



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: 12 | ARCHIVED on 21-Dec-2021 | ISR48664 |

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: 31-Dec-2022

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 \$196.09 M)

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

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Unsatisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Unsatisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Risk Rating	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

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 has initially 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



cancellation amounts to US\$160.00). The Project closing date was extended by one year to October 30, 2021 to allow the five remaining participating utilities to complete the ongoing major network reconstruction and heat generation investments. A second and final extension to June 30, 2022 which should enable the completion of major investments was implemented on October 27, 2021.



Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Macroeconomic	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Sector Strategies and Policies	--	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial
Technical Design of Project or Program	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Institutional Capacity for Implementation and Sustainability	--	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial
Fiduciary	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Environment and Social	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Stakeholders	--	<input type="checkbox"/> Moderate	<input type="checkbox"/> Moderate
Other	--	--	--
Overall	--	<input type="checkbox"/> Substantial	<input type="checkbox"/> Substantial

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	287,000,000.00	1,091,000,000.00
Date	01-Jul-2014	31-Dec-2018	19-Oct-2021	30-Jun-2021



Comments:	The fuel savings will be estimated at the end of the upcoming heating season, taking into account the recently commissioned infrastructure in Kamyranets (boilers, CHP and network upgrade), infrastructure to be completed by the end of the year in other cities, and installed Individual Heat Substations.			
<input type="checkbox"/> Project lifetime fuel savings, calculated as decreased gas needs of participating utilities for heat production (Cubic Meter(m3), Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2,800,000.00	8,434,265.00	32,200,000.00
<input checked="" type="checkbox"/> Energy savings of participating DH companies (Gigawatt-hour (GWh), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	38.00	38.00	380.00
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	30-Jun-2021
<input type="checkbox"/> Avoided CO2 emissions of participating DH companies (Tones/year, Custom Supplement)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	10,160.00	32,000.00	115,840.00
Improve quality of service of selected Ukrainian DH companies and improve their financial viability				
<input checked="" type="checkbox"/> People that gained access to more energy-efficient cooking and/or heating facilities (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	55,909.00	194,355.00	497,600.00
Date	01-Jul-2014	31-Mar-2019	19-Oct-2021	01-Jul-2020
Comments:	Latest indicator value reported is for Kamyranets Podilsky only, since this is the only city where investments are substantially completed and full benefits for users have materialized.			
<input checked="" type="checkbox"/> 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	02-Apr-2021	02-Apr-2021	01-Jul-2020
Comments:	Beneficiary feedback survey is being finalized (results not yet available except for Kamyranets where satisfaction was 85% but this may not be representative for project as a whole)			
<input checked="" type="checkbox"/> Ratio of total revenues to total operating costs (including debt service requirements) (Percentage, Custom)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.80	0.90	0.83	1.00
Date	01-Jul-2014	31-Dec-2020	19-Oct-2021	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:	improvement in efficiency of heat generation (boilers, CHP) will be assessed at the end of the next heating season after a full season of operation for infrastructure financed under the project.			
□ 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 network heat losses (Megawatt hour(MWh), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	4,960.00	4,960.00	49,000.00
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	30-Jun-2021
▶ Reduction in residential heat consumption in buildings where IHSs were installed (Megawatt hour(MWh), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	11,400.00	11,400.00	114,000.00
Date	01-Jul-2014	31-Dec-2018	31-Dec-2018	01-Jul-2021

Performance-Based Conditions

Data on Financial Performance



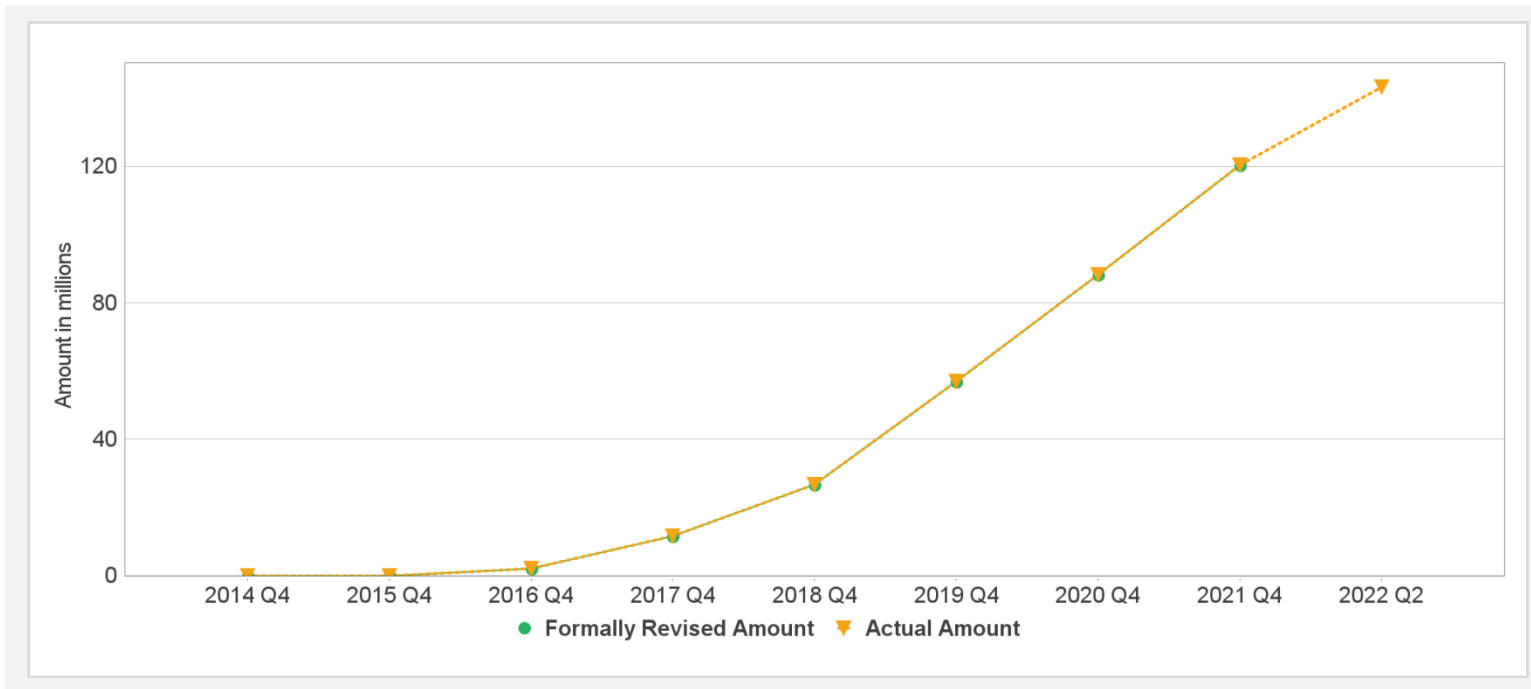
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P132741	IBRD-83870	Effective	USD	332.00	151.59	180.41	124.76	26.83	82%
P132741	TF-16327	Effective	USD	50.00	50.00	0.00	19.69	30.31	39%

Key Dates (by loan)

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-Jun-2022
P132741	TF-16327	Effective	22-May-2014	26-May-2014	21-Nov-2014	30-Oct-2020	31-Dec-2022

Cumulative Disbursements



PBC Disbursement

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



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 ,Level 2 Approved on 22-Oct-2020 ,Level 2 Approved on 08-Feb-2021 ,Level 2 Approved on 11-Nov-2021

Related Project(s)

There are no related projects.
