



U1. 8451-MD

Supplemental Letter No. 2

REPUBLIC OF MOLDOVA

April 15, 2015

International Bank for
Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Re: Loan No. 8451-MD
(District Heating Efficiency Improvement Project)
Performance Monitoring Indicators

Dear Sirs and Mesdames:

This refers to paragraph A.1 of Section II of Schedule 2 to the Loan Agreement of even date herewith between the Republic of Moldova (the Borrower) and the International Bank for Reconstruction and Development (the Bank). The Borrower hereby confirms to the Bank that the indicators set out in the attachment to this letter shall serve as a basis for the Borrower to monitor and evaluate the progress of the Project and the achievement of the objectives

Very truly yours,

REPUBLIC OF MOLDOVA

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Authorized Representative

REPUBLIC OF MOLDOVA
(District Heating Efficiency Improvement Project)

Project Development Objectives

PDO Statement

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

These results are at

Project Level

Project Development Objective Indicators

Indicator Name (Unit)	Baseline	Cumulative Target Values					End target	Frequency	Data Source/ Methodology	Responsibility for data collection
		2015	2016	2017	2018	2019				
Reduction in network heat losses (GCal)	360,000	360,000	355,000	347,000	339,000	332,000	330,000	Semi-annual	Newco. This indicator tracks the total heat loss reduction of the system based on equipment improvements/retrofits. Since long-term accurate estimates of percentage reduction of the whole system may produce biased estimates, results here are tracked in GCal losses from Project investments only. Years 3 and 4 are expected to generate the most savings.	Newco
Debt Service Coverage Ratio	24.5	24.5	24.4	1.4	1.6	1.6	>1.2	Semi-annual	This ratio will be calculated as the Earnings before Interest and Tax divided by the Debt Service.	Newco
Projected lifetime fuel savings (MJ) (Core)	0	0	110,371,131	220,742,261	331,113,392	331,113,392	9,603,288, 368	Annual	This indicator will be tracked annually from reports of Newco. This indicator is intended to track and calculate corresponding fuel savings as the decreased gas needs of the new utility for heat production in GCal, converted into MJ for official tracing purposes of Core Sector indicators, projected over a 30 year project lifetime.	Newco

Projected lifetime energy savings (MWh) (Core)	0	0	32,750	65,499	98,249	98,249	2,849,208	Annual	Newco. Current projected lifetime energy savings are estimated as electricity + gas savings (total energy savings) based on economic analysis of the Project over a 30 year project lifetime.	Newco.
Percentage of households that reported improved quality of service in buildings where IHSs were installed (Percentage)	0	0	Each year, we will have a target for at least 80% of the respondents reporting better quality of hot water services and of more comfortable temperatures in their households.				80%*	Annual	There will be yearly DH quality of service surveys conducted in the municipality of Chisinau. The surveys will be part of the Technical Assistance Component of the Project.	Newco
Projected lifetime reduction in CO2 emissions due to investments financed under the project (tCO2)	0	0	7,877	15,754	23,631	23,631	685,299	Annual	Newco. Number tracked from reduction of CO2 emissions from Termocom pre- and post-project, based on economic analysis of the Project. End target is lifetime savings value projected over 30 years.	Newco
District Heating systems breakdown rate (Number/km)	1.36	1.36	1.3	1.2	1.1	1.0	0.9	Semi-annual	Newco. Indicator measures the frequency of breakdowns per km. The indicator tracks improvements in the whole system based on investments of the Project (pipes replaced, HIS, new pumping stations, frequency converters).	Newco

*: Target to be determined in consultations with the client – 80% would represent 80% satisfaction among all households surveyed. 80% target is based on targets from similar project in Ukraine using same instrument to measure quality of service

Intermediate Results Indicators

Indicator Name	Baseline	2015	Cumulative Target Values				End Target	Frequency	Data Source/ Methodology	Responsibility for data collection
			2016	2017	2018	2019				
People that gained access to more energy- efficient heat-generating facilities (Number) (Core) <i>Of which</i> Female beneficiaries (%)	27,000	27,000	45,000	63,000	86,000	109,000	109,000*	Semi-annual	The indicator tracks the number of people who benefited from upgrades in more reliable and efficient heat supply through switches from GHS to IHS. Existing 182 IHS supply each about 50 apartments with 2-3 inhabitants in each (~27,000ppl). Additional 540 IHS installed by Project will improve heat efficiency for additional 81,000 ppl.	Newco, semi-annual report.
	50	50	50	50	50	50	50			

Actual fuel savings (GCal)	0	0	26,379	52,759	79,138	79,138	79,138	Annual	This indicator will be tracked annually from reports of Newco. This indicator is intended to track and calculate corresponding fuel savings as the decreased gas needs of the new utility for heat production.	Newco
Self-financing ratio (Percentage)	55	55	51	31	104	113	>25	Semi-annual	Newco. This ratio will be calculated by the formula: (Net Cash Flow from Operations – Debt Service)/ Investment	Newco/ Ministry of Economy
Termination of CHP-1 operations (Date)	23 Oct. 2014	--	--	--	--	--	31 Sept 2015	Once	Ministry of Economy, stakeholders. The termination of all CHP operations will have to take effect by fall 2015 for the Project not to be postponed by one calendar year heating season.	Ministry of Economy
Reduction in Heat Consumption due to transition from Group Heating Stations to Individual Heating Stations (GCal)	0	0	0	0	500	700	709	Annual	Calculated as the difference between billed consumption in year t and year (t+1) adjusted by degree days. This is based on the current procurement plan and the estimated end schedule of the installation of the IHS, the benefits following afterwards with the consumption decrease.	Newco
Government institutions reconnected to DH system (Number)	0	0	22	22	0	0	44*	Annual	Newco. Target set according to procurement plan of reconnections in 2015/16 and results in 2016/2017.	Newco, Ministry of Economy
Staff who received re-training (Number) Of which Female staff	0 50%	0	50 % of end target	50% of end target	0	0	648** 50%	Annual	Number of staff impacted by restructuring based on estimates from PwC "Corporate Restructuring Options" report.	Newco, Ministry of Economy
Staff who got severance payments (Number) Of which Female staff	0 50%	0	488 50%	410 50%	0	0	898*** 50%	Annual	Number of staff impacted by restructuring based on estimates from PwC "Corporate Restructuring Options" report.	Newco, Ministry of Economy

*: This numbers represents about 10%+ of the number of current JSC Termocom institutions.

** : Out of the 898, about 250 staff will retire, and the difference is our estimate for the ones re-training.

***: The number of affected staff is estimated by the PwC report to 898. It is expected by closure of CHP-1 (or end-2015) that a total of 488 staff will be considered redundant /retire and those staff will benefit from re-training or packages. The remaining 410 staff will be considered redundant or will retire between 2015 to end 2019. The total number of retirees over the 5-6 year period is estimated at 250, and the remaining number would be staff needing to retrain. We consider from a social mitigation perspective that completion of severance payments should be done early after the staff restructuring to ensure support to outgoing staff, thus targets are set in years 1-2.

Indicator Name	Description (indicator definition etc.)
Reduction in network heat losses (%)	This indicator will report the reduction in heat loss of the system tracked annually resulting from investments done through the Project. This indicator will help track improvements in operational efficiency.
Debt Service Coverage Ratio (%)	This indicator will contribute to measuring improvements in financial viability.
Projected lifetime fuel savings (MJ)	This indicator projects lifetime fuel use that is avoided by energy efficiency measures. The baseline value for this indicator should be zero. This indicator will report improvements in financial viability and operational efficiency.
Projected lifetime energy savings (MWh)	This indicator projects lifetime energy savings directly attributable to the Project, converted to MWh. The baseline value is expected to be zero. Similarly, the indicator will track improvements in financial viability and operations efficiency.
Percentage of households that reported improved quality of service in buildings where IHSs were installed (Percentage)	This indicator will report on the improvements in the quality of service perceived by households that live for one full heating season in buildings where Individual Heating Stations (IHS) are installed as part of the Project. Usually after one heating season households notice general improvements in temperature and hot water.
Projected lifetime reduction in CO2 emissions due to investments financed under the project (tCO2)	This indicator tracked the reduction in emissions of CO2 due to the Project investments, calculated by conversion of the total energy savings (electricity and gas savings). This indicator will contribute to improvements in overall quality of the system with positive effects on clean air in Chisinau.
District Heating system breakdown rate (%)	This indicator will monitor the improvements of the reliability of the heating system, and track system breakdown frequency. The indicator measures the number of breakdowns per kilometers of network.
Indicator Name	Description (indicator definition etc.)
People that gained access to more energy-efficient heat-generating facilities (Number) (Core)	This indicator measures the number of people living in households that switched to more energy-efficient stoves or systems as the primary source of energy for cooking, space heating, or both. The baseline value for this indicator should be zero
Actual fuel savings (GCal)	Actual savings recorded after start of the project implementation on annual basis. Current projections are based on yearly gas savings estimated in the economic analysis of the Project.
Self-financing ratio	This indicator will track the provision of adequate cash flow for the investment plan of Newco. Besides tracking the financial viability, this indicator contributes to tracking the adequacy of the tariff methodology.
Termination of CHP-1 operations	Tracking one of the most important policy actions impacting both operational efficiency/financial viability.
Reduction in Heat Consumption due to transition from Goup Heating Stations to Individual Heating Stations (GCal)	This indicator will track the reduction in heat consumption of residential buildings where IHSs are installed as part of the Project.
Government institutions reconnected to DH system	Number of institutions.
Staff who received re-training	Staff who was affected by the restructuring process that received retraining for re-assignment or as part of the severance package. The Project will track participation of female beneficiaries in the re-training.
Staff who received severance packages	Staff who was affected by the restructuring process that is retiring and therefore not retraining to re-enter the workforce. The Project will track number of female retirees as well.

Project Development Objective Indicators	
Indicator Name	Description (indicator definition etc.)
Reduction in management time spent meeting regulatory requirements	Reduction in management time spent meeting regulatory requirements as measured by the annual domestic Cost of Doing Business survey
Percentage of matching grant recipients that are engaged in a new export-oriented activity	MGF beneficiaries exporting existing products to new markets or new customers, exporting for the first time, exporting new products to existing or new markets, or selling new products into export-oriented value chains
Average annual percentage increase in lending to export oriented enterprises by participating financial institutions	As reported by PFIs' internal management information systems
Cumulative amount of medium and long term lending by participating financial institutions under the line of credit (>24 months)	As reported by PFIs to the CLD
Intermediate Results Indicators	
Indicator Name	Description (indicator definition etc.)
Establish and apply performance indicators for Government authorities with a business regulatory function	In accordance with the Action Plan agreed upon between the World Bank and the Government in Year 1 of the project. This is a DLJ in years 1 (December 2015), 3 (December 2017), and 5 (December 2019).
Cumulative number of reforms enacted according to the Action Plan to reduce regulatory barriers and remove anti-competitive elements of legislation and regulation	In accordance with the Action Plan agreed upon between the World Bank and the Government in Year 1 of the project, and updated in subsequent years. This is a DLJ in years 1 (December 2015), 3 (December 2017), and 5 (December 2019).
Percentage of laws and sub-laws affecting businesses that are assessed by the RIA Secretariat and discussed at Working Group of the State Commission on Regulation before approval by Parliament	As reported by the RIA Secretariat
Percentage of event participants reporting satisfied or very satisfied with workshops, training, seminars, conferences, study tours, etc.	As reported by participants in surveys at each event. This applies to events held under the Regulatory Reform component.
Adoption and implementation of a Strategy for ODIMM that promotes organizational effectiveness and reflects segmentation of delivery assistance mechanisms and enterprise needs	Segmentation of delivery assistance mechanisms reflects appropriate focus on high growth potential enterprises and other enterprises, as well as on size and sophistication of enterprises
Adoption and implementation of a Strategy for MIEPO that promotes organizational effectiveness and reflects market segmentation and improved export promotion delivery assistance mechanisms	Segmentation of delivery assistance mechanisms reflects appropriate focus on enterprises with different needs, as well as on size and sophistication of enterprises
Increased outreach of ODIMM	Percent increase in number of enterprises that have been assisted
Increased effectiveness of ODIMM	Percent increase in enterprises reporting they have received effective services
Increased outreach of MIEPO	Percent increase in number of enterprises that have been assisted
Increased effectiveness of MIEPO	Percent increase in enterprises reporting they have received effective services
Cumulative number of SMEs receiving Matching Grants	As reported in the MGF monitoring and evaluation system
Cumulative number of business development services provided to	As reported in the MGF monitoring and evaluation system

SMEs	
Number of MGF beneficiaries creating or improving products	As reported in the MGF monitoring and evaluation system
Number of MGF beneficiaries improving production processes	As reported in the MGF monitoring and evaluation system
Number of MGF beneficiaries improving business management	As reported in the MGF monitoring and evaluation system
Percent of MGF beneficiaries that are woman-owned or have a female CEO	This indicator will be tracked but will not be used to measure project performance
Number of sub-loans disbursed from the Line of Credit (cumulative)	As reported by PFIs to the CLD
Volume of PFI funding for exporters through the Line of Credit	As reported by PFIs to the CLD
Portfolio at risk (NPLs) under the Line of Credit	As reported by PFIs to the CLD