

**INTEGRATED SAFEGUARDS DATA SHEET  
APPRAISAL STAGE**

**Report No.: ISDSA6413**

**Date ISDS Prepared/Updated:** 17-Sep-2014

**Date ISDS Approved/Disclosed:** 17-Sep-2014

**I. BASIC INFORMATION**

**1. Basic Project Data**

<b>Country:</b>	Moldova	<b>Project ID:</b>	P132443
<b>Project Name:</b>	District Heating Efficiency Improvement Project (P132443)		
<b>Task Team Leader:</b>	Shinya Nishimura		
<b>Estimated Appraisal Date:</b>	08-Sep-2014	<b>Estimated Board Date:</b>	23-Oct-2014
<b>Managing Unit:</b>	GEEDR	<b>Lending Instrument:</b>	Investment Project Financing
<b>Sector(s):</b>	Energy efficiency in Heat and Power (40%), Public administration- Energy and mining (40%), Thermal Power Generation (20%)		
<b>Theme(s):</b>	Urban services and housing for the poor (40%), Debt management and fiscal sustainability (30%), Corporate governance (30%)		
<b>Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?</b>			No
<b>Financing (In USD Million)</b>			
Total Project Cost:	61.10	Total Bank Financing:	40.50
Financing Gap:	0.00		
<b>Financing Source</b>			<b>Amount</b>
Borrower			20.60
International Bank for Reconstruction and Development			40.50
Total			61.10
<b>Environmental Category:</b>	B - Partial Assessment		
<b>Is this a Repeater project?</b>	No		

**2. Project Development Objective(s)**

The objective of the proposed project is to contribute to improved operational efficiency and financial viability of the new DH company and to improve quality and reliability of heating services delivered to the population of Chisinau, Moldova.

### 3. Project Description

The Project, proposed to be financed by an IBRD Credit of US\$40 million, will comprise of three components, each focusing on the issues identified in the PDO:

Component 1: Priority investments in the DH system (IBRD: US\$ 33.4 million).

This component will support priority investments aimed at optimizing and modernizing the heat distribution network, with the objective to achieve reduced heat losses, improved service quality and more efficiency and secure supply of heat and hot water to end-user consumers. The DH network operated by Termocom is old, worn-out, and with large heat and water losses, and requires urgent rehabilitation and modernization. The low quality of service and lack of ability by the consumer to control their heat has resulted in significant disconnections from the DH system, mainly among the wealthy population who can afford to invest in individual boilers. Also a large number of public buildings (state and municipality owned) were disconnected from the DH system about 15-10 years ago. As a result, the vulnerable population of Chisinau will stand to be disproportionately affected should there be interruptions in the DH services. Therefore, the investments proposed under the Project will focus on ensuring the operational sustainability of Termocom, as well as efficiency. Specifically, financing would be provided for: (i) modernization of selected pumping stations to reduce electricity consumption and provide for modern and efficient variable flow operation mode of the DH system; (ii) rehabilitate selected segments of the distribution network to ensure continued secure DH service and reduce losses of heat and hot water; (iii) replace old and inefficient central heat substations (CHS) with modern fully automated individual building level heat substations (IHS) for more efficient, secure and affordable heat supply to end-users (iv) reconnect about 40 public buildings, which were earlier disconnected, to the DH system to improve the usage of the DH system.

Component 2: Support for streamlining operations (IBRD: US\$5.6 million)

This component will support the Government's decision to streamline operations and corporate structure of Newco, including closing down of CHP-1 operation. The Plant is being operated well beyond the designed life and being operated very inefficiently. Closing down CHP-1 itself would have a net benefit of over MDL 8 million per year for the energy consumers. In order to ensure stability of DH operations after CHP-1 ceases its operations and smooth transition in corporate restructuring process, the following programs will be supported under the component: (i) Connection of alternative heat distribution network and construction of new pumping station to service area supplied by CHP-1, (ii) Social Impact Mitigation Program for staff who may be affected by the restructuring, and (iii) Environmental Audit for CHP-1 site.

Component 3: Project Management and Technical Assistance (IBRD: US\$1 million).

This component will provide technical and financial support for project management. The implementation agency for the proposed project will be the Ministry of Economy (MoE). The Moldovan Energy Projects Consolidated Unit, which is directly subordinated to MoE, has more than 10 years of experience in implementing the World Bank and will serve as a fiduciary agent for the implementing agency. This component will finance activities such as: (i) MEPIU staff and operations, including Monitoring and Evaluation activities; (ii) public awareness campaigns for dissemination of the benefits of energy efficiency improvements and efficiently operating DH

systems. The MEPIU will also monitor a gender indicator, specifically number of female beneficiaries of the improved DH sector.

#### 4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project will be implemented in Chisinau city, the capital of the Republic of Moldova.

#### 5. Environmental and Social Safeguards Specialists

Arcadii Capcelea (GENDR)

Klavdiya Maksymenko (GURDR)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	
Natural Habitats OP/BP 4.04	No	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/ BP 4.11	No	
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	Yes	
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	No	
Projects in Disputed Areas OP/BP 7.60	No	

## II. Key Safeguard Policy Issues and Their Management

### A. Summary of Key Safeguard Issues

<p><b>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</b></p> <p>The Project will generate mostly positive socio-economic benefits due to the improvement of population hot water supply and heating services along with improved environmental conditions on the Chisinau Municipality territory. At the same time it might also generate a series of adverse impacts: noise; impact on water quality and resources; impact on water by the construction run-offs; disturbance of traffic during construction and rehabilitation works; construction dust; and workers safety, etc. However, these impacts will be temporary and site specific and could be easily mitigated through implementing adequate avoidance and/or mitigation measures. Conducted project EIA concluded no major impacts are expected and no sensitive or protected areas will be</p>
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affected during the proposed civil works. Furthermore, no any physical cultural resources will be involved/or impacted.

The Consultant was hired to conduct a social assessment. The SA revealed that rehabilitation and upgrading works planned on the heating pipelines under Component 1 will cause temporary disruption of livelihoods of the street market, the construction of the boiler house will require acquisition of the small state owned land plot that is under the lease by Moldovan Cooperatives Union (MOLDCOOP), therefore OP4.12 is triggered. The Abbreviated RAP to address the adverse impacts of the project is prepared and was disclosed in the Municipality in local language on Trmocom's web-site and in Bank's Infoshop.

**2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:**

Potential long term impacts are positive and relate to improved heating services and hot water supply for the city population.

**3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.**

N/A

**4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.**

To address potential environmental impacts the client prepared an EMP which includes along the WB safeguards policies applied to the current project a description of the policies, legal, and administrative framework in place in the Republic of Moldova regarding environmental management and district heating sector. It contains also: (a) a series of activities targeted at mitigating identified adverse impacts; (b) monitoring plan for EMP implementation; (c) implementing arrangements as well as a short analysis of project beneficiary (Termocom) EA capacity. The EMP stipulates all adverse environmental impacts associated with the Project will be prevented, eliminated, or minimized to an acceptable level. This will be achieved through the mechanism for the continuous refinement and effective implementation of the environmental mitigation measures, including careful selection of project sites; replacing of old pipes and pumps and conducting rehabilitation works in a way that would prevent as much as possible cutting of trees, destroying vegetation in parks, pollution of air and soil; ensuring labor safety and health impacts during welding operations etc. The monitoring section of the EMP provides: (a) details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements; and, (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation. The EMP implementation will be supervised by MEPIU and Termocom staff periodically (as per monitoring schedule), as well as by the WB (during its supervision missions) and by the local ecological and environmental construction inspectors. Furthermore, Termocom semiannually will present short information about the EMP implementation as part of the Progress Reports to be presented to the WB by the client. The EMP provisions will form part of the design documents for the project, and will be included in construction contracts for proposed activities, both into specifications and bills of quantities. Furthermore the Contractors will be required to include the cost in their financial bids and required to comply with the EMP provisions while implementing the project activities. As the project will include CHP 1 closure, the EIA&EMP report contains the draft TORs for its environmental auditing focused on assessing the cost of "decommissioning, dismantling, and environmental remedial measures" for several alternative scenarios – starting from maintaining the site at present

condition with minimal cleanup to meet environmental compliance and ensure safety and finishing with the full decommissioning (i.e., dismantle all equipment; demolish all buildings and structures; clean up entire site per required environmental standards).

The main implementing agencies (the Ministry of Economy) as well as the implementing entity (MEPIU) have good experience in successfully implementing safeguards issues within two World Bank projects (Energy II; and Competitiveness Enhancement Project). MEPIU is staffed with highly qualified and experienced professionals, both in technical and safeguards aspects, will ensure project implementation in accordance with the Operations Manual (OM), as well as that the EMP provisions are fully integrated into project implementation, conducting monitoring and reporting required by the World Bank. The main responsibilities with regard to day to day implementation of safeguards requirements are assigned to district heating company "Termocom" which is well prepared and has long time experience in this regard. The company is currently certified under both ISO 14001 (Environmental Management) as well as under ISO 18001 (Operational Health and Safety Management System) and has in its structure three subdivisions responsible for the issues related to environmental safeguards (Chemical Service, in charge of all environmental issues; Safety and Occupational Hazards division; and Technical Supervision division, which is responsible for ensuring all civil works financed by the company are done in compliance with the design documents and existing norms and standards). These entities have very experienced staff with all necessary licenses and certificates. The proposed mitigation measures will be implemented by the Contractors, being monitored and supervised by Construction Supervision Company and Termocom staff.

The corporate restructuring of Termocom, CHP1 and CHP2 will have a social impact as the need in some categories of personnel is expected to be decreasing gradually. However given that details of the corporate structure have not been finalized during project preparation it was not possible to prepare detailed Social Impact Mitigation Plan. In order to assist the borrower in addressing the social impact of the corporate restructuring the Social Impact Mitigation Framework was prepared and disclosed prior to appraisal.

**5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.**

The draft EIA&EMP report was consulted with all key stakeholders. On November 8, 2013 disclosed the document on its website. On November 23, 2013, it conducted a public briefing on the document which concluded that the draft report covers practically all potential impacts and possible mitigation measures along with clear procedures from environmental screening and monitoring. The draft document was revised after the meeting, taking into account outputs from the previous consultations. The final version of the EIA&EMP (in English and summary in Romanian) were posted on the Termocom website and submitted to the World Bank for its disclosure in Infoshop. The EMP will be used by the Termocom during the project implementation.

The draft ARAP was prepared and consultations with affected parties held on December 30, 2013. The ARAP was disclosed in Chisinau, Moldova in local languages (Romanian and Russian) and in the Infoshop. Termocom will be responsible for the implementation of the ARAP. The implementation will be monitored by the MEPIU.

**B. Disclosure Requirements**

**Environmental Assessment/Audit/Management Plan/Other**

Date of receipt by the Bank	23-Nov-2013
Date of submission to InfoShop	30-Jun-2014
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
<b>"In country" Disclosure</b>	
Moldova	23-Nov-2013
<i>Comments:</i> Disclosed on Termocom website. Submission to Infoshop was made after the project implementation structure was confirmed.	
<b>Resettlement Action Plan/Framework/Policy Process</b>	
Date of receipt by the Bank	20-Dec-2013
Date of submission to InfoShop	23-Dec-2013
<b>"In country" Disclosure</b>	
Moldova	20-Dec-2013
<i>Comments:</i> The document was also physically available in the office of Termocom	
<b>If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.</b>	
<b>If in-country disclosure of any of the above documents is not expected, please explain why:</b>	

### ***C. Compliance Monitoring Indicators at the Corporate Level***

<b>OP/BP/GP 4.01 - Environment Assessment</b>	
Does the project require a stand-alone EA (including EMP) report?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>OP/BP 4.12 - Involuntary Resettlement</b>	
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>The World Bank Policy on Disclosure of Information</b>	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
<b>All Safeguard Policies</b>	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]

Have costs related to safeguard policy measures been included in the project cost?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [ <input checked="" type="checkbox"/> ] No [ <input type="checkbox"/> ] NA [ <input type="checkbox"/> ]

### III. APPROVALS

Task Team Leader:	Name: Shinya Nishimura	
<b><i>Approved By</i></b>		
Practice Manager/ Manager:	Name: Arturo S. Rivera (PMGR)	Date: 17-Sep-2014