The District Heating Energy Efficiency Project (P132741)

EUROPE AND CENTRAL ASIA | Ukraine | Energy & Extractives Global Practice | IBRD/IDA | Investment Project Financing | FY 2014 | Seq No: 10 | ARCHIVED on 30-Jun-2020 | ISR42585 |

Implementing Agencies: Ministry of Communities and Territories of Ukraine, Ukraine

Key Dates

Key Project Dates

Bank Approval Date: 22-May-2014 Effectiveness Date: 21-Nov-2014

Planned Mid Term Review Date: 18-Sep-2018 Actual Mid-Term Review Date: 18-Sep-2018

Original Closing Date: 30-Oct-2020 Revised Closing Date: 30-Oct-2020

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The project development objective is to improve the energy efficiency and quality of service of selected Ukrainian district heating(DH) companies, improve their financial viability and decrease their CO2 emissions.

The global objective is to reduce greenhouse gas (GHG) emissions through avoided heat generation by improving heat generation efficiency, reducing heat losses in DH transmission and distribution systems, and reducing residential heat consumption.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components Table

Name

Component 1: Energy Efficiency Investments:(Cost \$204.50 M)

Component 2: Technical Assistance and Capacity Building:(Cost \$5.50 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	□ Moderately Satisfactory	□Moderately Satisfactory
Overall Implementation Progress (IP)	□Moderately Satisfactory	■Moderately Satisfactory
Overall Risk Rating	Substantial	□Moderate

Implementation Status and Key Decisions

The project was approved by the Board of Executive Directors on May 22, 2014 in the amount of US\$382 million (US\$332 IBRD Loan and US\$50 million Clean Technology Fund (CTF) Loan). The Loan and Project Agreements were signed on May 26, 2014, and the project was declared effective on November 21, 2014.

The implementation progress so far has been below expectations with significant delays experienced in the first year following effectiveness. While the Central Project Management Unit at Minregion is adequately staffed and able to fulfill its missions, some District Heating companies have made insufficient progress in the preparation of their investment plans, feasibility studies and in tendering. Given this situation, the Ukrainian authorities and the Bank agreed to restructure the Project. Four restructurings have taken place, in March 2016, May 2017, June 2018 and January 2019, resulting in a reduction of the number of participating utility companies (from 10 to 5) and in a reduction of the IBRD loan (which after

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cancellation amounts to US\$160.00). All five remaining participating utilities are now making progress towards completion of major network reconstruction and heat generation investments.

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Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance		Substantial	Moderate
Macroeconomic		Substantial	Moderate
Sector Strategies and Policies		Substantial	Substantial
Technical Design of Project or Program		□Moderate	Moderate
Institutional Capacity for Implementation and Sustainability		□Moderate	□Moderate
Fiduciary		□Moderate	□Moderate
Environment and Social		□Moderate	Moderate
Stakeholders		Substantial	Moderate
Other			
Overall		Substantial	Moderate

Results

PDO Indicators by Objectives / Outcomes

Improve the energy efficiency and decrease CO2 emissions ▶ Projected lifetime fuel savings (Mega Joules (MJ), Custom) Baseline Actual (Previous) Actual (Current) **End Target** Value 0.00 95,000,000.00 95,000,000.00 1,091,000,000.00 Date 01-Jul-2014 31-Dec-2018 31-Dec-2018 30-Jun-2021

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Comments:	recently commission	The fuel savings will be estimated at the end of the upcoming heating season, taking into account the recently commissioned infrastructure in Kamyanets (boilers, CHP and network upgrade), infrastructure to be completed by the end of the year in other cities, and installed Individual Heat Substations.							
□Project lifetime fu Supplement)	el savings, calculated as decreas	ed gas needs of participating u	ilities for heat production (C	cubic Meter(m3), Custom					
	Baseline	Actual (Previous)	Actual (Current)	End Target					
Value	0.00	2,800,000.00	2,800,000.00	32,200,000.00					
►Energy savings of	participating DH companies (Giga	awatt-hour (GWh), Custom)							
	Baseline	Actual (Previous)	Actual (Current)	End Target					
/alue	0.00	38.00	38.00	380.00					
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	30-Jun-2021					
□Avoided CO2 em	issions of participating DH compa	anies (Tones/year, Custom Sup	plement)						
	Baseline	Actual (Previous)	Actual (Current)	End Target					
Value	0.00	10,160.00	10,160.00 10,160.00 115,840.00						
mprove quality of ser	vice of selected Ukrainian DH co	mpanies and improve their finar	ncial viability						
►People that gained	access to more energy-efficient	cooking and/or heating facilities	(Number, Custom)						
	Baseline	Actual (Previous)	Actual (Current)	End Target					
/alue	0.00	55,909.00	55,909.00	497,600.00					
Date	01-Jul-2014	31-Mar-2019	31-Mar-2019	01-Jul-2020					
Comments:		Latest indicator value reported is for Kamyanets Podilsky only, since this is the only city where investments are substantially completed and full benefits for users have materialized.							

▶ Percentage of households that reported improved quality of service in buildings where IHSs were installed (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	80.00
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	01-Jul-2020
Comments:	Beneficiary feedback surv	vey is ongoing (data not yet a	vailable)	

▶ Ratio of total revenues to total operating costs (including debt service requirements) (Percentage, Custom)

Baseline	Actual (Previous)	Actual (Current)	End Target

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Value	0.80	0.90	0.90	1.00
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	31-Dec-2021

Intermediate Results Indicators by Components

Component 1: Energy	Efficiency Investments			
► Improved efficiency	of heat generation (Percentage,	Custom)		
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2.90
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	30-Jun-2021
Comments:		ciency of heat generation (boiler eason of operation for infrastruc		
□Fuel saved due to	efficiency gains (Megawatt hour	(MWh), Custom Supplement)		
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	21,750.00	21,750.00	216,000.00
► Reduction in networ	k heat losses (Megawatt hour(M	Wh), Custom)		
► Reduction in networ	k heat losses (Megawatt hour(M Baseline	Wh), Custom) Actual (Previous)	Actual (Current)	End Target
	, ,	,	Actual (Current) 4,960.00	End Target 49,000.00
	Baseline	Actual (Previous)	,	Ü
Value Date	0.00 01-Jul-2014	Actual (Previous) 4,960.00 31-Dec-2018	4,960.00 31-Dec-2018	49,000.00 30-Jun-2021
Value Date	Baseline 0.00	Actual (Previous) 4,960.00 31-Dec-2018	4,960.00 31-Dec-2018	49,000.00 30-Jun-2021
Value Date	0.00 01-Jul-2014	Actual (Previous) 4,960.00 31-Dec-2018	4,960.00 31-Dec-2018	49,000.00 30-Jun-2021
Value Date	Baseline 0.00 01-Jul-2014 ntial heat consumption in building	Actual (Previous) 4,960.00 31-Dec-2018 gs where IHSs were installed (M	4,960.00 31-Dec-2018 legawatt hour(MWh), Custo	49,000.00 30-Jun-2021 om)
Value Date ▶Reduction in reside	Baseline 0.00 01-Jul-2014 Intial heat consumption in building	Actual (Previous) 4,960.00 31-Dec-2018 gs where IHSs were installed (M	4,960.00 31-Dec-2018 legawatt hour(MWh), Custo Actual (Current)	49,000.00 30-Jun-2021 om) End Target

Performance-Based Conditions

Data on Financial Performance

Disbursements (by loan)

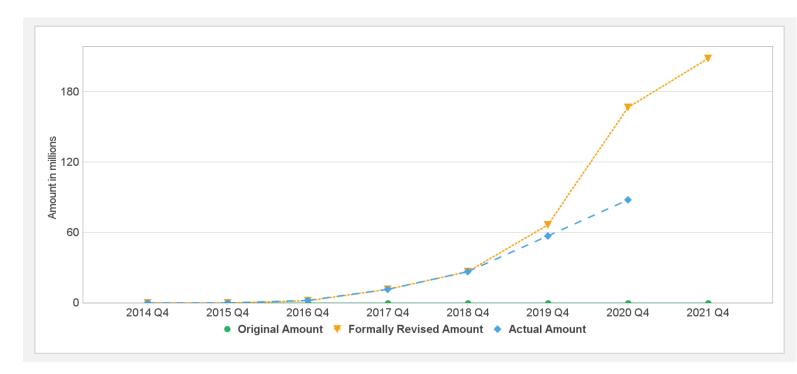
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Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P132741	IBRD-83870	Effective	USD	332.00	160.00	172.00	80.62	79.38	50%
P132741	TF-16327	Effective	USD	50.00	50.00	0.00	8.23	41.77	16%

Key Dates (by Ioan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P132741	IBRD-83870	Effective	22-May-2014	26-May-2014	21-Nov-2014	30-Oct-2020	30-Oct-2020
P132741	TF-16327	Effective	22-May-2014	26-May-2014	21-Nov-2014	30-Oct-2020	30-Oct-2020

Cumulative Disbursements



PBC Disbursement

PBC ID	PBC Type	Description	Coc	PBC Amount	Achievement Status	Disbursed amount in Coc	Disbursement % for PBC

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Restructuring History

Level 2 Approved on 12-Nov-2014 ,Level 2 Approved on 26-Feb-2016 ,Level 2 Approved on 29-May-2017 ,Level 2 Approved on 29-Jun-2018 ,Level 2 Approved on 21-Jan-2019

Related Project(s)

There are no related projects.

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