils, surface water and groundwater can occur by accidental spills due to the malfunctioning construction machinery or negligent work conduct. The level of this risk is '3' (low likelihood of occurrence and very low severity/ consequences). It can be concluded that the impacts caused by the risk will be short-term and temporary, only for the construction period and will be localized only within the boundaries of the sites subject to rehabilitation works. The works are conducted on urban asphalted surfaces minimizing impact on soil and water.

- **Risk management**
  Indirect contamination of soil, surface and groundwater resulting from unregulated disposal of waste can be avoided in accordance with the legislation on waste management. Detailed information on the applicable legislation is given in the subchapter concerning waste risks management.

The use of construction equipment in good working condition is ensured by the requirements of Art. 28 of Ordinance № 2 dated 22 March 2004 on the minimum requirements for health and safety working conditions during performance of construction and installation works. It is necessary for the operators and workers entrusted with the management or the use of construction machinery, tools or construction and assembly pistols to check the functioning of the machines and tools before starting work and during work to monitor their condition and, in case of failure, to cease work.

5.2.2.5 **Risks of impacts on human health, both for the workers at the construction sites and the population within the border of the relevant area**

- **Overall assessment of the risks**
  The unlawful handling (especially asbestos) and disposal of wastes and use of construction equipment that does not meet the requirements present a health and safety risk both, for the workers at the construction sites and the population within the border of the relevant area. Risks for workers’ health can also occur as a result of lack of appropriate training and instruction on health and safety during work in accordance with the specifics of the individual jobs and professions; lack of protective equipment, worn by the workers or lack of fencing and safety signs of construction sites.

The management of the generated wastes observing all legal requirements in force will lead to prevention of the occurrence of the risk connected with eventual impacts on human health (both on the health of the workers at the construction site and the population within the border of the relevant area). The assessment of the risk is given in details in the subchapter which concerns the risks as a result of generation of household and construction wastes (including hazardous and toxic wastes).

Regarding the rest of the risks, whose occurrence may lead to impacts on human health, their level is '3' (low likelihood of occurrence and very low severity/ consequences). The caused impacts will be short-term and temporary, only for the construction period and will affect the workers and the population within the borders of the construction site.

- **Risk management**
  In order to properly manage the risks, compliance with the above mentioned subchapters, concerning ambient air, wastes and noise risks laws and ordinances, is required.

In addition to the described in detail regulations concerning air quality, proper waste management and preventing noise pollution of the environment, legislation related to health and safety at work should also be followed. Asbestos waste should be handled by specialized companies, which should reduce health implications on workers and pollution of the air and soil (described in 5.2.2.2).
According to the Health and Safety at Work Act (pub. SG/124 dated 23 December 1997, last amendment and supplemented. SG/79 dated 13 October 2015), every employer is obliged to provide appropriate training and instruction on health and safety at work (Art. 26 of the Act) in accordance with the specifics of the workstation and the occupation of each of its employees when:

1. Signing on labour contracts;
2. Moving to another job or changing jobs;
3. Introducing new working equipment and technology or changing the old one.

Training and instructions are conducted periodically taking into account new or changed risks in the workplace. They are done by a person, appointed with an order, issued by the Manager of the relevant construction company.

According to the requirements of Art. 7 of the Health and Safety at Work Act, workplaces must meet the minimum requirements for ensuring healthy and safe working conditions. In workplaces conditions to protect the health and to ensure the safety of working people are created, such as:

- The workplace and work equipment is maintained in good technical condition and all malfunctions that may affect workers’ safety and health are removed in the shortest possible period;
- The workplace and work equipment and roads leading to them are cleaned regularly;
- The protective equipment and means of personal and collective protection are regularly checked and maintained in good working order;
- Roads to emergency exits and the exits themselves are kept clean at all times.

According to Art. 16 of Ordinance № 2 dated 22 March 2004 on the minimum requirements for health and safety working conditions during performance of construction and installation works the constructor provides instruction, training, upskilling and verification of knowledge of the workers in compliance with the Health and Safety at Work Act. In compliance with the requirements of Art. 15, Para. 1 of Ordinance № RD-07-2 dated 16 December 2009 on the terms and conditions for conducting regular training and instruction of employees by the regulations for ensuring healthy and safe working conditions (prom. in SG/102 dated 22 December 2009, am. In SG/25 dated 30 March 2010), workers at the construction site are subject to daily instructions.

Regarding the health and safety of the workers and population, a Health and safety Plan for construction sites and Health and safety instructions for each workspace are developed, according the requirements of the above mentioned Ordinance № 2 from 22 March 2004. They are approved by the Manager of the relevant construction company. Construction sites are marked, information signs are placed and the sites are secured, and, during the conduction of the activities on the rehabilitation of the buildings, the use of personal protective equipment by the workers is compulsory.

Meeting the requirements of Art. 28 of Ordinance № 2 from 22 March 2004 ensures the use of good working construction equipment. Operators and workers entrusted with the management or the use of construction machinery, tools or construction and assembly pistols have to check the functioning of machines and tools before starting work, to monitor their condition during work, and, in case of failure, to cease work.

5.2.2.6 Risk of excessive use of natural resources

- Overall assessment of the risks
For the implementation of the activities, permitted under the financing NPEEMB, the incorporation of natural resources, such as certain quantities of fresh water and some materials, such as sand, etc. are necessary. The inputs in the process of renovating each building separately will be insignificant, regarding the used quantities. Simultaneous renovation of several buildings under the NPEEMB will result in a cumulative effect as regards the used quantity of natural resources. How significant it is in terms of the resources invested in the construction, it can be concluded only after obtaining information about the exact number of renovated buildings and the repair activities which are carried out.

Failure to comply with the approved technological process can lead to unappropriate use of natural resources for the implementation of the activities permitted under the funding NPEEMB (such as specific quantities of fresh water, sand, gravel, etc.). The level of this risk is assessed as level '3' (low likelihood of occurrence and very low severity/consequences). The impacts caused by the risk occurrence would be short-term and temporary, only for the construction period.

Risk management

Only materials with proper certification of origin, which are delivered from suppliers, holding all licenses and permits, required by the national regulations can be used.

5.2.2.7 Risk of low capacity in the municipalities

Overall assessment of the risk

The study of the individual municipal government structures showed that they are facing the following challenges in implementing their functions under the NPEEMB:

1. Regarding the municipal administrations, especially smaller municipalities, there might not be sufficient expert potential for the implementation of activities under the NPEEMB. It is observed that in some of the municipal administrations one person carries many functions (of more than one expert position) which might prevent them in task implementation if the NPEEMB in their respective municipality takes larger scope;

2. The expert potential of municipal administrations of the small municipalities might even not have enough knowledge and experience to deal with the obligations of the municipalities under the NPEEMB.

Notwithstanding the above identified challenges, faced by some of the municipalities in Bulgaria, the expert assessment shows that they are determined to deal with the challenges and to implement successfully the Program.

In contrast to small municipalities in the Republic of Bulgaria, the largest, such as the five leading municipalities in economic growth - Sofia, Plovdiv, Bourgas, Varna and Ruse, have a sufficient number of qualified and experienced staff, which would allow the timely and lawful fulfilment of their obligations under the Program. This statement is relevant for all program activities, incl. those, concerning the environmental protection.

The level of the risk is assessed as '2-2' (medium likelihood of occurrence and medium severity/consequences). In case of occurrence of the risks, the impacts on the components and factors of the environment will be direct and adverse. They will be temporary and long- to short-term ones. If the latter are mitigated (corrective actions are undertaken) on time, the risk will be prevented.

Risk management

The proposed measures, which concern the management of the risk, are described in details in Chapter 9, Subchapter 9.2 below. They are mainly related to improvement of the administrative capacity through:
1. Constant improvement of the qualification of the employees (specialized trainings and courses, guidelines) including learning and implementation of international good practices; and
2. If possible and necessary, increasing the number of experts, involved in the implementation of the environmental legislation at local level.
6 PROGRAM'S POTENTIAL SOCIAL BENEFITS, IMPACTS, RISKS AND OPPORTUNITIES FROM NPEEMB

6.1 Social benefits and impacts

NPEEMB will have considerable long-term social benefits during the performance phase, while negative impacts, if appear, are expected to be short-term and linked to the construction/rehabilitation phase. Positive social benefits of the NPEEMB are expected to occur soon upon the finalization of the construction works. The positive expected social impacts include improved living conditions, increased value of property i.e. the assets of the house owners and a decrease in energy consumption i.e. costs. Due to the socio-economic composition of house owners in the program’s targeted buildings, with a large share of low income households, energy consumption often represents the highest household expense. Improved energy efficiency is therefore expected to have a tangible positive impacts on household income. Energy expenditures can make up to almost 50% of total living costs of these families and are therefore an important factor that determines the living conditions of these low- and middle-income households. A recent World Bank study found for example that both low- and middle-income families in Bulgaria report that they find it necessary to reduce basic expenses such as food, clothing, and to inadequately heat their homes in order to cope with energy bills.\(^{12}\)

\(^{11}\) This social systems assessment is done in line with the core principles (see section 2 of this document) that guide the ESSA analysis as per the PforR guidelines (OP/BP9.00), with a particular focus on core principles 1, 4, and 5.

\(^{12}\)World Bank 2015: Adapting to Higher Energy Costs: Public Perspectives and Responses to Rising Energy Costs in ECA.
The Demonstration project for the Rehabilitation of Multifamily Buildings that the MRDPW carried out in partnership with UNDP documented the positive social impacts of rehabilitation activities for beneficiaries. A satisfaction survey that was carried out after the completion of the Demonstration Project found that 80% of project beneficiaries were very satisfied with the renovation works and that 96% of the residents experienced an increased standard of living. Moreover, 99% of the owners experienced a reduction of their monthly heating and water costs, or savings of about €70 a month.

Introducing incentives for formation of Housing Owner Associations is expected to furthermore increase social cohesion and capital and to contribute to improved civic capacity to get organized for the achievement of mutually beneficial goals.

In addition, the NPEEMB is expected to have wider positive social impacts, going beyond impacts on individual beneficiaries. As the targeted buildings consist of unattractive residential complexes, in many cases, wealthier inhabitants of these buildings have over the past two decades increasingly moved out to newer, more attractive and more comfortable buildings. This means that currently, the targeted buildings are increasingly socially stratified. Investing in these buildings and making them more attractive will likely reduce this trend and is expected to contribute towards less social

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14 http://mrb.govtment.bg/files/good_practices_brochure.pdf
stratification inside the targeted buildings and geographical social stratification inside the municipalities.

6.2 Social Risk Screening

6.2.1 Land acquisition

All activities under NPEEMB will be conducted on existing buildings and footprint will involve mostly retrofitting of existing equipment, building elements and systems, and there will be no land acquisition or resettlement necessary in connection with the NPEEMB, and no negative impacts related to land acquisition are expected. It must be highlighted that participation in the Program is voluntary and people will be informed about the nature and schedule of works allowing them to plan accordingly.

The risk assessment confirmed that, till now during the implementation of NPEEMB no temporary resettlements were necessary, and this is not expected to be an issue during the remainder implementation of NPEEMB. Moreover, as residents are participating in the program on a voluntary basis, they are prepared to deal with the minor disruptions they will be facing during the renovations. To facilitate this, contractors will develop detailed construction plans, including schedules and timelines, for applying necessary safeguards measures, to minimize disruptions to residents. These plans will be communicated in a timely manner to HOAs, both (i) to ensure participating residents can arrange to provide contractors with full access to their facilities and (ii) to accommodate any disruptions they may face during renovations.

6.2.2 Opportunities to Enhance Capacity of Municipalities including with the management of the beneficiary dimension of the Program, including access to the Program for vulnerable groups 15.

Experience in NPEEMB implementation so far has demonstrated that there is very high demand of participation by the side of HOA. Till now, only about 9% of the estimated 19,000 eligible buildings are covered by the grant financing. The selection of homeowner associations (HOAs) on a "first-come, first-served" basis may give an advantage to those multifamily buildings whose inhabitants have a higher capacity to deal with administrative procedures. In addition, as noted in the PforR Project Appraisal Document, the government does expect that it will be unable to offer the 100% grant indefinitely, so future programming may expect to see a diminishing grant amount and an increasing leverage of private funding (HOA contributions, commercial financing).

. To address the issue of unmet demand under this phase of the NPEEMB, MRDPW will develop a plan for how the Government will support renovation of the full residential building stock, through policies and programs, and estimated needs for government support, including the expected diminishing grant amount over time. Such a plan will need to be informed by a thorough assessment of the social impacts of the Residential Energy Efficiency Program. It would furthermore need to identify the need to introduce any additional measures to allow the most vulnerable households to benefit from the future policies and programs. It would furthermore need to identify the need to introduce any necessary social mitigation measures to allow the most vulnerable households to benefit from the future policies and programs.

6.2.3 Grievance Redress Mechanisms

Bulgarian legislation has sufficient provisions for petitions and complaints submission. The NPEEMB follows the general grievance redress mechanism that has been established for MRDPW. Grievances and complaints are handled by the Ministry’s Inspectorate, as established and described under the State Administration Act. The Inspectorate’s role, as defined by the State Administration Act, is (i) the prevention and elimination of irregularities in the functioning of the administration; (ii) the independent and

15 This section focuses on aspects of the Program in line with core principle 5 (see section 2 of this document)
objective evaluation of administrative operations; and (iii) improvement of the administration’s performance. Where grievances are concerned, the Inspectorate has the following responsibilities:

- Conduct comprehensive, planned, subject-specific, ad hoc and follow-up checks of structures, activities and processes in the administration;
- Assess the corruption risk and propose measures for reducing it;
- Collect and analyze information and conduct checks to detect violations, corrupt practices and ineffective operation of the administration;
- Review observances of the laws, the instruments of secondary legislation, and the intra-departmental acts on the organization of work of the administration employees;
- Potentially propose the institution of disciplinary proceedings upon detection of breaches of official duties, as well as of the Code of Conduct of State Administration Employees;
- Check any alerts about unlawful or incorrect steps or omissions of administration employees;
- Exercise control and carry out examinations under the Conflict of Interest Prevention and Ascertainment Act;
- Draw up written statements ascertaining administrative violations upon detection of violations on the part of administration employees, where provided for by law;
- Alert the prosecuting authorities where, upon conduct of checks, it has learned that a criminal offence has been committed;
- Propose new intra-departmental acts, or the amendment thereof, regulating the organization of the work and operation of the administration. Municipalities have not established separate grievance redress mechanisms for the Program. In addition to the Inspectorate, the Ministry maintains a Program website, which includes information on all contracts that have been signed. The website also allows user to pose questions to the Ministry and provide feedback, including suggestions for Program adjustments. So far, the Ministry has not received any complaints on the Program via their website.

While the NPEEMB contains a grievance handling mechanism attached to the MRDPW, given the responsibilities of municipalities with regard to Program implementation, establishing local level grievance and complaint handling mechanisms would an important element for, transparent and constructive communication channels and relationships between local beneficiaries and the municipalities.

Improving the municipal grievance redress mechanisms and effectively connecting them with the MRDPW’s Inspectorate would reduce risks of NPEEMB delays due to unaddressed complaints. The grievance redress systems at municipal level should include standardized services. Existing local complaints handling mechanisms should strengthen their use of IT and the internal management, tracking and monitoring and evaluation systems, and invest in human capacity to ensure timely response rates. Particular attention should also be given to ensuring that all population groups – including marginalized population groups and ethnic minorities – are aware and encouraged to make use of the complaints handling services and that their complaints are being handled with the same level of attention and care.
ASSESSMENT OF THE NPEEMB ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEM

7.1 Assessment of the Program Environmental Management System

7.1.1 Strategic Documents in the Field of Environment

The National Energy Efficiency Program for Multifamily Buildings is in relation with the two main environmental policies on the territory of Bulgaria – National Environmental Policy and National Policy on Climate Change.

The national environmental policy is based on the sustainable development as a fundamental principle of the environmental protection. Bulgaria’s policy on climate change is based on two essential aspects related, on one side, to the country’s international commitments undertaken with the ratification of the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol and, on the other side, to the newly adopted European legislation in this area.

Achievement of the planned results in the Program, aiming mainly to improve the energy efficiency of buildings and the living environment, is in the context of the integration process of the environmental policy (EPI) and policy on climate change (PCC) in other sectorial policies. This is the main starting point and focus for 2014-2020 programming period. This Program is in relation also to Guidelines for the integration of environmental policy and policy on climate change in the funds for Cohesion Policy and Common Agricultural Policy and the Common Fisheries Policy for the period 2014 - 2020.

All above mentioned policies are the basis for the development of number of national and regional strategic documents. The objectives and measures, set out in them, contribute to the implementation of the government policies.

The National Energy Efficiency Program for Multifamily Buildings entirely complies with the policies, objectives and measures set out in the European and national strategic and planning documents in terms of energy efficiency policies, environment protection and climate change, given in details below in the current Report.

7.1.1.1 European Strategic Documents

7.1.1.1.1 “Europe 2020” Strategy

"Europe 2020" Strategy sets five main goals for the European Union by 2020, one of which is associated with the reduction of carbon dioxide emissions by at least 20% compared to levels of 90 years; the share of renewable energy sources in final energy consumption to increase to 20% (national goal of Bulgaria - 16%), and energy efficiency to improve by 20%.

One of the 20 priorities of ETUC European Energy Policy to 2020 is developing a program for renovation aiming energy saving for the entire housing fund.

7.1.1.2 Energy Roadmap for the period up to 2050 - Future with energy (2012/2103(INI))

In terms of energy efficiency with the European Parliament resolution of 14 March 2013 on the Energy Roadmap for the period up to 2050, is underlined that:

- Improved energy efficiency and energy saving will play an important role in the transformation of the energy system and that achieving the 2020 targets is a prerequisite for achieving further progress by 2050;
- In this respect it is recommended the Member States to increase their efforts to fully implement the recently adopted Directive on energy efficiency and it is recommended the inclusion of...
campaigns to raise awareness for energy efficiency in national education programs of Member States;

- Recommends that Member States and the Commission should make greater efforts to integrate national ideas and involvement of national development banks to support the exchange of best practices; reminds that energy efficiency when used properly, is a cost-effective way to achieve long-term objectives of the EU in terms of energy saving, climate change and the economic and energy security;

- Recognizes that the transition to an economy with higher energy efficiency can accelerate the spread of innovative technological solutions to reduce imports of fossil fuels and improve the competitiveness and growth of industry in the Union;

- Considers that the switch to a better energy efficiency policy should cover the whole chain of supply and demand of energy, including transformation, transmission, distribution and supply, alongside industrial and consumption in buildings and households;

- Underlines that long-term EU strategy on energy efficiency should consider reducing energy consumption in buildings as a central element, given the huge potential for saving energy of the already carried out renovation;

- Underlines the need to significantly improve the current rate and quality of renovation of buildings which would allow the EU to significantly reduce the energy consumption of existing buildings by 80% by 2050 compared with the levels in 2010;

- Calls in this regard the Member States to adopt ambitious long-term strategies for the renovation of buildings, as required under the Energy Efficiency Directive.

7.1.1.2 National Strategic Documents

The mentioned below, strategies and plans at a national level, which are in a close relation to the concerned Program, are subject to the Energy Roadmap for the period to 2050:

7.1.1.2.1 National Development Program: Bulgaria 2020

This Program is a national strategic document of the highest rank, formulating objectives and priorities for Bulgaria’s development in all sectors related to the achievement of the "Europe 2020" strategy.

One of the priorities, priority 7, of the Program is related with the development of adequate energy infrastructure, assistance in enhancing the resource efficiency and reducing energy dependence. Sub-priority 7.2 aims to increase energy efficiency by increasing the efficiency of energy consumption and, in particular, the efficiency of energy consumption in households.

7.1.1.2.2 Energy Strategy of Republic of Bulgaria to 2020

According to the targets set in the Strategy Bulgaria aims to reduce by 50% the energy intensity of gross domestic products (GDP) by 2020. The implementation of the forthcoming for approval with the Energy Strategy of Bulgaria 2020 measures and policies to increase energy efficiency aims to lead to improved energy efficiency by approximately 25%, or saving more than 5 million by 2020. One of the policies that will contribute to achieving the objectives set in the strategy is (4) Substantial effort will be made to improve the energy characteristics of buildings - private and public, including also accelerated introduction towards the European norms of requirements for buildings with close to zero energy consumption in the public sector.

7.1.1.2.3 National Action Plan for Energy Efficiency 2014-2020

The National Action Plan Energy Efficiency is developed in accordance with the requirements of Directive 2012/27 / EC on energy efficiency (EED), which aims to establish a common framework to promote energy efficiency in the EU, to ensure the achievement by 2020 the 20% primary energy savings, and creating conditions for improving the energy efficiency thereafter. Requirements related to Directive 2010/31 / EC on the energy performance of buildings are also considered.
One of the policy measures laid down in the National Plan for implementing the Directive 2012/27 / EU on energy efficiency is 3.2. Energy efficiency of buildings 3.2.1. PROGRAMME FOR THE RENOVATION OF BUILDINGS (EED ARTICLE 4), a national long-term program for mobilizing investments for the implementation of measures to improve the energy performance of buildings, which is an Appendix of the National Plan.

7.1.1.2.4 National Regional Development Strategy 2012-2022
One of the specific objectives of the National Regional Development Strategy (NRDS) Specific objective 1 (to priority 4.1 of strategic objective 4) is related to integrated renewal and urban development and urban environment improvement, incl. by introducing energy efficiency measures.

7.1.1.2.5 Third National Action Plan on Climate Change for the period 2013-2020. (Approved by Decision of the Council of Ministers № 459 of June 1, 2012)
According to the Third National Action Plan on Climate Change for the period 2013-2020, Sector "Household and services" is characterized by an upward trend in greenhouse gas emissions, which is determined by raising the standard of living and respectively - increased energy consumption of households. The measures in this sector are targeted primarily to increasing energy efficiency and use of renewable energy sources.

7.1.1.2.6 National Environmental Strategy 2009-2018 and the Action Plan to it, approved by Decision № 353 of the Council of Ministers dated 15.05.2009
According to the Action Plan of the National Environmental Strategy the leading strategic objective is to reduce and prevent the effects of climate change and clean energy, which should be achieved through the adoption and implementation of the Energy Strategy of Bulgaria till 2020.

7.1.1.2.7 National Plan for Waste Management 2014-2020 (NPWM)
The Program implementation is in direct connection with the National Plan for Waste Management 2014-2020 (NPWM) and National Strategic Plan of the Republic of Bulgaria for management of the waste, generated from construction and demolition works for the period 2011-2020.

NPWM is based on the following main principles:
- "Preventing" - waste generation should be reduced and avoided where possible;
- "Extended producer responsibility" and "polluter pays" principle - those who produce or contribute to waste generation or pollute the environment or current holders of waste must cover the full costs of waste treatment and manage them in a way that ensures high level of protection of the environment and human health;
- "Prevention" - potential problems with the waste should be foreseen and avoided at an early stage;
- "Proximity" and "self-sufficiency" - waste must be disposed of as close as possible to the place of their formation, the waste generated in the EU should be treated within the community;
- "Public participation" - the relevant stakeholders and authorities and the general public have the opportunity to participate in the development of waste management plans and waste prevention programs, and have access to them once elaborated.

The main types of waste, expected to be generated as a result of the implementation of the Program are falling within the scope of the key objectives of NPWM- non-hazardous construction wastes and hazardous wastes. According to the same, the aim is to be reached a gradual increase in the percentage
of recycled and recovered non-hazardous construction waste - from 35% in 2016 to 70% in 2020. Regarding the hazardous wastes, the main goal of the NPWM is to improve the management of specific hazardous waste streams.

7.1.1.2.8 National Strategic Plan of the Republic of Bulgaria for Management of the Waste, Generated from Construction and Demolition Works for the period 2011-2020

The main strategic objective of the National Strategic Plan for Waste Management from Construction and Demolition is associated with the development of a system for construction and demolition waste management in a way to ensure that by 2020 Bulgaria will have a developed integrated system for construction and demolition waste management, which will provide not less than 70% economically viable recycling, in order to terminate pollution and to reduce to a minimum the environmental impact of wastes generated as a result of construction activities in the context of sustainable development.

7.1.1.3 Regional and Municipal Strategic Documents

At a local level (for each of the municipal administrations in the Republic of Bulgaria) National Energy Efficiency Program for Multifamily Buildings is in connection with the objectives and policies set out in the following regional strategic documents:

7.1.1.3.1 Regional development plans for the period 2014-2020, regional development strategies for the period 2014-2020 and municipal development plans for 2014-2020

One of the main objectives of each of them is related to a balanced territorial development through a complex improvement of technical and social infrastructure and living environment, conservation and preservation of natural and cultural heritage.

7.1.1.3.2 Action plans for sustainable energy development for 2020 and programs for energy efficiency and encouraging the use of renewable energy sources and biofuels for the period

Exactly these documents set priority objectives at a local level, associated with reducing greenhouse gas emissions and reducing energy consumption and implementation of energy efficiency measures in the housing sector.

7.1.1.3.3 Programs for Environmental Protection and Programs for Waste Management on the territory of the respective municipalities, incl. plans for implementation of the measures of the two programs

The two programs describe the measures which implementation is to deal with the environmental issues and issues of waste management on the territory of the respective municipality. A plan for implementing the measures and the results of their performance are reported annually.

7.1.1.3.4 Municipal programs for air quality

The programs describe measures, which are necessary to be taken in order to improve the quality of the ambient air – mainly regarding the dust emissions (rarely NOx and SOx).

7.1.2 Overview of relevant environmental legislation for implementation of effective environmental safeguards policies

The current subchapter describes the main laws and ordinances, connected with the management of the environment as a whole as well as the separate components and factors. The requirements of each of them, regarding the implementation of the Program, are described in details in Subchapter 5.2.2, which provides more elaborate information about the management of each identified risk.
The following regulations are relevant for the implementation of the National Energy Efficiency Program for Multifamily Buildings:

7.1.2.1 Environmental Protection Act
This Act (Promulgated in State Gazette (SG), issue 91, dd. 25 September 2002, last amended in SG, issue 62, and dd. 14 August 2015) regulates the social relations with regard to:

- Protection of the environment for the present and future generations and protection of human health;
- Conservation of biological diversity in conformity with the natural biogeographic characteristics of Bulgaria;
- The conservation and use of environmental assets;
- The control and management of factors damaging the environment;
- The exercise of control over the state of the environment and over the sources of pollution;
- The prevention and limitation of pollution;
- The establishment and management of the National Environmental Monitoring System;
- Environmental strategies, programs and plans;
- Collection of, and access to, environmental information;
- The economic organization of environmental protection activities;
- The rights and the obligations of the State, the municipalities, the juristic and natural persons in respect of environmental protection.

7.1.2.2 Ordinance on the Way and Conditions for the Implementation of Environmental Impact Assessment (EIA Ordinance)
This Ordinance (adopted with Decree by the Council of Ministers № 59, dd. 07.03.2003, last amended in SG issue 94, dd. 30 November 2012) describes in details the way and conditions of the environmental impact assessment procedure on the territory of the country.

According to the requirements of Chapter VI of EPA and EIA Ordinance and given the characteristics of the investment proposals, concerning the rehabilitation of multifamily buildings, EIA is not needed, however following must be done: notification of the competent authority (the RIEW and the municipality) and the concerned public.

Based on the environmental international and national laws, currently in force, the Notification should contain the following information:

- Characteristic of the Investment Proposal, incl. summary of the Investment Proposal: (a new Investment Proposal and/or (it is for ) an extension or modification of manufacturing activity)
- Description of the main processes, capacity, productivity (tons per year/ production output), total used area; need of other activities - supporting or auxiliary, which are connected with the main scope of activity, including here usage of existing technical infrastructure or necessity to
be constructed new technical infrastructure (roads/ streets, gas pipeline, power lines and etc.), envisaged excavation works, presumed depth of the excavations, usage of blasts.

- Location of the site: settlements, municipality, residential district, landed property, geographical coordinates;
- Natural resources, envisaged to be used during the construction and operation;
- Types of wastes, expected to be generated and methods, which are envisaged for their treatment;
- Period for realization and implementation stages of the investment proposal

If the investment proposals are not incl. in Annex I and Annex II of the EPA: In such case the relevant Competent Authority will take the final decision, based on the requirements of the Biological Diversity Act\textsuperscript{16} and the documents applicable to it regulation and will issue a standpoint that there is no risk about the protected areas\textsuperscript{17}, which standpoint will be the end of the procedure. This standpoint is a mandatory document for obtaining of the construction permit.

7.1.2.3 Clean Ambient Air Act (Prom. In SG 45 dated May 28, 1996, last amended and supplemented in SG 98 dated November 28, 2014)

The law regulates:
- The definition of indicators and standards for air quality;
- The limit the emissions;
- The rights and obligations of state and municipal authorities, companies and individuals in the control, management and maintenance of air quality;
- The quality requirements for liquid fuels, including monitoring the compliance with the quality requirements for liquid fuels when placed on the market and their distribution, transportation and use, and
- Limitations on sulfur dioxide emissions when using liquid fuels, limitations on the sulfur content of oil derivatives and the way they are burned by vessels that are in the ports of the Republic of Bulgaria in the Bulgarian section of the Danube river, internal sea waters, territorial sea and the exclusive economic zone.

Requirements of the Act relate to:
- Designed, constructed and operating facilities and equipment for production and non-production use;
- Vehicles and other individual sources of pollution;
- Construction and other open sites;

\textsuperscript{16} The requirements for appropriate assessment procedure on the territory of Bulgaria are set in the Biological Diversity Act (promulgated in SG, issue 77, dd. 9 August 2002, last amended in SG, issue 61, dd. 11 August 2015) and Ordinance on Conditions and Way for Conducting Appropriate Assessment (Effective as from 11.09.2007, adopted with Decree issued by the Council of Ministers № 201, dd. 31 August 2007, promulgated in SG, issue 73, dd. 11 September 2007, last amended in SG, issue 94, dd. 30 November 2012). The investment proposals are not a subject of mandatory AA.

\textsuperscript{17} The Program activities will be carried out in urbanized areas (mainly towns and rarely villages) excluded from the boundaries of the protected territories and in some urbanized areas that are part of the protected territories, but no species or habitats subject to protection are expected to be registered on their territories.
- Construction, demolition, production, transportation, municipal, agricultural and other activities and
- Containers for storage and use of liquid fuels, oil depots, terminals, stations, auto- and railway tanks, marine fuel tanks, with the exception of the tanks of motor vehicles.

7.1.2.3.1 Other regulation in the field of air pollution prevention
The ordinances, connected with the management of the ambient air quality, are as follows:
- Ordinance № 1 of 27.06.2005 on limit values of harmful substances (pollutants), emitted into the atmosphere from facilities and activities with stationary emission sources (Prom. in SG. 64 of 5.08.2005, effective from 6.08.2006);
- Ordinance on limiting emissions of volatile organic compounds from the use of organic solvents in certain paints, varnishes and vehicle refinishing products (Prom. in SG. 20 of March 6, 2007, last amended and supplemented in SG. 55 of 20 July 2012) and
- Ordinance № 10 dated 24 February 2004 on the terms and conditions for approval of internal combustion engines for off-road machinery, in terms of emissions of pollutants (Prom. in SG. 28 of 6 April 2004, last amended and supplemented in SG. 69 of 11 September 2012)

7.1.2.4 Waste Management Act (Prom. in SG 53 of 13 July 2012, amended in SG 98 dated 28 November 2014)
This law regulates the measures and controls for protecting the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and by increasing the efficiency of such use.

This law defines the requirements to products which in their manufacturing process or after their final use form hazardous and/ or widespread wastes, as well as requirements for extended producer responsibility for these products in order to promote re-use, prevention, recycling and other recovery of waste. Waste management aims to prevent or reduce harmful effects on human health and the environment.

7.1.2.4.1 Other regulation in the field of waste management
The ordinances, with respect to the generated wastes are as follows:
- Ordinance № 2 dated 23 July 2014 on waste classification. According to the requirements of the Ordinance, the waste classification has to be made by each contractor, responsible for construction and installation works, and it has to be approved by the relevant RIEW. The following main types of waste are expected to be generated:
  - Household waste, which can be classified in group 20, namely municipal waste (household waste and similar waste from commercial, industrial and institutional activities), incl. separately collected fractions: 20 01 separately collected fractions (except 15 01), incl. 20 01 01 paper and cardboard, 20 01 02 glass, 20 01 08 biodegradable kitchen and canteen waste, 20 01 21* fluorescent tubes and other mercury-containing waste, 20 01 27* paint, inks, adhesives and resins containing dangerous substances, 20 01 28 paint, inks, adhesives and resins other than those mentioned in 20 01 27, 20 01 33* batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these
batteries, 20 01 34 batteries and accumulators other than those mentioned in 20 01 33, 20 01 35* discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components, 20 01 36 discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35, 20 01 39 plastics and 20 01 40 metals; 20 03 other municipal wastes, incl. 20 03 01 mixed municipal waste;

✓ Wastes from construction and demolition, which can be classified in group 17: subgroups 17 01 concrete, bricks, tiles and ceramics, incl. 17 01 06* mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances; 17 02 wood, glass and plastic, incl. 17 02 04* glass, plastic and wood containing or contaminated with dangerous substances; 17 03 bituminous mixtures, coal tar and tarred products, incl. 17 03 01* bituminous mixtures containing coal tar; 17 04 metals (including their alloys), incl. 17 04 09* metal waste contaminated with dangerous substances and 17 04 10* cables containing oil, coal tar and other dangerous substances; 17 06 insulation materials and asbestos-containing construction materials, incl. 17 06 01* insulation materials containing asbestos, 17 06 03* other insulation materials consisting of or containing dangerous substances and 17 06 05* construction materials containing asbestos; 17 08 gypsum-based construction material, incl. 17 08 01* gypsum-based construction materials contaminated with dangerous substances and 17 09 other construction and demolition wastes, incl. 17 09 02* construction and demolition wastes containing PCB and 17 09 03* other construction and demolition wastes (including mixed wastes) containing dangerous substances;

✓ Packaging waste; absorbents, wiping cloths, filter materials and protective clothing, classified in group 15: 15 01 packaging (including separately collected municipal packaging waste), incl. 15 01 01 paper and cardboard packaging, 15 01 02 plastic packaging, 15 01 04 metallic packaging, 15 01 07 glass packaging, 15 01 10* packaging containing residues of or contaminated by dangerous substances; 15 02 absorbents, filter materials, wiping cloths and protective clothing, incl. 15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.

- Ordinance № 1 dated 4 June 2014 concerning the order and the formats under which the information is provided for waste management activities and procedures for keeping public registers. According to the requirements of the Ordinance it is required by each contractor, responsible for construction and installation works, to keep reporting books where to record the quantities of wastes, generated on the site and those, submitted for subsequent treatment. The books need to be completed systematically and annually submitted to the EEA.

- Ordinance № 5 dated 15 April 2003 for prevention and reduction of environmental pollution by asbestos (Prom. in SG 39 dated 25 April 2003). According to the requirements of Art. 7, point 2 of the Ordinance, asbestos fibers or dust are deposited at landfills, built according to the requirements of Ordinance № 6 dated 27 August 2013 concerning the terms and requirements for construction and operation of landfills and other facilities and installations for recovery and disposal of waste. The preliminary storage of the asbestos wastes on their place of generation must be performed in a specially assigned site for storage of hazardous waste.
transportation of asbestos waste to the place of disposal must be done in a way which avoids the release of asbestos fiber or dust in the ambient air.

- Ordinance № 6 dated 27 August 2013 concerning the terms and requirements for construction and operation of landfills and other facilities and installations for recovery and disposal of waste;
- Ordinance № 7 dated 24 August 2004 concerning requirements that must be met for location of waste treatment facilities;
- Ordinance on requirements for treatment and transportation of industrial and hazardous wastes. The Ordinance regulates the requirements for preliminary storage and transportation of such waste. The preliminary storage of generated hazardous wastes is necessary to be made at special places within the boundaries of the construction site. Generally these places must be clearly marked and equipped with containers for waste storage; their floor/ground should have coverage avoiding soil and groundwater pollution and if it's necessary a bounded area/bund and adsorbent near the sites should be available (in case of preliminary storage of waste oils and petroleum products).
- Municipal Ordinances, establishing the terms and conditions for the disposal, collection, including separation, transportation, transfer, recovery and disposal of household and construction wastes in the territories of the respective municipalities. In relation to the rehabilitation of multifamily residential buildings, the municipal ordinances on waste management regulate the terms and procedures for coordinating the places for construction waste disposal, including the transportation routes, with the municipal administrations. In addition, these regulations are the legal basis for municipal administrations to impose penalties in case of registered land pollution or improper waste disposal.

7.1.2.5 Act on Protection from Environmental Noise (Prom. in SG 74 of 13 September 2005, last amended in SG. 98 dated 28 November 2014)

This law among other regulates:

- The assessment, management and control of environmental noise caused by road, rail, air and water transport as well as from industrial installations and facilities, including the categories of industrial activities listed in Annex № 4 to Art. 117, Para. 1 of the Environmental Protection Act, and local sources of noise;
- The estimating of the level of noise pollution in the environment through measurement, evaluation and mapping of noise levels in the environment and the development of strategic noise maps;
- The access and providing information about environmental noise and its effects to the public;
- The competence of state authorities and local authorities, rights and obligations of legal entities and sole traders, related to the assessment, management and control of environmental noise.
The objectives of this law for the establishment of healthy living conditions of the population and protection of the environment from noise can be achieved through the development and implementation of an integrated approach and measures for their avoidance, prevention or reduction.

According to the Act on Protection from Environmental Noise and the subordinate legislation, the rehabilitation of multifamily residential buildings is not subject to regular monitoring by the competent authorities. In case of submitted complaints according the Act for excessive noise levels, the respective RIEW should make an inspection. In case of proven violation penalties will be imposed.

7.1.2.5.1 Other regulation in the field of protection of noise
The respective ordinances are as follows:

- Ordinance № 4 dated 27 December 2006 for limiting the harmful noise by sound-proofing of buildings during their design and for rules and standards in the performance of construction works in terms of noise emitted during construction (Prom. in SG. 6 dated 19 January 2007);
- Ordinance № 6 dated 26 June 2006 for the indicators of environmental noise, taking into account the degree of discomfort in different parts of the day, limit values of noise indicators in the environment, methods of assessing the values of the noise and the harmful effects of noise on human health.

7.1.2.6 Act on Health and Safety at Work (Prom. in SG 124 of 23 December 1997, last amended in SG. 79 dated 13 October 2015)
This law regulates the rights and obligations of the state, employers, workers, workers’ representatives on health and safety at work, persons who work independently on their own account or in association and other organizations and entities to ensure healthy and safe working conditions.

The law establishes general principles of prevention and measures to encourage improvements in the health and safety of the workers for:

- Prevention of occupational risks;
- Protection of safety and health;
- Eliminating the risks and causes of work accidents and occupational diseases;
- Information, consultation, training;
- Balanced participation.

7.1.2.6.1 Other regulation in the field of health and safety at work
The respective ordinances are as follows:

- Ordinance № 2 dated 22 March 2004 on the minimum requirements for health and safety working conditions during performance of construction and installation works and
According to Art. 16 of Ordinance № 2 dated 22 March 2004 on the minimum requirements for health and safety working conditions during performance of construction and installation works the constructor provides instruction, training, upskilling and verification of knowledge of the workers in compliance with the Health and Safety at Work Act. In compliance with the requirements of Art. 15, Para. 1 of Ordinance № RD-07-2 dated 16 December 2009 on the terms and conditions for conducting regular training and instruction of employees by the regulations for ensuring healthy and safe working conditions (prom. in SG/102 dated 22 December 2009, am. In SG/25 dated 30 March 2010), workers at the construction site are subject to daily instructions.

7.1.3 Environmental Standards and Practices

The following environmental standards and practices are relevant to the implementation of the NPEEMB:

- The standard ISO 14001, applied in Bulgaria as BNS EN ISO 14001
  
  It is the most widely used standard in Bulgaria (in Bulgarian companies), the main reasons for this are its worldwide recognition, lower initial cost and its similarity with the well-known and applied ISO 9001 Standard.

- EU scheme for environmental management and auditing – EMAS
  
  Currently it is not widely applied in Bulgaria. This is mainly due to the insufficient awareness of the benefits of implementing the system, the higher requirements than in ISO 14001 and higher initial costs.

- Currently, simplified systems for environmental management, such as EMAS Easy and EKOPROFIT
  
  These are not widely represented on the Bulgarian market. They are particularly suitable for small and medium-sized enterprises as they require lower costs and less human resources for their implementation. With their help environmental management can be implemented in an easy and understandable way without need of large investments. They can be used as the first steps towards the next formal transition to ISO 14001 or EMAS.

- Life Cycle Assessment
  
  The standard, which provides the basic principles and scope of the LCA is ISO 14040. In Bulgaria, BNS EN ISO 14040 - Environmental Management is the standard that regulates the life cycle assessment. It is not widely used by the Bulgarian companies. The reasons for this are the high cost for its implementation, the need for specialized knowledge and information systems and the long duration, equal to the duration of life and use of the product, the time for receiving and evaluation of results.

- Ecolabel
  
  As a voluntary method for certifying the environmental impact it is a practice that is very rarely used by the Bulgarian companies.

- Benchmarking and eco-design
  
  They are other approaches to environmental management that could be widespread among Bulgarian companies, but at the moment they are poorly represented.
7.1.4 Adequacy of institutional organization and capacity, labor division and likelihood for the objectives of the applicable environmental management systems to meet their goals

As already noted, the most significant role in the implementation of activities under the Program is given to the respective municipal administrations. The study of the municipality structures showed that some of the municipalities in Bulgaria are facing challenges in implementing their functions under the program, related with the environmental and social protection. Especially smaller municipalities noted that they lack sufficient social experts to ensure the appropriate implementation, supervision and evaluation of the social dimensions, e.g. support to vulnerable population groups in connection to managing maintenance after refurbishment, e.g. in protected houses. Capacity constraints are twofold: (i) possible lack of number of staff, to sufficiently cover Program activities in a timely and high-quality manner; (ii) possible lack of expertise among staff particularly with regard to managing the social dimensions of the program.

Detailed analysis is provided in section 8.1, 8.2 and 8.3

7.1.5 Effectiveness of inter-agency coordination arrangements

The good inter-agency coordination between the competent authorities in the process of planning the activities under the Program, the development and coordination of the technical designs, their subsequent realization, as well as the monitoring and assessment of the performed activities are of crucial importance for the successful implementation of the Program.

The ESSA concluded that there is effective inter-agency communication at local level, regarding the management of environmental aspects. This is in more details explained in 8.4

7.2 Assessment of the Program Social Management system

7.2.1 Overview of relevant social legislation guiding the Program

✓ National Housing Strategy

The main strategic objectives of the strategy are (i) Decrease the deterioration of the existing housing stock, and (ii) create a working mechanism to provide new affordable housing (purchase and rental). The strategy in its foot is focused on the housing needs of different vulnerable groups in society (low income families, young families, single elderly people, refugees, homeless); the state of housing and living environment; it also aims to strengthen the institutional and administrative capacity of providing housing, etc.

✓ National strategy for reducing poverty and in promoting social inclusion 2020 - one of the priorities of the strategy "Improving the living conditions of vulnerable groups and supporting the homeless" sets concrete measures in providing access to housing; creation of integrated cross-sectoral services for the homeless, including begging children and adults. The target is to reduce number of people living in poverty with 260,000 by 2020.

7.2.2 List of relevant legislation for management of social impacts

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19 http://ec.europa.eu/social/BlobServlet?docId=11770&langId=en
As a member state of the European Union, Bulgaria has a comprehensive and robust set of legislation governing the management of the Program’s social dimensions. These include the Employment Promotion Act, the Civil Servants Act, the Settlement of Collective Labor Disputes Act, the Labor Inspection Act, the Spatial Planning Act, the Administration Act, the Integration of People with Disabilities Act, the Conflict of Interests Act, the Legal Aid Act, the Child Protection Act, the Mediation Act, the Social Assistance Act, the Protection Against Discrimination Act, the Health Law, the State Aid Act, and the Condominium Management Act.

While environmental impact assessments (EIAs) are obligatory in the preparation of state-funded as well as private projects, drawing up a due diligence (ex-ante) social impact assessment (SIA) has not been established as a distinct obligatory procedure in Bulgaria’s national legislation. Some SIA elements, such as impact on material assets, health and accident risk assessment are incorporated in the overall requirements for EIAs, which are conducted for investment proposals and projects as part of the national and EU framework environmental legislation. The two main legislative and sub-legislative acts governing EIA procedure in Bulgaria are the Environmental Protection Act (EPA) and the “Ordinance concerning the way and condition for conducting an environmental impact assessment.”

The EIA Ordinance determines the way in which EIAs for investment proposals, which are required by the Environmental Protection Act, are conducted. The Ordinance specifies the following social and economic aspects to be considered when elaborating an EIA report: “impact on people and their health”, “material assets”, “land and soils”, “landscape”, “mineral abundance”, and “objects of cultural value” – as well as aspects strictly related to the state of the environment, such as air and water quality, waste and noise, vibration, and radiation emissions.

7.2.3 Overview of the borrower’s past experience with similar programs

The borrower has sound experience with implementing activities in the field of energy efficiency improvements in multi-family buildings.

a. Demonstration renovation of multifamily residential buildings, 2007 – 2012\(^{20}\) in partnership with UNDP

A 5 years long initiative aimed at development and testing for the first time in Bulgaria a full-cycle renovation action on multifamily buildings as the means to generate practical experience and lessons for the future implementation of the National Programme for the Renovation of Residential Buildings, as well as good practices for the implementation of Operation 1.2 “Housing Policy” of the Regional Development Operational Programme, and the respective axis 4c.

Under the demonstration project, the following activities were implemented:

1. Selection of beneficiaries (municipalities and condominiums) on a competitive basis based on a comprehensive information campaign;
2. Establishment of voluntary associations of owners;
3. Tender procedures for the selection of contractors for technical and energy surveys, technical supervision and renovation works;
4. Implementation of technical and energy surveys and renovation works, monitoring and control;
5. Renovation of surrounding public areas after consultation with stakeholder condominiums.

It is important to note that under this first pilot activities, no temporary relocation or resettlement of the inhabitants of the renovated buildings were necessary.

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As key-partners in the project the following institutions were involved:

1. The Ministry of Regional Development and Public Works (MRDPW) defined the conditions and provided a subsidy;
2. Selected group of local authorities (municipalities) provided support for the information campaigns aimed at the end beneficiaries (condominiums), provided technical (design and renovation of the surrounding areas) and financial contribution to the renovation of surrounding public areas;
3. The homeowners in multifamily buildings got organized in voluntary condominium associations for the purpose of renovation, provided the necessary funds and participated throughout the renovation process via authorized representatives;
4. United Nations development program (UNDP) provided support for the development and testing of the renovation scheme, provided funds for project management.

(b) BG161PO001/1.2-01/2011 „Support for Energy efficiency in multifamily buildings“21, 50 mln scheme financed by the EU financed operational program “Regional development” (OPRD), 2007 – 2013, operated by the MRDPW “Housing policy” department. The scheme was operation for the period of 2012 – 2015. The main goals of this program was to (i) provide better living conditions for citizens in multifamily buildings in 36 urban centers; (ii) to implement energy efficiency measures in multifamily buildings in 36 urban centers, with the objectives of increasing the aesthetic value of the buildings and supporting areas and reaching certain level of diversity and architectural order.

The instrument was implemented with the financial support of the European Union through the European Regional Development Fund on the territory of the Republic of Bulgaria within 36 urban centers. Eligible activities supported under the project were (i) energy efficiency auditing; (ii) implementation of energy efficiency measures in multifamily buildings (thermal insulation, replacement of woodwork, local installations and / or links to central heating systems, gas, etc.). A significant amount of capital grant support has been needed to kick-start this program (up to 85 percent) and to motivate residents to register as HOAs.

7.2.4 Consultation Requirements
The Program uses a 2 stage process for its communication and information disclosure strategy:
(i) Awareness campaign initiated and carried out by the municipalities eligible for the program;
(ii) Public consultations, and application assistance during the application, often fully covered by the municipal administration.

7.2.4.1 Awareness campaign
As described in the NPEEMBguidelines the purpose of the awareness campaign is to

• increase the awareness of target groups - House owners at residential buildings established as condominiums on the need to rehabilitate the buildings for energy efficiency and to give them incentives to undertake measures for energy efficiency rehabilitation;
• clarify the conditions how to apply for granting of financial support for energy efficiency in multifamily buildings.

The awareness campaign is designated as the responsibility of the municipality. MRDPW is supporting the municipalities in the course of their awareness campaigns.

The municipality is free to decide how to:

• plan and implement the awareness campaign locally (on its territory);
• print/produce relevant information materials;
• organize press conferences, joint meetings between managers and other media and information events to engage citizens’ attention;
• distribute relevant information materials (leaflets, brochures, short movies etc).

The information can be distributed via various channels access - mass media and directly organized meetings and other types of forums, such open days events etc.

Some of the main communication channels that municipalities are using to disseminate information about, based on the Program’s methodological guidelines are:
• Direct consultation on pre-arranged public meetings during the information campaign and ad hoc communication. In some of the surveyed municipalities help desks were established.
• Direct personal meetings with house owners.
• Printed materials – posters, leaflets etc. Financed by the municipal budget, by decision of the local parliament.
• TV and local broadcasting mass media – interviews or small advertisement spots. Again financed by the municipalities according to their budget, and decision.
• Online communication via e-mail, and publication of news and special information on the municipal web-page. In the case of Bourgas municipality the information section of the NPEEMB in the local web page is very informative22.

All of the surveyed municipalities stated that the most relevant and appropriate way for a successful information campaign has been direct public consultation meetings, i.e. ad hoc consultations. To reduce the level of uncertainty among residents, direct personal meetings were organized.

Information disclosure of the Program is following the national legislation for operating with private and public information. Most of the Program information is available for public access on the Program web page, but the private data of the HOA is carefully managed and secured. Additionally, the BDB is maintaining a public register of the HOA which includes all signed CTFs, where detailed information about the address, the name and the total contracted value is available.

22http://www.burgas.bg/bg/info/index/890
7.2.5 Oversight and Monitoring

The overall oversight and monitoring responsibility lies with MRDPW. Each municipality carries out its own monitoring of the municipality-specific activities. An annual social survey on the attitudes of homeowners and challenges before the implementation of the National Program provide a first set of quantitative data on the social dimensions of the program. In addition to the survey, it would be recommended to include socially disaggregated monitoring and evaluation indicators which allow to disaggregated program impact not only by gender, but also by other social characteristics (e.g. single parents, disabilities, family with more than three children) over the duration of the Program. Moreover it is recommended that the Program applies a project based monitoring framework, where each building and respective contract is being treated as an individual sub project.\footnote{This recommendation was among other considerations derived from feedback received during the social assessment process from interlocutors in various municipalities, including Lovech and Sevlievo}
8 Program Capacity and Performance Assessment

8.1 Human Resources/Staff

The study of the structures of individual municipal governments showed that they are facing the following difficulties in implementing their functions under the Program.

The assessment of the administrative and technical capacity of the municipalities for implementation and management of their duties regarding environmental protection is prepared on the basis of the results from the conducted in-depth interviews (site visits) and desk reviews.

In 16 from the total of 20 investigated municipalities, there is a designated unit (directorates, department, sector, etc.) in the structure of the municipal administration, whose commitments are related to protection of the environment and implementation of the requirements of the European and national legislation at local level. There is no such unit in the municipalities of Dolna Banya, Luki, Sopot and Ivaylovgrad24.

In some of the smaller municipalities, such as Sopot and Dolna Banya, the implementation of the environmental legislation at local level is not the solely function of the environmental experts. Together with that, they perform a range of other duties, e.g. implementation of EU plans and programs on the territory of the municipality (Dolna Banya municipality), management of the land, forests, water sources and issuing permits for the operation of stores/shops and restaurants (Sopot municipality).

In four of the municipalities, incl. Burgas, Plovdiv, Stara Zagora, and Sofia, as part of the municipal administration structure, there are established and operational independent units - Inspectorates. Precisely the employees of these structural units are responsible for the implementation of control on the territories of the respective municipalities in relation to the adherence of the requirements of the local ordinances for cleanliness of the municipal territories and waste management.

In all of the visited municipalities, except four – Lovech, Stara Zagora, Sopot and Plovdiv, the experts from the municipal administrations perform inspections mainly after public complaints concerning violation cases. The number of planned inspections in the other 5 municipalities is significant.

The specialized units of the investigated municipalities employ from 2 to 18 people (Burgas and Sofia), and their number varies largely and is in direct relation to:
- The size of the municipality, e.g. in the bigger municipalities the number of staff in the specialized unit is larger; and
- The financial resources of the municipal administration.

In all municipalities included in the survey, beside the people in the specialized unit, there are municipal employees (including the municipal leadership), who are engaged with different environmental protection activities. For instance, in each and every one of the municipal administrations there is a dedicated deputy mayor responsible for the lawful implementation of the duties in the area of the environment protection of the employees of the municipal administration.

24 In Ivaylovgrad, there is no information on the presence of an expert responsible for environmental protection and the implementation of the national and international regulations on this subject in the municipal administration.
Another example of the participation of expert staff from the municipalities in environmental protection activities is the approval of Construction Waste Management Plans. Often this takes place in the process of coordination of technical designs by construction engineers and architects working in the structure of the municipal administration.

The assessment of the qualification of the employees responsible for the implementation of the environmental legislation at local level are in the positive scale and are supported by the following arguments:

- In all visited municipalities the regulatory requirements in the field of the environmental protection in Bulgaria are implemented as a minimum;
- All surveyed municipalities have an established system for waste collection and transportation of all types of wastes, generated by the households (for more information see subchapters above), as well as an established local Ordinance on waste management on the territory of the respective municipality reflecting the latest changes in the European and national legislation;
- On the territory of each municipality there is an established and operating system for separate collection of waste packages - glass, paper and cardboard and metal;
- In all visited municipalities programs are either updated or being updated to align with the National Waste Management Plan 2014-2020;
- The approval of the investment projects takes place only after presenting the necessary documents, according the environmental legislation in force, e.g. Construction waste management plan, EIA Decision or Decision on assessing the need of an EIA report (EIA SCREENING), statement of the Competent Authority in accordance with Chapter VI of the EPA, etc.

In four of the visited municipalities participants in public procurement are obliged to provide documents proving their engagement in the environmental protection process - more often with certificates under ISO 14 001. In Burgas and Stara Zagora this practice is rare. Such requirement is not present in public procurement requirements of Lovech, Sevlievo and Sopot.

From the above presented, it can be concluded that, except the small municipal administrations, the other municipalities have a well-established and functioning organizational structure. The obligations regarding the environmental protection at local level are distributed among the municipal administration experts so that their timely implementation is guaranteed.

Only an issue regarding the lack of enough expert potential in some of the municipalities, necessary for the implementation of activities under the Program is identified. This is expected to occur as a result from the increased workload for the municipal level experts. The extent of the increase depends on and is proportional to the number of buildings to be simultaneously renovated and the simultaneous commencement of several Programs. Reconciling of the functions of more than one expert position from one person is observed, which would impede the timely implementation of the tasks set by the Program. The experts in the municipal administrations mostly of small municipalities often do not participate in regular training to improve their qualifications.

In contrast to small municipalities, the largest, such as - Sofia, Plovdiv, Burgas, Stara Zagora, have a sufficient number of qualified and experienced staff, which would allow the timely and lawful fulfilment of their environmental obligations under the Program.

In less than a half of the visited municipalities during the process of selecting a contractor/s, i.e. the public procurement process (more often for carrying out construction activities) there is a
requirement to provide engagement in the environmental protection process – more often with certificates under ISO 14 001 or equivalent. This might be considered as precondition for selecting a contractor who is responsible in terms of environmental protection.

All above mentioned conclusions can be referenced to the rest of the Bulgarian municipalities, depending on their size and stage of development.

8.2 Financial Resources for managing the social and environmental dimensions of the Program

Regarding the municipal budget for the aims of environmental protection, it can be summarized that in all visited municipalities its main part is focused on waste management activities.

All of the visited municipalities have the opinion that the funds allocated for environmental protection, at least at this point, are sufficient and cover the needs of the municipalities. Insufficiency of funds for covering administrative needs in the field of environmental protection have not been reported.

8.3 Training

In seven of the visited municipalities the building of the administrative capacity of the environmental experts is a priority, and programs for participation in training improving their qualification are being executed. In the larger municipalities training plans are conducted regularly, and in some municipalities plans are being prepared. Only in Dolna Banya municipality the expert responsible for implementation of the environmental legislation has pointed out that there is no practice of conducting training to improve his expert potential and knowledge. In Luki municipality the local environmental expert rarely visits such trainings.

All municipalities who were interviewed for the purpose of this assessment stated that they would benefit from trainings that would enhance their capacity to better manage social dimensions related to program implementation, such as managing social tensions inside the municipality, improving conflict resolution in cases of disputes and overall communication and mediation related to Program implementation. Additionally, the HOA representative and janitors interviewed for this assessment underlined that they would benefit from capacity building and trainings to allow them to more competently fulfil their role during the implementation of Program activities.

8.4 Effectiveness of inter-agency coordination arrangements where multiple agencies or multiple jurisdictions are involved

The good inter-agency coordination between the competent authorities in the process of planning the activities under the Program, the development and coordination of the technical designs, their subsequent realization, as well as the monitoring and assessment of the performed activities are of crucial importance for the successful implementation of the Program.

For example, even at the earliest stage of project implementation, the respective RIEW has to issue a statement regarding the applicable environmental impact assessment procedures under chapter VI of the EPA. The good coordination between RIEW and the respective municipal administration will prevent delay in the coordinating procedures, and will help for the adequate management of environmental issues, as a result of Project activities realization.

The management, including the control of lawful treatment of the waste generated on the territory of the municipality, is in the power of the municipal administration. In the cases of established violations in the waste management process at municipal level, the mayor of the respective municipality or a
person authorized by him/her can take the necessary steps for the elimination of the violation. They can also issue a penal decree.

If the established violations are related to deterioration of the quality of the ambient air or other, the case is different. Precisely in such cases the municipal administration has to seek assistance from the respective responsible bodies, in the current case, the respective RIEW. The RIEW experts conduct measurements of the ambient air emissions and, if necessary, issue penal decrees.

In the course of the conducted on-site visits in the surveyed municipal administrations good internal communication and relations between the bodies responsible for the implementation of the environmental legislation at local level have been found. The readiness of the respective RIEW to cooperate in the process of realization of the Program activities has been confirmed by the municipal administrations. Several examples of irregularities reported by the municipalities, when the regional inspectorates reacted on time and along with the municipal administrations performed the necessary inspections, and when it was necessary, drew penal decrees.

Given the above it can be concluded that there is effective inter-agency communication at local level, regarding the management of environmental aspects.

8.5 Performance of the implementing agency in ensuring that the rules and procedures are being followed

In order to ensure compliance with the rules and procedures regarding environmental protection, a number of actions are undertaken by the municipal administrations. They can be summarized generally as follows:

- In several of the municipal administrations, even at the stage of selecting a contractor for an activity, requirements for companies participating in the public procurements for proving their responsibility regarding the environmental protection are placed – most often it is necessary that they have an ISO 14 001 certificate;

- The presented as part of the technical designs Construction waste management plans are reviewed by the municipal experts for their integrity and data reliability – in Sevlievo municipality the return of such a plan for revision and complementing because it does not meet the requirements of the national legislation, is forthcoming;

- Each of the municipal administrations has an updated and functioning local ordinance on waste management, which is and will be applied regarding the treatment of the generated wastes by the buildings rehabilitation. In particular, construction waste should be transported for further treatment to designated areas in coordination with the municipal administrations – based on permits received by the municipality.

An example that environmental rules and procedures are complied with, is the fact that on the territory of Blagoevgrad municipality which already has one rehabilitated block and another under construction, there is no registered environmental damage or complaint by the local population.

No specific monitoring is envisaged for the Program social impact, based on specific performance indicators. Implementing agencies are following the obligatory procedures as envisaged by the methodological guidelines. The obligatory procedures for Program implementation, especially the public procurement action are carefully monitored by the National procurement agency, the MRDPW and its respective structures.
9 SUGGESTED AREAS OF IMPROVEMENT AND INPUTS TO PROGRAM ACTION PLAN

9.1 Significant key gaps between Bulgarian environmental management systems and the PforR core principles. Key elements the area of improvement in Program implementation to fully comply with the national legislation and mitigate identified environmental risks

Main conclusion of the ESSA is that there are no key gaps between the principles of Bulgarian Environmental and Social Management Systems and the Program-For-Results core principles. As a whole, environmental sustainability is promoted in the Program design, the Program design sets/determines health and safety requirements, which will provide public and workers’ safety against the potential risks associated with the construction and operation of the rehabilitated multifamily building. With regard to social sustainability, the Program operates within an adequate legal and regulatory framework and will provide long-term livelihood improvements to all beneficiaries.

9.1.1 Summary of the key organizational, technical, or institutional measures agreed and those to be considered under the Program

The section presents all measures that were envisaged to improve the Program implementation. The measures are either related to the topic of (i) increasing capacity of municipalities or (ii) sharpening the procurement process.

The key organizational, technical and institutional measures needed to be taken during the implementation of the Program can be divided in two main groups:

A) Measures that should be implemented during project preparation and within the first few months of the P4R implementation presented in sub-chapter 9.1.1.1. and Annex 1

B) Measures that could be implemented in a long term or voluntary measures to be implemented in selected municipalities.

In general, the measures for the improvement of the administrative capacity could be reduced to the following few key measures:

- Increasing the number of experts that are engaged in the implementation of the environmental legislation at local level. This can be done in one of the following ways:
  - Appointment of additional environmental experts under permanent employment contract or civil contract for the purpose of implementing the Program (recommended);
  - Conduction of specialized environmental training of experts from the municipal administration on other positions and who are not involved in the Program implementation (agreed);
  - Signing contracts with external environmental consultants for the Program implementation (recommended).

The review of the minutes of the meetings conducted in 9 (nine) municipalities (see Annex 3 to this Report) showed that in over 50% of the visited municipalities an opinion that the environmental expert team of the municipality is insufficient and that additional experts need to be appointed is expressed. The application of this measure itself would lead to a number of benefits, such as:

- The experts will have enough time to timely track the changes in the environmental legislation. This would lead to its timely and correct implementation at local level;
- Conditions for performance of inspections on the adherence of the environmental legislation will be created (that will not be mainly as a result of received signals/complains). This in turn will strengthen the responsibility of the contractors/builders towards the environment;
The experts will have enough technical time for conduction of training, implementation and application of best practices. This will improve staff qualification.

The general procurement related measure that could be undertaken to pledge environmental requirements to the contractors at each stage of awarding public procurement. This of course is necessary to happen in compliance with the provisions of the Public Procurement Act (PPA):

- In the cases when it is possible to implement the so-called “green” public procurement (recommended).
- In the announcement of the public procurement there is a possibility to point out requirements related to environmental protection, incl. providing of ISO 14 001 certificate or equivalent. It is possible to set weights for assessment related to environmental requirements, in the cases of choosing the most economically favourable offer (recommended);
- It would be good to require from applicants a description of the measures that will be implemented to protect the environment during the implementation of the procurement, to be presented in the tender documentation; other existing opportunity is to present certificates issued by independent organizations (recommended);
- When selecting a contractor and signing a contract:
  - a) Clauses in the contract on the implementation of environmental and health and safety requirements in accordance with the subject of the procurement (agreed), to be included and
  - b) Further agreements on environmental protection to be signed as part of the contracts for implementation (recommended);
  - Subcontractors to be obliged to prepare an Environmental Management and Monitoring Plan (EMMP) that is mandatory to be implemented and the same to be applied as an annex to the contracts (recommended);
  - To prepare environmental Guidance for contractors and supervisors. It will include the duties of subcontractors in relation to the environmental legislation implementation (agreed).

The implementation of the measures from the two groups would contribute to the development of quality design projects and construction works.

Some of the measures from the two groups presented in detail below is related to additional financial costs for municipal administrations. Smaller municipal administrations, whose budget is relatively more limited, could face difficulties in implementation. Larger municipal administrations, on the other hand, have the necessary financial resources.

Carrying out periodic trainings to improve the capacity of HOA managers at municipal level would improve program implementation, and likely reduce the overall municipal work load and potential number of complaints related to the Program.

9.1.1.1 Measures that should be implemented in parallel with the Program preparation and implementation

The two measures indicated in this sub-chapter are considered low cost with potentially high impact on the quality of Program implementation and should be included in the Program implementation immediately. These measures have been discussed with the Government and their implementation has been agreed. These measure will be part of the PAP.
Measures for improvement of the administrative capacity that will be implemented during Program preparation and implementation

Constant improvement of the qualification of the employees (specialized trainings and courses) includes learning and implementation of good social and environmental practice and their correct motivation such as:

(i) Participation of environmental / social / municipal experts in specialized training, organized by other institutions under the Program or the municipal administrations themselves;

(ii) Preparation of Guidance on the basic duties of the municipal administrations in the field of environmental protection under the Program for the implementation phase as well as practical guidance for supervising the implementation of the Program, and

(iii) Preparation of guidance and good practice notes on the management of the social dimensions of the program, including providing targeted outreach and administrative support to vulnerable beneficiary groups, development and management of grievance redress mechanisms and monitoring of social impacts of the program

Measures that will be applied for promotion of good construction practices due to the increased volume of work

(i) Prepare clauses in the works contract on the implementation of environmental and health and safety requirements associated with the Program;

(ii) Prepare general Guidance for contractors and supervisors related to mitigation of environmental risks associated with the Program. The Guidance would be applicable to both contractor and if possible to form an integral part of the awarding contracts that will be signed between the municipal administrations and contractors.

10 CONCLUSIONS

Summarizing the available information presented in details above, as well as the data from the conducted site visits and desk reviews, it may be concluded that the National Program for Energy Efficiency of Multifamily Buildings will result in long-term positive impacts on the environment, the main of which are increase of the energy efficiency of buildings and reduction of CO₂ emissions. The negative impacts will be short- to long-term ones only during the construction/ rehabilitation period. All of them can be successfully managed by applying the requirements of the national legislation on a local level. This is fully applicable and evidences of this are: the adequate administrative structures of the municipalities, the presence of local environmental regulations and their successful implementation so far. Therefore, the expectation is that the identified and assessed risks are medium ones (with risks levels ‘2’and ‘3’), which can be easily mitigated.

In order to improve the implementation of the National Program from an environmental point of view, some measures are agreed to be taken (9.1.1.1 and annex 1) as well as some recommended to considered (chapter 9). They are limited primarily to improving the administrative capacity of municipal administrations, experts engaged in the implementation of the environmental legislation at local level and increasing the efficiency of the contractor/s selection process pledging environmental requirements to the contractors at each stage of awarding the public procurement.
11 ESSA DISCLOSURE AND PUBLIC CONSULTATION (To be completed upon completion of the consultations)

The public consultation on the draft ESSA are planned to be done in late May or early June 2016 and will be agreed with the Government during May 2016. The ESSA document will be disclosed on Bulgaria WB website and possibly on the Program website. The Bank team has sufficient funds to carry out consultation.

The draft public disclosure and consultation announcement has been prepared and is ready to be published. Prior to the consultation meeting, ESSA will be disclosed on the website and hard copy available in the WB office for at least two weeks. In advance of the public consultation meeting, an invitation letter will be sent to main the stakeholders to participate in the consultation meeting.

The draft invitation letter:

World Bank Invitation to Public Consultations of Environmental and Social System Assessment for National Energy Efficiency Program for Multifamily Buildings – Program for Results

The World Bank Group (WB), through Program for Results financial program support, has upheld National Energy Efficiency Program for Multifamily Buildings launched by the Government of the Republic of Bulgaria.

The main purpose of Project National Energy Efficiency Program for Multifamily Buildings is to rehabilitate multifamily buildings with the objective to contribute to higher level of energy efficiency of multifamily residential buildings and reduction of energy costs, enhance the operational characteristics and extending the useful life-time of the buildings and provide conditions for the living environment in compliance with the criteria for sustainable development. The project will be coordinated by Ministry of Regional Development and Public Works (MRDPW).

For the purpose of ensuring Program’s compliance with WB environmental safeguard policies, Bulgarian and EU legislation and identify and mitigate potential environmental risks, the World Bank carried out a comprehensive Environmental and Social System Assessment (ESSA). The main objective ESSA being to assess ability of the overall national environmental and social system to support implementation of the Project achieving strong sustainability of all program’s activities, identify gaps and propose measures to overcome them.

In line with WB and national requirements and as a part of the appraisal the WB will disclose the ESSA document on ____ web site and in hard copy at ____site from xx 2016 to xx 2016 making it available to general public, NGOs and other interested parties for comments, questions and suggestions. All are welcomed to the following address:

- Electronic mail:
- Postal address:
- Telefax number:
Presentation of the ESSA and public consultations will follow the disclosure. Interested parties are invited to attend presentation and participate in discussions providing the valuable inputs. Public consultations will take place at xxx, on xxx 2016, xxx am.
### Annex 1 - Main environmental and social issues and risks for the PforR and proposed activities to address them

#### Table 12-1: Main environmental and social issues and risks for the PforR and activities to address them

<table>
<thead>
<tr>
<th>ENVIRONMENTAL RISKS</th>
<th>#</th>
<th>Issues and risks</th>
<th>Actions</th>
<th>Responsibility</th>
<th>Timeframe</th>
<th>Costs (USD)</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key measures for improving environmental performance of the Program to be implemented in parallel with the Program preparation and implementation</td>
<td>1</td>
<td>Measures for improvement of the administrative capacity</td>
<td>Constant improvement of the qualification of the employees (specialized trainings and courses) includes learning and implementation of good environmental practice and their correct motivation such as (i) Participation of environmental municipal experts in specialized training, organized by other institutions under the Program or the municipal administrations themselves (ii) Preparation of Guidance on the basic duties of the municipal administrations in the field of environmental protection under the Program for the implementation phase as well as practical guidance for supervising the implementation of the Program</td>
<td>Common responsibility of the Government and WB</td>
<td>Prior to the Program implementation or within two months of the P4R approval</td>
<td>Guidelinecca 20000 USD</td>
<td>Number of trained representatives from municipalities</td>
</tr>
</tbody>
</table>
Measures for promotion of good construction practices

| Clear and structured guidelines for contractors and supervisors on their duties can help municipalities to deal with the increased volume of work. (i) Prepare clauses in the contract on the implementation of environmental and health and safety requirements associated with the Program; (ii) Prepare general Guidance for contractors related to mitigation of environmental risks associated with the Program. The Guidance would be applicable to both contractor and if possible to form an integral part of the awarding contracts that will be signed between the municipal administrations and contractors | Common responsibility of the Government and WB Guidelines and sample clauses would be prepared by Government and WB | Guidelines would be prepared prior to the Program implementation, or with in of month after the PforR approval; clauses in the contracts would be added before signing the agreements | Cca 20000 USD | Share of contracts with the clauses on implementation of environmenta l and health and safety requirements |

### SOCIAL RISKS

<table>
<thead>
<tr>
<th>#</th>
<th>Issues and risks</th>
<th>Actions</th>
<th>Responsibility</th>
<th>Timeframe</th>
<th>Costs (USD)</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Measures for avoiding/mitigating potential negative social impacts and maximizing social benefits of the program</td>
<td>Trainings and capacity building activities for the management of the social dimensions of the Program for municipal administration staff, with a particular focus on building capacity for supporting on the most vulnerable segments of the beneficiary population; the establishment of grievance redress mechanisms at the municipal level</td>
<td>Common responsibility of the Government and WB</td>
<td>Prior to the Program implementation, or with in of month after the PforR approval</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
and the development and monitoring of social impact indicators

Training and capacity building activities for HOA managers

Common responsibility of the Government and WB

12.2 Annex 2 - Public Consultation Process during the preparation of ESSA

Table 12-2 Municipalities, which were visited / interviewed

<table>
<thead>
<tr>
<th>№</th>
<th>Regions</th>
<th>Municipalities</th>
<th>Pre-selection justification</th>
<th>In depth interviews (site visits)</th>
<th>Planned date and time of the visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sofia</td>
<td>Dolna Banya</td>
<td>The municipality will be visited. It is a small municipality. The number of the contracts is above the minimum one.</td>
<td>Yes</td>
<td>12 October 2015; 10.00 am</td>
</tr>
<tr>
<td>2</td>
<td>Blagoevgrad</td>
<td>Blagoevgrad</td>
<td>The municipality will be visited. It was visited also on 17 September 2015. There is a large number of contracts.</td>
<td>Yes</td>
<td>12 October 2015; 2.30 pm</td>
</tr>
<tr>
<td>3</td>
<td>Gabrovo</td>
<td>Sevlievo</td>
<td>The municipality will be visited. It is a medium sized municipality with average number of contracts.</td>
<td>Yes</td>
<td>13 October 2015; 10.30 am</td>
</tr>
<tr>
<td>4</td>
<td>Lovech</td>
<td>Lovech</td>
<td>The municipality will be visited. It is a medium sized municipality with average number of contracts.</td>
<td>Yes</td>
<td>13 October 2015; 2.30 pm</td>
</tr>
<tr>
<td>5</td>
<td>Plovdiv</td>
<td>Sopot</td>
<td>The municipality will be visited. It is a small municipality. The number of residents per signed contract is small</td>
<td>Yes</td>
<td>14 October 2015; 10.00 am</td>
</tr>
<tr>
<td>6</td>
<td>Plovdiv</td>
<td>Plovdiv</td>
<td>The municipality will be visited. It was visited also on 18 September 2015. There is a large number of contracts.</td>
<td>Yes</td>
<td>14 October 2015; 2.30 pm</td>
</tr>
<tr>
<td>7</td>
<td>Plovdiv</td>
<td>Laki</td>
<td>The municipality will be visited. It is a small municipality. The number of the contracts is above the minimum one.</td>
<td>Yes</td>
<td>15 October 2015; 10.30 am</td>
</tr>
<tr>
<td>8</td>
<td>Stara Zagora</td>
<td>Stara Zagora</td>
<td>The municipality will be visited. There is a large number of contracts.</td>
<td>Yes</td>
<td>19 October 2015; 10.30 am</td>
</tr>
<tr>
<td>9</td>
<td>Burgas</td>
<td>Burgas</td>
<td>The municipality will be visited. It is a large municipality</td>
<td>Yes</td>
<td>20 October 2015</td>
</tr>
<tr>
<td>№</td>
<td>Regions</td>
<td>Municipalities</td>
<td>Pre-selection justification</td>
<td>In depth interviews (site visits)</td>
<td>Planned date and time of the visit</td>
</tr>
<tr>
<td>----</td>
<td>---------</td>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Dobrich</td>
<td>Dobrich</td>
<td>It is a medium sized municipality. The number of residents per signed contract is small.</td>
<td>Yes</td>
<td>9.30 am</td>
</tr>
<tr>
<td>2</td>
<td>Haskovo</td>
<td>Ivaylovgrad</td>
<td>It is a medium sized municipality. The number of residents per signed contract is small.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Haskovo</td>
<td>Simeonovgrad</td>
<td>It is a medium sized municipality. The number of residents per signed contract is small.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Pazardzhik</td>
<td>Pazardzhik</td>
<td>It is a large municipality with a high percent of signed contracts.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Shumen</td>
<td>Smyadovo</td>
<td>It is a medium sized/ small municipality. The number of residents per signed contract is small.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sliven</td>
<td>Nova Zagora</td>
<td>It is a medium sized municipality with average number of contracts.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Sliven</td>
<td>Sliven</td>
<td>It is a large municipality with large number of contracts.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Sofia</td>
<td>Botevgrad</td>
<td>It is a medium sized municipality with average number of contracts.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Sofia (stolitsa)</td>
<td>Stolichna</td>
<td>It is a large municipality with large number of contracts.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Veliko Tarnovo</td>
<td>Gorna Oryahovitsa</td>
<td>It is a medium sized municipality with average number of contracts.</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Yambol</td>
<td>Bolyarovo</td>
<td>It is a small municipality. The number of the contracts is above the minimum one.</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Table 12-3 Municipalities, needed to be a subject of desk review
| Total municipalities | 11 |
12.3 Annex 3 – Question Form

QUESTION FORM
MUNICIPALITY ..............

Necessary information/ Questions to the municipality representative/s

..............................
/date/

Experts, answering to the environmental questions:

1. ..............................
2. ..............................
3. ..............................

<table>
<thead>
<tr>
<th>№</th>
<th><strong>Necessary information/ Questions</strong> to the municipality representative/s</th>
<th><strong>Answers</strong> by the Municipality representative/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The total number of buildings on the territory of the municipality, which are able to apply under the program and could benefit from the National Energy Efficiency Program</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>How much applications have been received till now and the number of the expected ones</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Based on the already received applications: The main source of heating – central or local one and the used fuel (approximate number of the buildings from each group)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Presence of city gas distribution network and options more buildings to use this network</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>If there is information about:</td>
<td></td>
</tr>
</tbody>
</table>
- The maximum heat consumption (kWh/m²/y) for a building with central heating and for a building with a local heat source;
- The average annual CO₂ (kgCO₂/m²/y) emissions from heat energy referred to a unit of area: buildings with local heat source and such with central heat source

<p>| 6 | Information about the number of the projects, related to replacement of the local heat sources/ boiler farms or adjacent facilities, including change of the fuel base, where there is a proven environmental effect. The same information about projects, concerning the construction of systems for utilization of energy from renewable sources for the energy needs of the building as well as such for gasification of buildings |
| 7 | Presence of an environmental expert, as a part of the staff of the municipality administration |
| 8 | Availability of landfills for construction wastes on the territory of the municipality and capacity of the same. If there is free capacity |
| 9 | Necessity to develop Construction waste management plans for already developed projects (with already submitted applications) |
| 10 | Presence of municipal ordinances, establishing the terms and conditions for the disposal, collection, including separation, transportation, transfer, recovery and disposal of household and construction wastes (Art. 22 of the Waste Management Act) |
| 11 | Regarding already approved projects: Information about the process on coordination of the sites for disposal of construction wastes, as well as the itineraries/routes for their transport to the disposal site |
| 12 | According the requirements of the Program, the municipality mayors are responsible for conducting procedures for awarding activities under the Public Procurement Act and the applicable regulations. What kind of documents, demonstrating compliance with the environmental protection requirements, are necessary the participants in the public procurement to submit (if there is such requirement) – i.e. waste permits under the Waste management Act, presence of ISO 14001 |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Information about the presence of asbestos in the construction elements of the renovated buildings, which will lead to generation of asbestos containing wastes. Ways of treatment of such wastes at the municipal territory</td>
</tr>
<tr>
<td>14</td>
<td>Previous experience in the field of such projects</td>
</tr>
<tr>
<td>15</td>
<td>Information about the environmental budget of the municipality</td>
</tr>
<tr>
<td>16</td>
<td>Environmental trainings of the experts of the municipality</td>
</tr>
<tr>
<td>17</td>
<td>Coordination of the municipality with the respective Competent Authorities: Regional Inspection of Environment and Water and/or Ministry of Environment and Water</td>
</tr>
<tr>
<td>18</td>
<td>Additional data/information</td>
</tr>
</tbody>
</table>
### 12.4 Annex 4 – Implementation of Waste Management Legislation on Local Level

#### Table 12-4: Implementation of Waste Management Legislation on Local Level

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Responsible RIEW</th>
<th>Regional landfills for non-hazardous waste</th>
<th>Waste management and predominant on local level practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burgas</td>
<td>Burgas</td>
<td>YES</td>
<td>The old landfill will be closed and remediated. Currently there is a project, realized at the territory of the old landfill – before its remediation all wastes, deposited in it, will be dredged and processed into pellets. A modular installation was installed. On the territory of RIEW Burgas there are no landfills for construction waste except in the municipalities of Burgas and Tsarevo. It is not required/ necessary a specialized landfill for construction waste in the municipality of Primorsko to be constructed. The construction waste is disposed in accordance with the project for remediation of old quarry, located within the boundaries of &quot;Uzundzhata&quot; area. The Municipality of Sozopol is in a procedure for construction of landfill and waste separation installation. On the territory of RIEW Bourgas there are facilities and installations for preliminary treatment of waste from construction and demolition. There are also facilities and installations for construction waste recovery and disposal, which facilities are operated by the following companies: “Torkret” Ltd., &quot;Eurobuild&quot; Ltd., &quot;Kop Stroy&quot; Ltd. &quot;Roster&quot; Ltd. and &quot;Andesite&quot; AD</td>
</tr>
<tr>
<td>Luki</td>
<td>Smolyan</td>
<td>YES</td>
<td>On the territory of RIEW Smolyan five municipal landfills, which do not meet the legal requirements, have been liquidated: Borino, Nedelino, Chepelare and Luki. There was not identified improper waste disposal. In four municipalities (Rudozem, Madan, Zlatograd and Devin) there are construction waste landfills. The receipt of the waste by them is controlled. These sites are terrains, damaged from the mining industry. The construction waste is used for the remediation of the damaged terrain. Construction waste is landfilled also on the Regional Landfills – the same</td>
</tr>
<tr>
<td>Municipality</td>
<td>Responsible RIEW</td>
<td>Regional landfills for non-hazardous waste</td>
<td>Waste management and predominant on local level practices</td>
</tr>
<tr>
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<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Blagoevgrad</td>
<td>Blagoevgrad</td>
<td>NO</td>
<td>On the territory of RIEW Blagoevgrad the old landfills, located in Belitsa and Bansko, are remediated. Yakorouda landfill is currently under remediation.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>In the municipalities of Razlog, Bansko, Belitsa and Yakorouda, construction waste is disposed on the existing landfill of the town of Razlog, until the construction of the Regional Landfill Razlog. Blagoevgrad municipality continues to use the old municipal landfill which will be closed and reclaimed after the commissioning of the regional one.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>In the Regional Landfills in Gotse Delchev (for the municipalities of Gotse Delchev, Garmen and Hadjidimovo) and Sandanski (for the municipalities of Sandanski, Strumyani and Kresna) construction waste is landfilled in existing cells, together with other hazardous waste, or these are used to fill the negative relief forms (for remediation of damaged terrains).</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>In Regional Landfill - Petrich (municipality of Petrich) a separate cell for construction waste has been assigned and currently operates.</td>
</tr>
<tr>
<td>Gorna Oryahovitsa</td>
<td>Veliko Tarnovo</td>
<td>NO</td>
<td>On the territory of RIEW Veliko Tarnovo the operation of the existing municipal landfills will be discontinued upon the commissioning of the two Regional Landfills in the region.</td>
</tr>
<tr>
<td>Sevlievo</td>
<td></td>
<td>YES/ the Regional Landfill has also an IPPC Permit for hazardous waste treatment</td>
<td>In the village of Ledenik operates a landfill for disposal of construction waste, located within the borders of the municipality of Veliko Tarnovo. In the constructed landfill for municipal solid waste in the town of Sevlievo there is also a possibility of disposing construction waste for municipalities of Sevlievo, Suhindol and Dryanovo. After the construction of regional landfills for the municipalities of Gabrovo and Tryavna as well as for Veliko Tarnovo, Gorna Oryahovitsa, Strazhitsa, Zlataritsa, Elena and Lyaskovetz, disposal of construction waste will be carried out under issued IPPC</td>
</tr>
<tr>
<td>Municipality</td>
<td>Responsible RIEW</td>
<td>Regional landfills for non-hazardous waste</td>
<td>Waste management and predominant on local level practices</td>
</tr>
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</tr>
<tr>
<td>Plovdiv</td>
<td>Plovdiv</td>
<td>YES</td>
<td>As a result of the inspections of municipalities and settlements on the territory of the Regional Inspectorate, carried out by the Plovdiv RIEW it has been found that:</td>
</tr>
<tr>
<td></td>
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<td>• The operation of all rural dumps has been discontinued;</td>
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<td>• The existing rural dumps have been cleaned;</td>
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<td>• The identified unregulated pollutions are incidental.</td>
</tr>
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<td></td>
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<td></td>
<td>There is a landfill for construction waste at the territory of Rodopi municipality. It is located at a former gravel pit in the land of Parvenets village. It is there, where the generated construction waste is processed and disposed of. The landfill has a valid permit for waste management activities, issued by the Competent Authority. On the territory of RIEW - Plovdiv there aren’t other specialized landfills for construction waste, but there are companies with permits, issued for the recovery and recycling of construction waste.</td>
</tr>
<tr>
<td>Sopot</td>
<td></td>
<td>YES</td>
<td>For the following municipalities: Karlovo and Hisarya</td>
</tr>
<tr>
<td>Stara Zagora</td>
<td>Stara Zagora</td>
<td>NO</td>
<td>From 2009 to 2014 on the territory of RIEW - Stara Zagora 6 landfills for non-hazardous waste stopped functioning. They are located in the municipalities of Topolovgrad, Tvarditsa, Bratya Daskalovi, Elhovo, Bolyarovo and Pavel Banya. By the end of 2015 regional facilities for waste treatment for the regions of Stara Zagora and Yambol should be put into operation. Old landfills in these regions should be closed and reclaimed.</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>For the following municipalities: Sevlievo, Dryanovo and Suhindol</td>
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<td></td>
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<td>permits.</td>
</tr>
<tr>
<td>Municipality</td>
<td>Responsible RIEW</td>
<td>Regional landfills for non-hazardous waste</td>
<td>Waste management and predominant on local level practices</td>
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<tr>
<td>Nova Zagora and Sliven</td>
<td>RIEW</td>
<td>Nikolaev, Opan, Pavel banya, Radnevo, Tvarditsa, Chirpan</td>
<td>On the territory of RIEW Stara Zagora there is an existing municipal landfill for construction waste - in municipality of Kazanlak, which does not meet the regulatory requirements and will be closed upon the start of operation of the Regional Landfill for Non-Hazardous Waste- Stara Zagora.</td>
</tr>
<tr>
<td>Bolyarovo</td>
<td></td>
<td>NO</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>There is a project for Regional Landfill for Non-Hazardous Waste for the following municipalities: Sliven, Yambol, Tundzha, Straldzha and Nova Zagora</td>
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<td></td>
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<td>YES</td>
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<td></td>
<td></td>
<td>For the following municipalities: Bolyarovo and Elhovo</td>
<td></td>
</tr>
<tr>
<td>Lovech</td>
<td>Pleven</td>
<td>YES</td>
<td>Upon the commissioning of the Regional Landfill for Non-Hazardous Waste, the old municipal landfill is closed and the same is remediated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For the following municipalities: Lovech, Letnitza and Ugarchin</td>
<td>During the inspections, conducted by the RIEW Pleven it is ascertained that the requirements of the waste management legislation, the conditions of the IPPS permits and the monitoring plans are implemented.</td>
</tr>
<tr>
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<td></td>
<td>In 2014 control of illegal dumpsites closed in past periods was conducted. 18 inspections of closed dumps have been carried. During the inspections new illegal dumps have not been found.</td>
</tr>
<tr>
<td>Dobrich</td>
<td>Varna</td>
<td>YES</td>
<td>On the territory of RIEW Varna exist 13 municipal landfills which do not meet the legal requirements. Their operation is consistent with the measures referred to implementing the plans for compliance with the objectives of the National Waste Management Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For the following municipalities: Dobrich, Dobrichka, Krushare</td>
<td>On the territory of RIEW Varna there are three landfills for construction waste. They are located in the municipalities of Balchik, General Toshevo and Dobrich. The last two of them have ceased operation. These landfills do not meet the legal requirements and are subject to closure and remediation. Construction waste from the region is utilized for daily covering of the working areas of the Regional Landfills for Non-Hazardous Waste</td>
</tr>
<tr>
<td>Municipality</td>
<td>Responsible RIEW</td>
<td>Regional landfills for non-hazardous waste</td>
<td>Waste management and predominant on local level practices</td>
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<tr>
<td>Ivaylovgrad</td>
<td>Haskovo</td>
<td>NO</td>
<td>Ivaylovgrad municipality has terminated in advance the operation of the old municipal landfill, which was closed with ISPA funds. Since 2010, the household waste, generated in the municipalities of Kardzhali, Momchilgrad, Ardino, Kirkovo, Krumovgrad, Ivaylovgrad and Chernoochene, is transported to a temporary site, located next to the old landfill of Kardzhali Region, on the territory of Vishegrad village. It will be used till the construction and commissioning of the first cell of Regional Landfill for Non-Hazardous Waste- Kardzhali. Upon the commissioning of the Regional Landfill for Non-Hazardous Waste for the municipality of Simeonovgrad, the old municipal landfill is closed and is remediated. The main method for construction waste treatment on the territory of RIEW Haskovo is landfilling on sites, designated by the mayor of the relevant municipality. On the Regional Landfill for Non-Hazardous Waste in the city of Harmanli and village of Raven is allowed utilization of construction waste in limited quantities by aligning land covering with soil of the working sections of the landfill and for the waste, which appear excavated land masses, soil and stones and reclamation of the filled landfill cells. On the territory of RIEW - Haskovo there are no separate facilities for treatment (recovery, incl. recycling or disposal) of construction waste, which meet the legal requirements of the waste management legislation.</td>
</tr>
<tr>
<td>Simeonovgrad</td>
<td></td>
<td>YES</td>
<td>Waste – town of Dobrich and village of Vaglen. In the municipality of Varna, construction waste is mainly used for landscaping of damaged terrains.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Pazardhik</td>
<td>Pazardhik</td>
<td>NO</td>
<td>On the territory of RIEW Pazardzhik 99 landfills for non-hazardous waste that do not meet the legal requirements have been closed. Other 9 are in a process of closing. On the territory of RIEW Pazardzhik there are no operating landfills for construction waste. The only landfill of such type, situated in the municipality of Panagyurishte, was closed in 2012.</td>
</tr>
<tr>
<td>Pazardhik</td>
<td></td>
<td>NO</td>
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<tr>
<td>Municipality</td>
<td>Responsible RIEW</td>
<td>Regional landfills for non-hazardous waste</td>
<td>Waste management and predominant on local level practices</td>
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<tr>
<td>Smyadovo</td>
<td>Shumen</td>
<td>YES For the following municipalities: Shumen, Veliki Preslav, Smiadovo Kaspichan, Novi Pazar, Kaolinovo, Hitrino and Venets</td>
<td>It has been implemented a project for remediation of the old landfill for solid municipality waste, which was closed in 2006, On the territory of RIEW Shumen there is a municipal landfill in operation - in municipality of Opaka, which does not meet the legal requirements The municipality is included in the Regional Landfill Byala, which is built under &quot;Environment&quot; OP. On the territory of RIEW Shumen there are two companies possessing a document under Art. 35 of the Waste Management Act for recovery of construction waste: Agrostroy Ltd. and Golden Field Ltd. Another document for the company in Shumen is in a process of issue - for construction waste recovery. On the territory of RIEW - Shumen there are currently no operating landfills for construction waste. Basic practice is construction waste to be used for remediation of damaged terrains.</td>
</tr>
<tr>
<td>Sofia</td>
<td>Sofia</td>
<td>YES For Sofia municipality there is a waste treatment system: “Integrated System of Municipal Waste Treatment Facilities for Sofia Municipality” (incl. Non-Hazardous waste landfill “Sadinata” and Waste Water Treatment Plant, Biological treatment plant for green waste and bio-waste, Mechanical biological treatment (MBT) plant with RDF production)</td>
<td>During the inspections conducted by the RIEW Sofia on the compliance of the requirements of the issued IPPS permits there are no established violations of the waste management. It was built a treatment plant in the quarter of Vrajdebna, Sofia city, for environmentally sound management of construction waste. For the other municipalities there are not built sites for collection and recycling of construction waste. There are no data from Sofia RIEW for found or newly created illegal dumps.</td>
</tr>
<tr>
<td>Botevgrad</td>
<td>Sofia</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Municipality</td>
<td>Responsible RIEW</td>
<td>Regional landfills for non-hazardous waste</td>
<td>Waste management and predominant on local level practices</td>
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</tr>
<tr>
<td>Dolna Banya</td>
<td></td>
<td>For municipalities Botevgrad, Etropole and Pravetz</td>
<td>YES For municipalities Smokov, Ihtiman, Kostenetz and Dolna Banya</td>
</tr>
</tbody>
</table>
### 12.5 Annex 5 – Stakeholder’s Capacity for the Implementation of the Environmental Management System on Local level

#### Table 12-5: Stakeholder’s Capacity for the Implementation of the Environmental Management System

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Environmental expert, as a part of the staff of the municipality administration</th>
<th>Presence of a separate department “Inspectorate” as part of the municipality administration</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lovech</td>
<td>Yes</td>
<td>No</td>
<td>On a permanent job at the municipality administration there is 1 ecologist and 1 forest-ranger. The practice of the municipality is to perform on-site inspections of the facilities by a signal (as a result of complaints received by citizens). Planned inspections of the facilities whose aim is to check for compliance with the environmental legislation are not performed.</td>
</tr>
<tr>
<td>Stara Zagora</td>
<td>Yes</td>
<td>Yes</td>
<td>There are two environmental experts. They work in close conjunction with the unit “Inspectorate”, which is part of the structure of the municipality. As part of this unit there are experts, responsible for the ecology, cleanliness and public order within the borders of the municipality. They perform both planned and unplanned (upon received complaints by citizens) inspections on the territory of the municipality – these inspections include also inspections of construction sites.</td>
</tr>
<tr>
<td>Sevlievo</td>
<td>Yes</td>
<td>No</td>
<td>Two ecologists are responsible for waste management, preparation and implementation of the municipal programs, inspections following signals and complaints. They do not perform planned inspections of construction sites. The inspections are performed mainly upon received complaints and in the course of these inspections (in case irregularities are noticed) preventive actions are taken.</td>
</tr>
<tr>
<td>Plovdiv</td>
<td>Yes</td>
<td>Yes</td>
<td>An Ecology and Waste Management Directorate operates as part of the municipal structure. 11 people work there. There are also environmental experts, working in the administration of the separate municipality Regions.</td>
</tr>
</tbody>
</table>

25 Detailed information, concerning the exact number of the environmental experts and the practice of the municipality to perform on-site inspections, is available mainly for the visited municipalities. Such kind of information is not available for the other municipalities.
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Environmental expert, as a part of the staff of the municipality administration</th>
<th>Presence of a separate department “Inspectorate” as part of the municipality administration</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burgas</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Luki</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sopot</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

All environmental experts work in close conjunction with the unit "Inspectorate", which is part of the structure of the municipality. As part of this unit there are experts, responsible for the ecology, cleanliness and public order within the borders of the municipality. They perform both planned and unplanned (upon received complaints by the citizens) inspections on the territory of the municipality.

Within the structure of the municipal administration there is an Environment Protection Directorate. As part of this directorate there are two departments: Environmental Policies and Programs and Control and Administrative-punitive Activity on Environment. The experts of the second department perform inspections on the territory of the municipality, incl. inspections of construction sites. They are mainly based on received complaints from citizens. There is not enough time for planned inspections.

There are 18 – 19 environmental experts in total. Currently they successfully meet their responsibilities and there is no need of additional experts.

There is one environmental expert. She is responsible for the implementation of the environmental legislation – all kind of necessary documents. One additional expert, responsible for landscaping and cleaning the municipality (collection and transportation of household waste generated on the territory of the municipality).

The environmental expert carries out inspections, concerning the compliance of different activities (i.e. treatment of generated waste as a result of construction activities) with the requirements of the environmental legislation, mainly based on complaints, received by citizens.

There is one environmental expert. He is also responsible for the land, forests, water sources management and issuing permits for the operation of stores/shops and restaurants.
<table>
<thead>
<tr>
<th>Municipality</th>
<th>Environmental expert, as a part of the staff of the municipality administration</th>
<th>Presence of a separate department “Inspectorate” as part of the municipality administration</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blagoevgrad</td>
<td>Yes</td>
<td>No</td>
<td>The environmental expert carries out regular inspections, concerning the compliance of different activities (i.e. treatment of the waste generated as a result of construction activities) with the requirements of the environmental legislation. He conducts monthly inspections, concerning the presence of irregular landfills. He also conducts inspections based on complaints received by citizens.</td>
</tr>
<tr>
<td>Dolna Banya</td>
<td>Yes</td>
<td>No</td>
<td>There is one environmental expert. His main responsibility is not the application of the environmental legislation. He is mainly responsible for the implementation of the EU plans and programs on the territory of the municipality. The environmental expert carries out inspections concerning the compliance of different activities (i.e. treatment of the waste generated as a result of construction) with the requirements of the environmental legislation, mainly based on complaints received by citizens.</td>
</tr>
<tr>
<td>Nova Zagora</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Dobrich</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Ivaylovgrad</td>
<td>-</td>
<td>No</td>
<td>There is no information on the presence of an environmental expert as a part of the municipal administration.</td>
</tr>
<tr>
<td>Simeonovgrad</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Pazardzhik</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Smyadovo</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Municipality</td>
<td>Environmental expert, as a part of the staff of the municipality administration</td>
<td>Presence of a separate department “Inspectorate” as part of the municipality administration</td>
<td>Comments</td>
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</tr>
<tr>
<td>Sliven</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Botevgrad</td>
<td>Yes</td>
<td>No</td>
<td>There are 3 (three) environmental experts</td>
</tr>
<tr>
<td>Sofia municipality</td>
<td>Yes</td>
<td>Yes</td>
<td>As part of the municipal structure there is a Directorate responsible for the environmental management operations. There are also environmental experts working in the administrations of the separate municipality Regions. All environmental experts work in close conjunction with the unit “Inspectorate”, which is part of the structure of the municipality. As part of this unit there are experts responsible for the environment, cleanliness and public order within the borders of the municipality. They perform both planned and unplanned (upon received complaints by citizens) inspections on the territory of the municipality.</td>
</tr>
<tr>
<td>Bolyarovo</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
<tr>
<td>Gorna Oryahovitsa</td>
<td>Yes</td>
<td>No</td>
<td>Such information is not available</td>
</tr>
</tbody>
</table>