



USAID
FROM THE AMERICAN PEOPLE

MUNICIPAL ENERGY REFORM PROJECT (MERP)

SEVENTEENTH QUARTERLY REPORT



January 2018

This document was produced for review by the United States Agency for International Development (USAID). It was prepared by the USAID Municipal Energy Reform Project in Ukraine.

Key to cover photos:

USAID Project Communication Director Vira Illiash Helps Journalists with Concept of Publication during Editorial Session of Media Training	Video PSA Educates Consumers of Communal Services about their Rights and Possibilities for Implementation of EE/AE Measures	Young Visitors of USAID Project's Information Camp Research Alternative Energy Sources during Sustainable Energy Day in Khmelnytskyi
USAID Project COP Diana Korsakaite Delivers Presentation at XIII International Congress on Reforming Housing and Public Utilities Sector	Myrnohrad and Pokrovsk City Councils Approve Sustainable Energy and Climate Action Plans Developed with Support of MERP	City Council of USAID Project Partner City Rubizhne Adopts Sustainable Energy and Climate Action Plan
New Video PSA Appeals to Co-owners of Multi-apartment buildings to Create HOA and Make Their Buildings Comfortable Place to Live	MERP COP Diana Korsakaite Opens Seminar "Prospective Planning for Heating Supply to Cities and Settlements in Ukraine"	Third Season of MERP TV Program "Your Home" Stays Firmly at Top-Ten Rating List of National Television

MUNICIPAL ENERGY REFORM PROJECT (MERP)

SEVENTEENTH QUARTERLY REPORT OCTOBER 1 – DECEMBER 31, 2017

CLEAN ENERGY IDIQ: AID-OAA-I-13-00015

Contract: AID-121-TO-13-00006

January 2018

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

This page is intentionally left blank.

TABLE OF CONTENTS

BACKGROUND	7
A. SUMMARY OF PROGRESS AND ACCOMPLISHMENTS.....	9
B. DETAILED DESCRIPTION OF PROGRESS/ ACCOMPLISHMENTS DURING THE REPORTING PERIOD.....	19
B.1 Project Team and Procurement Actions.....	19
B.1.1 Consulting Agreements	19
B.1.2 Subcontracts.....	19
B.1.3 Grants.....	19
B.2 Costs	19
B.3 Environmental Compliance	19
B.3.1 Project Activities	20
B.4 Progress and Accomplishments By Activity.....	22
B.4.1 Activity 1: Improve CE Regulatory and Legislative Enabling Environment	22
B.4.2 Activity 2: Promote Investment in CE Technologies and Applications	32
B.4.3 Activity 3: Capacity Building and Dissemination	44
B.4.4 Activity 4: Enhance Capacity for the GOU in LEDS	44
C. DELIVERABLES	47
D. MILESTONES	55
E. PROBLEMS	59
F. PLANS	61
F.1 Activity 1: Planned Activities in Quarter 18.....	61
F.2 Activity 2: Planned Activities in Quarter 18.....	62
F.3 Activity 4: Planned Activities in Quarter 18.....	63
G. PERFORMANCE INDICATORS.....	65

LIST OF TABLES

Table 1. Consulting Agreements in Place during the Reporting Period	Error! Bookmark not defined.
Table 2. Fixed-price Subcontracts (Purchase Orders) Signed during the Reporting Period	Error! Bookmark not defined.
Table 3. Summary of Project Expenditures (USD)	Error! Bookmark not defined.
Table 4. Summary of Information on the Projects Supported	34
Table 5. Current Project Pipeline	35
Table 6. EE “Warm Loans” Program Disbursements 2015–2017	37
Table 7. Current Status of Design and Cost Documentation Development for Residential Sector Demo Projects.....	39
Table 8. Current Status of SECAPs Development and Approval for Odesa Oblast	41
Table 9. Current Status of Design and Cost Documentation Development for Public Buildings Demo Projects	42
Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project	47
Table 11. Q17 Milestones for Activity 1: Improve CE Regulatory and Legislative Enabling Environment	55
Table 12. Q17 Milestones for Activity 2: Promote Investment in CE Technologies and Applications.....	56
Table 13. Q17 Milestones for Activity 4: Enhance Capacity for the GOU in LEDS.....	57
Table 14. Q18 Milestones for Activity 1: Improve CE Regulatory and Legislative Enabling Environment	63
Table 15. Q18 Milestones for Activity 2: Promote Investment in CE Technologies and Applications.....	63
Table 16. Q18 Milestones for Activity 4: Enhance Capacity for the GOU in LEDS.....	64

ACRONYMS

ADCS	Automated dispatch and control systems
AE	Alternative energy
ARVI	Aggregated Recovery Value Indicator
BEE	Business Environment for Energy
CBP	Capacity-building plan
CCS	Center for Climate Strategies
CE	Clean energy
CEAC	Clean Energy Advisory Center
CE RC	Clean Energy Resource Center
CFR	U.S. Code of Federal Regulations
CHPP	Combined heat and power plant
CIESIN	Center for International Earth Science Information Network
CMU	Cabinet of Ministers of Ukraine
CO ₂	Carbon dioxide
CoM	Covenant of Mayors
COP	Chief of Party
COR	Contracting Officer Representative
CPFF	Cost plus fixed fee
CSO	Civil society organization
CTF	Clean Technology Fund
DCA	Development Credit Authority
DCOP	Deputy Chief of Party
DH	District heating
E5P	Eastern Europe Energy Efficiency and Environmental Partnership
EA	Energy audit
EBRD	European Bank for Reconstruction and Development
EC-LEDs	Enhanced Capacity for Low Emission Development Strategies
EE	Energy efficiency

EECU	Association of Energy Efficient Cities of Ukraine
EFOM	Energy Flow Optimization Model
EIA	Environmental impact assessment
EIB	European Investment Bank
EM	Energy management
EnPC	Energy performance contracts
ENU	Eastern Ukrainian National University
EPC	Energy performance contract
ERC	Environmental review checklist
ESCO	Energy service company
EU	European Union
EU MS	EU Member States
EUR	Euro (<i>currency</i>)
Gcal/h	Gigacalories per hour
GCC	Global climate change
GDA	Global Development Alliance
GDP	Gross domestic product
GHG	Greenhouse gas(es)
GOU	Government of Ukraine
HE	Heat energy
HOA	Homeowners association
HORECA	Hotel, Restaurant, Cafe / Catering
IEA	International Energy Agency
IEE	Initial environmental examination
IEEC	Institute for Environment and Energy Conservation
IEF	Institute for Economics and Forecasting
IFC	International Finance Corporation
IFI	International financial institution
IHS	Individual heating substation
IPCC	Intergovernmental Panel on Climate Change
IRG	International Resources Group

KfW	Kreditanstalt für Wiederaufbau
KPI	Key performance indicator
kWh	Kilowatt hour(s)
LEDS	Low Emission Development Strategies
M2	Square meters
M3	Cubic meters
MARKAL	MARKet and Allocation Model
MDI	Municipal Development Institute
M&E	Monitoring and evaluation
MEIS	Municipal Energy Information System
MERP	Municipal Energy Reform Project
MinEcology	Ministry of Ecology and Natural Resources
MinEconomy	Ministry of Economy
MinEnergy	Ministry of Energy
MinJustice	Ministry of Justice
MinRegion	Ministry of Regional Development, Construction, Housing and Communal Services
MinSocPolicy	Ministry of Social Policy
MMP	Mitigation measures plan
MRV	Monitoring, reporting, and verification
MTO	MERP Task Order
MWh	Megawatt hours
MW	Megawatts
NECSRC	National Energy and Communal Services Regulatory Commission
NEURC	National Energy and Utility Regulatory Commission
NEFCO	Nordic Environment Finance Corporation
NGO	Nongovernmental organization
Odesa TGO	Odesa Heat Supply Company
OPORA	All Ukrainian Public Organization “Civic Network OPORA”
PEST	Political, economic, social, technological [analysis]
PPP	Public-private partnership
PSA	Public service advertisement/announcement

Q	Quarter
RC	Resource Center
RE	Renewable energy
REDS	Resource Efficiency Development Strategies
REP	Regional Energy Plan
RFP	Recordkeeping of fare payment
RSEP	Regional Sustainable Energy Plan
SAEE	State Agency on Energy Efficiency and Energy Saving of Ukraine
SECAP	Sustainable Energy and Climate Action Plan
SEAP	Sustainable Energy Action Plan
SIDA	Swedish International Development Cooperation Agency
SME	Small and medium enterprises
SMM	Social media marketing
SoW	Scope of work
SSF	Shareholder Special Fund [of the EBRD]
SWOT	Strengths, Weaknesses, Opportunities, Threats [analysis]
TA	Technical assistance
TIMES	The Integrated MARKAL-EFOM System
T&M	Time and materials
TO	Task Order
TPA	Third Party Access
UAH	Ukrainian hryvna (<i>currency</i>)
UMIDP	Ukrainian Municipal Infrastructure Development Program
UNFCCC	United Nations Framework Convention for Climate Change
USAID	United States Agency for International Development
USD	United States dollar (<i>currency</i>)
VR	Verkhovna Rada, Supreme Council of Ukraine
WB	World Bank
WSS	Water Supply and Sewage
YCELP	Yale Center for Environmental Law and Policy

BACKGROUND

The United States Agency for International Development (USAID) Mission for Ukraine, Moldova, and Belarus and the Office of Economic Growth supports the implementation of the Municipal Energy Reform Project (MERP, or the Project) in Ukraine as described in the scope of work (SoW) and further detailed in the IRG, a subsidiary of RTI International, Technical Proposal and subsequent modifications.

The primary purpose of the USAID MERP is to enhance Ukraine's energy security. Increased end-use energy efficiency (EE) combined with the increased production of clean energy (CE) in large towns and cities will reduce the consumption of conventionally produced energy in Ukraine while cutting greenhouse gas (GHG) emissions, energy expenditures, and imports. The Project has four main activities:

1. Improve the CE Regulatory and Legislative Enabling Environment
2. Promote Investment in CE Technologies and Applications
3. Capacity Building and Dissemination
4. Enhance the Capacity of the Government of Ukraine (GOU) in Low Emission Development Strategies (LEDS)

The GOU is engaged in reforming the municipal energy sector and addressing the challenges identified in the GOU Program of Economic Reforms for 2020, with an emphasis on CE/EE, through price signals and improving the competitiveness and reliability of municipal services. Ukraine's energy policies are shifting toward domestic resources and strengthening the energy market framework to meet European Union (EU) standards. The adoption and full implementation of Energy Community Treaty and Global Climate Change (GCC) Convention provisions could provide Ukraine with a competitive, transparent, and predictable market framework to attract investment and to underpin CE/EE improvements in the energy sector.

The Project focuses on introducing CE/EE in cities by assisting municipalities with:

- Planning, preparing, and financing CE projects
- Introducing energy management (EM) systems
- Supporting the implementation of Development Credit Authority (DCA) loan guarantees
- Supporting mechanisms that mobilize private sector investment, performance contracts by energy services companies (ESCOs)
- Preparing sustainable energy public awareness plans

This Quarterly Report is submitted in accordance with the contract requirements, and covers the project period from October 1, 2017, through December 31, 2017. It serves as a tool for evaluating the Project's progress and achievements and provides a summary of Project activities, accomplishments, issues, and problems encountered in implementing the activities set by the Project Work Plan. It also weighs the accomplishments in the context of the indicators set by the monitoring and evaluation (M&E) plan.

This page is intentionally left blank.

A. SUMMARY OF PROGRESS AND ACCOMPLISHMENTS

The overall objective of MERP is to enhance Ukraine's energy security. Increased end-use EE combined with the increased production of CE in large towns and cities should reduce the consumption of conventionally produced energy while cutting GHG emissions, energy expenditures, and overall energy imports (i.e., natural gas from Russia).

Under Activity 1, the Project continued supporting GOU and the Ukrainian Parliament in approving key legislative and regulatory acts related to municipal energy reform.

Law on Commercial Metering of Heat Energy and Water Supply

The *Law of Ukraine on Commercial Metering of Heat Energy and Water Supply*¹ was adopted on June 22, 2017. During the reporting period, the Project developed and provided two documents to the Ministry of Regional Development, Construction, Housing and Communal Services (MinRegion): (1) Methodology on Allocation of Consumed Services in the Building to Individual Consumers and (2) Order for Taking on Record Customer Meters.

Law on Housing and Communal Services

On November 9, 2017, the VR adopted the *Law on Housing and Communal Services* (reg. #1581-d dated 10/12/2015²). The law was developed and passed with assistance from MERP. The law came into effect on December 10, 2017.

Municipal Energy Sector Reform

The Cabinet of Ministers of Ukraine (CMU) adopted Resolution #951, aiming to monetize state subsidies at the level of utilities (partial monetization), as of January 1, 2018. Specifically, the resolution provides for payment of subsidies, based on actual consumption of services, directly to the service provider's account of special regime opened at the Treasury. MERP supported these changes by providing analytical inputs to MinRegion.

Biomass Market Development

The Project submitted the report, "Recommendations on the Organization of the Solid Biofuels Market in Ukraine." The report provides analysis of the biomass market's functioning in different EU Member States, formulates recommendations for Ukraine regarding biomass sector organization, analyzes legal barriers to efficient biomass sector organization, and provides the package of draft legal acts implementing the concept of biomass sector organization on market

¹ The name of the law is different from the name of draft bill, *Commercial Metering of Communal Services*. See: http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=59553

² http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=57371

principles. The draft legal package provided to the State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE) contains draft laws as well as draft GOU resolutions.

District Heating

The Project finalized the first part of technical modelling for TPA in Zaporizhzhia and Vinnytsia, and submitted to SAEE a summary analytical report on improving the technical and economic efficiency of district heating (DH) systems through integration and optimization (in both cities).

The Project finalized the economic and legal work for the framework of third-party access to existing DH infrastructure.

Task 1.2: Assistance to NEURC

During the reporting period, the Project conducted three training seminars for the National Energy and Utility Regulatory Commission (NEURC) and licensees (heating companies) from partner cities: (1) Reports Submitted to NEURC by Licensees Operating in Heating Sector; (2) Organization of Reporting, Training Seminar on Service Quality Monitoring in District Heating Sector: Methodology, Tools, Utilization of Results; and (3) Training Seminar on Benchmarking in District Heating Sector.

Development of Service Quality Monitoring Methodology

Heating Sector

During the reporting period, the Project finalized assistance to NEURC with developing reporting forms and automated monitoring tools for monitoring service quality in the heating sector. In November 2017, the Project presented these materials at the seminar and submitted them to NEURC.

Support Changes to the Asset Valuation Methodology for Natural Monopolies in the DH and Water and Wastewater Sectors

Valuation of Assets: Heating Sector

The Project participated in the meeting on changes in the Asset Valuation Methodology at the State Property Fund of Ukraine. The meeting was organized to present draft Aggregated Recovery Value Indicators (ARVIs) for heat energy (HE) transportation. As a result, it was agreed that draft ARVIs for HE transportation will be provided to NEURC for review and comments. If no comments are received from NEURC,³ the ARVIs will be introduced in the Asset Valuation Methodology.

Valuation of Assets: Centralized Water Supply and Wastewater Treatment Sector

During the reporting period, the Project participated in several meetings on valuation of assets in centralized water supply and wastewater treatment sectors. In Q18, comments on draft Classifier of Assets will be collected from six WSS companies and Association of Water Supply and Sewage Companies “Ukrvodokanalokologia.” It’s anticipated that the Scientific Research and Design Technological Institute of Municipal Economy will start ARVIs development in January 2018.

³ In January 2018, NEURC approved the proposed ARVIs and a formula to calculate an optimization coefficient. NEURC also initiated a meeting with the State Property Fund of Ukraine, Deloitte & Touche, and other stakeholders to discuss further steps in finalizing the changes and Asset Valuation Methodology (Methodology #293).

Improvement of Regulatory Reporting Forms

During the reporting period, the Project developed and submitted to NEURC reporting forms and instructions for licensees in DH and centralized water supply and sewage sectors, which will apply incentive-based tariffs. The new reporting forms are based on the existing reporting approach,⁴ but include indicators (e.g., regulatory assets base) needed for incentive-based tariff regulation.

Assist NEURC in the Gradual Introduction of Incentive Tariff Regulation for Heating and Water Utilities

Heating Sector

In December 2017, the Project experts completed and submitted to NEURC the first test calculations of incentive-based tariffs for HE. The test calculations demonstrated that significant cross-subsidies between HE generation, transportation, and supply still exist. The new tariff-setting approach will eliminate cross-subsidies and, as a result, the HE transportation tariff will increase and HE generation and supply tariffs will decrease. The overall price for integrated service (HE generation, transportation, and supply) will stay approximately the same.

Centralized Water Supply and Wastewater Treatment Sector

The Project completed the draft manual, Methodological Recommendations for Licensees on Development of Long-Term Investment Programs in Water Supply and Sewage Sector under Incentive-Based Tariff Regulation. The draft document was submitted to NEURC for review and comments.

Development of a Mechanism to Use Benchmarking Indicators Based on an Analysis of Best International Practice

The Project submitted to NEURC the final version of the Report, “Benchmarking of Utility Companies Operating in the Heating Sector.”⁵

Develop Methodological Recommendations on Accounting for Licensed Types of Activities

Heating Sector

On October 10, 2017, NEURC approved Resolution #1223 on Approval of the Procedure (Rules) on Separated Accounting by Licensed Activity by Business Entities Operating in the Heating Sector (DH, cost+).⁶ On November 9, 2017, the resolution was published in the Government newspaper *Uryadovyi Kurier* and on November 11, 2017, it came into effect.⁷

During the reporting period, the Project experts developed draft Procedure (Rules) for separated accounting by licensed activity (DH) to reflect the specifics pertinent to incentive-based regulation.

Centralized Water Supply and Sewage

During the reporting period, the Project provided assistance to NEURC to revise the draft Resolution on Approval of the Procedure (Rules) for Separated Accounting by Type of Licensed

⁴ Current reporting forms were introduced by NEURC Resolution #717 of May 31, 2017.

⁵ In the letter dated January 11, 2018, NEURC expressed appreciation for the work done by the USAID Project regarding development of the methodology for clustering of heating companies and implementation of benchmarking based on KPIs.

⁶ <http://www.nerc.gov.ua/?news=6560>

⁷ <http://www.nerc.gov.ua/?id=28703>

Activity by Business Entities Operating in the Centralized Water Supply and Sewage Sector (cost+). The resolution was approved by NEURC on December 27, 2017.

The Project experts developed Procedure (Rules) for Separated Accounting by Type of Licensed Activity (WSS) to reflect the specifics pertinent to incentive-based regulation. Following discussions with NEURC, the Project experts prepared a draft document and submitted it to NEURC in December 2017.

Supporting EE Standards

MERP finalized the development of the national standard, *Rules for the Energy Labelling of Translucent Building Envelope Structures*. The standard was approved and submitted for publication on December 27, 2017.

Public Information and Awareness Campaign

Survey Reveals Effectiveness of MERP Outreach Campaign and Activities

The USAID Project received first data on results of the survey conducted by the Kyiv International Institute of Sociology to evaluate the effectiveness of the Project outreach campaign. The survey was conducted in September 2017 in 110 cities and villages in all oblasts of Ukraine. The results showed that about 86.9 percent of the adult population of Ukraine (+/- 2%, and not counting the population of temporarily occupied territories) strongly supports or rather supports EE/CE measures. More than 18 percent of the adult population of Ukraine (+/- 2%, and not counting the population of temporarily occupied territories) recognizes USAID Project information materials, and over 20 percent of Ukrainians saw at least one episode of the MERP TV program, *Your Home*.

Launch of EE Campaign in the Most Popular Ukrainian Online Media

The USAID Project team together with the most popular Internet media outlet, Obozrevatel, launched a joint social information project—a series of publications on the most pressing issues of energy saving, EE, and management of homeowner association (HOA) buildings.

Video PSAs

The USAID Project team finalized a production of four video public service advertisements (PSAs):

- [“Defend your rights on utility services quality”](#)
- [“Make your buildings feel like home - Create HOA!”](#)
- [“Where are we heading to? To energy independence!”](#)
- [“Change the way you take care of your home and you will change the world around!”](#)

In these advertisements, we appeal to consumers of communal services to advocate for service quality, and for installation of metering equipment, verification of energy consumption, and use of “warm loans” programs to improve EE in their dwellings. Video PSAs were produced in cooperation with representatives of CMU, MinRegion, and SAE.

During the reporting period, the USAID Project team released all video PSAs in the social media. During the reporting period, about 148,374 people viewed the new video PSAs in social media marketing (SMM), and over 276,284 were reached on Facebook.

To broadcast these videos via national and regional TV channels on a free-of-charge basis, the Project team applied to and received confirmation from the National Commission of TV and

Radio of Ukraine with the request to give these video PSAs the status of social advertisement (to confirm that they are not of a commercial nature).

Outdoor Campaign

During the reporting period, about 123 billboards and 166 city lights have been placed for free in USAID Project partner cities.

Your Home TV Program

MERP's TV program, *Your Home*, was among the top five most highly rated programs of the UA-One National Channel. Since the beginning of the third season in October, 12 episodes have been released. The 26-minute program is broadcast by UA-One National TV every Friday during prime time (7:00 p.m.). The potential audience of *Your Home* viewers on UA-One is about 1.5 million. In addition to the national channel, the program is rotated among 25 regional TV channels, which substantially expands its audience. *Your Home* is also placed in social networks, such as YouTube and Facebook, where it has been viewed by 1.7 million users.

Hotline on EE/AE and "Warm Loans" Program

Due to a wide advertisement through USAID Project video PSAs, billboards, Internet resources, as well as the excellent professional reputation of the operator, the USAID Project Hotline on EE and Alternative Energy (AE) is in a high demand among Ukrainians. During the reporting period, we provided answers to 1,426 Ukrainians and during a year period, it served about 9,738 clients.

Educating Journalists on EE/AE and Correct Terminology

During the reporting period, the USAID Project team completed a series of six trainings for journalists entitled "Key Information on Energy Efficiency in Media." Overall, 2-day trainings were conducted in six partner cities and attracted about 150 journalists from all oblasts of Ukraine.

Public Outreach Materials and Events to Support Energy Sector Reform

As of December 31, 2017, the Project team disseminated 392,000 (69,000 during the reporting period) brochures and posters to raise awareness about EE/AE, tariff regulation, HOA creation and management, and new legislation in communal sector. Informational materials were developed and/or updated, printed, and published on the MERP website and Facebook page.

Printed materials were delivered to 18 Homeowner Association/Clean Energy Resource Centers (HOA/CE RCs) for dissemination to residents. They were also distributed via targeted events, including conferences, workshops, Sustainable Energy Weeks, and EE Days in MERP partner-cities.

Public Outreach and Media Events on the National and Municipal Levels

The USAID Project supported the Sustainable Energy Day in Khmelnytskyi.

The USAID Project Chief of Party (COP) Diana Korsakaite participated in the XIII International Congress on Institutional and Technical Aspects of Reforming Housing and Communal Services, organized by MinRegion. She delivered the presentation, "Four Years of Assistance to Communal Sector Reform by USAID Project."

The USAID Project provided support to the IX International Investment Forum on Renewable Energy and Energy Efficient Modernization of Industry, organized by SAEI and attended by more than 600 participants. The presentation, "International Best Practice to Stimulate Demand and Supply of Thermal Energy from Renewable Sources," was delivered at the forum.

Under Activity 2, the Project supported partner cities with the preparation and implementation of their Sustainable Energy Action Plans (SEAPs) in compliance with the European Covenant of Mayors (CoM).

Energy Planning

To date, 15 new SEAPs have been prepared (first and second groups of cities), and 14 of them have been approved by the city councils. The SEAP for Kyiv is expected to be considered by the city council in February 2018.

Investment Mobilization: New Projects Development

During the reporting period, the Project supported cities in mobilizing funding for EE/CE investments. The Project pipeline includes 61 project proposals valued at approximately USD489 million. As of the end of the reporting period, the Project mobilized funding for 16 new projects valued at USD120.4 million. During the reporting period:

- MERP experts conducted energy audits (EAs) of 50 public and residential buildings for the city of Kropyvnytskyi. Based on energy audits results and lending options from international financial institutions (IFI) such as the European Bank for Reconstruction and Development (EBRD), the Project prepared a prefeasibility study for complex thermomodernization of 38 public buildings.
- The Project prepared and presented a prefeasibility study (based on European Investment Bank [EIB] requirements) to increase efficiency of the public transportation system for the city of Chernihiv. The study will enable the city to mobilize up to euro (EUR) 8 million to procure 40 new trolleybuses and improve the EE of the electric transportation system. The project implementation will also result in reduced CO₂ emissions.
- The Project received a letter from Kamianets-Podilsky City Council expressing gratitude for the assistance provided in preparation of the degasification and landfill gas utilization project. USAID Project assistance covered preliminary assessment of the landfill's capacity for generation and utilization of the landfill gas, preparation of a prefeasibility study, and assistance in seeking private investors.
- The EBRD approved the project concept to provide a senior loan of up to EUR6 million to the city of Kremenchuk set up to manage energy-saving projects in public buildings in the city. The loan is to be complemented by a grant of up to EUR1.5 million, proposed for co-financing from the EBRD Shareholder Special Fund (SSF), and a concessional loan of up to EUR1.5 million from the Clean Technology Fund (CTF). The proposed investment will enable the city to finance EE measures in 66 public buildings, including 38 kindergartens, 23 schools, and 5 hospitals through energy performance contracts implemented by private construction/engineering or energy service companies selected by competitive tender. The prefeasibility study for the project was prepared by MERP.

Development of the Catalogs of Investment Projects

The Project prepared a Catalog of Investment Projects and an Investment Strategy for the city of Kramatorsk. On November 30, 2017, both documents were presented at the expanded meeting of the Working Group at Kramatorsk City Council.

Development of the Concept of the Project for Increasing Effectiveness of Public Transport of Kramatorsk

In October 2017, the Project experts presented the Concept Paper for Increasing Effectiveness of Public Transport of Kramatorsk. The event was attended by the representatives of

Kramatorsk City Council, managers of transport companies, representatives of civil society organizations (CSOs), and media. The concept reflects the results of the comprehensive analysis and modelling for the transport system of Kramatorsk. The city expressed appreciation of the detailed analysis of existing problems in the public transport sector and outlined the importance of results and recommendations.

Funding Mobilized for Residential EE

As a result of the joint MERP and SAEF campaign for “warm loans” promotion and other program support actions, 274,662 loans (approximate value of more than USD195 million), including 1,248 loans to HOAs, had been issued under the State Program to support residential EE.^[1] Before the campaign began in June 2015, such loans had been taken by only 3,984 households and one HOA in the amount of Ukrainian hryvna (UAH) 71 million (less than USD3 million).

Task 2.3: Introduction of Energy Management Systems

Energy Management: Municipal Level

MERP conducted a process to identify municipalities that would receive support for participation in ISO 50001 (Energy Management Standard) certification. The selection was conducted on a competitive basis through a request for applications (RFAs) process. The Project received 11 applications in response to RFAs. After the evaluation, the MERP Grant Committee decided to support certification for the Department of Education and Culture (most energy consuming) of the Sumy City Council. The selection was approved by USAID and certification process started in December 2017.

Development Credit Authority (DCA) Loan Guarantee

As of the end of the reporting period, Bank Lviv had received 48 applications and issued 22 loans for a total of UAH9.684 million, EUR1.95 million, and USD0.55 million (total value of ~USD3.024 million). Cumulative utilization percent of DCA guarantee, according to the Bank's Credit Monitoring System, is 37 percent.

Support Mechanisms That Mobilize Private Sector Investment

EBRD New Loan Program

Based on the precedent of Kremenchuk project,⁸ EBRD established a EUR100 million Ukraine Public Sector Energy Efficiency Framework to provide loans to municipal energy management companies in Ukraine to finance energy-saving improvements in public buildings and street lighting infrastructure. This framework (facility) will enable the municipalities to finance EE measures in public buildings and street lighting through energy performance contracts (EPC) implemented by private ESCOs.⁹ Based on EBRD lending parameters, MERP prepared feasibility studies (assessments) for the cities of Kharkiv, Odesa, Kryvyi Rih, Kropyvnytskyi, and Kremenchuk. The estimated value of the proposed projects (EE measures) is USD47 million.

Support to Odesa Region Localities

The Project provided support to introduce energy service in public buildings of Odesa Oblast localities. The Project experts conducted analysis of energy service potential in the public buildings sector for the cities of Bilhorod-Dnistrovskyi, Chornomorsk, Odesa, and for buildings

^[1] As of December 31, 2017.

⁸ See Section on Task 2.2.

⁹ <http://www.ebrd.com/work-with-us/projects/psd/ukraine-public-sector-energy-efficiency-framework.html/>

under the purview of Odesa Oblast Administration. The Project also provided consulting support to municipalities to prepare relevant procurement documentation. It is expected that up to 10 energy service contracts will be signed in January–February 2018.

Support to HOA/CE RC Operations

Generating Responsible Homeownership through Support of HOA/CE RCs

MERP continued providing its 18 HOA/CE RCs with capacity building, outreach, legal, technical, economic, ecological, and other key areas of support related to EE/AE projects and the attraction of investments for use in residential buildings. To date, as a result of active outreach efforts, MERP RCs were able to conduct over 5,928 public outreach events at the local level (including trainings and meetings on establishing HOAs), and provide 14,629 initiative groups or/and individuals with consultation on legal, administrative, and technical issues. Some 4,046 new condominiums were created (since the beginning of 2015 through December 31, 2017), which is about 34.2 percent of all new HOAs (11,876) established in Ukraine during the same period.

Support to Implementation of CE Demonstration Projects in Multifamily Residential Buildings

The Project finalized design and cost documentation and preparation for the demo projects. Five out of six projects received state expertise (clearance).

Implementing Sub-Activity 2 Tasks in Odesa Oblast and Ukrainian Territories Affected by the Conflict with Russia

Eastern Ukraine

During the reporting period, the Project finalized energy audit reports, Sustainable Energy and Climate Action Plans (SECAPs), and investment strategies for the cities of Myrnohrad, Pokrovsk, and Rubizhne. All SECAPs were approved by the city councils.

Energy Audits and Specific Project Support

During the reporting period, the Project supported cities in identification of EE/CE measures and projects, including the following:

- The Project finalized an in-depth energy audit of the DH system of Mariupol.
- The Project finalized a prefeasibility study for complex thermomodernization of 51 public buildings (educational and health care facilities) in Kharkiv using IFI resources.
- The Project conducted energy audits of public buildings in Donetsk Oblast, which should allow them to draw state budget financing.
- In cooperation with Oblast Administration, the Project conducted assessment of 60 public buildings in Luhansk Oblast (Rubizhne, Severodonetsk, Lysychansk and Pryvillya). The assessment covered walk-through energy audits of 60 public buildings and development of typical technical solutions for installation of more efficient gas-fired boilers and replacement of fossil fuels used for heating with locally available renewable sources (biomass).
- The Project completed biomass assessment for Donetsk and Luhansk oblasts and Odesa Oblast.

Energy Planning

To date, six out of eight SECAPs developed for the Odesa region (Izmail, Bilhorod-Dnistrovskyi, Reni, Balta, Yuzhne, and Bolhrad) were approved by the localities.

Energy Audits and Specific Project Support

USAID Project experts conducted presentations on energy audit of Odesa Heat Supply Company (Odesa TGO); EM concepts for heat supply and municipality, feasibility studies for hot water supply using solar collectors to budgetary institutions and for thermomodernization of public buildings.

The Project finalized development of a comprehensive solid waste management program for Odesa Oblast. Among other measures, the program identified projects related to landfill gas utilization for significant carbon dioxide (CO₂) emissions reduction.

Regional Energy Plan (REP)

The Project continued collection of information necessary for the development of the REP of Odesa Oblast and developed several chapters of the Odesa REP. On December 22, 2017, the Project experts organized a public event to present technical chapters of REP and REP financial framework to local authorities.

Demonstration Projects

The Project developed design and cost documentation for seven demonstration projects to be implemented in Odesa Oblast and Eastern Ukraine.

Under Activity 4, the Project continued supporting the GOU with Low Emission Development Strategies (LEDS).

Paris Agreement Implementation: State Climate Policy Concept Action Plan

During the reporting period, MERP continued its support to the Ministry of Ecology and Natural Resources (MinEcology) for implementing the State Climate Policy Concept, and the State Climate Policy Concept Action Plan has been adopted by GOU. The action plan outlines specific activities, policies, and measures to be implemented by GOU agencies, ministries, and local authorities to move into the LED pathway and to implement the Paris Agreement provisions.

Paris Agreement Implementation: LEDS Policy Document

During the reporting period, MERP finalized the national policy document, “Low Emission Development Strategy,” and submitted it to MinEcology. MinEcology placed the Strategy on the official website to solicit public comments and discussions (<https://menr.gov.ua/timeline/Zmina-klimatu-ta-ozonoviy-shar.html>, news from November 3, 2017). During the reporting period, MERP also supported consultations between MinEcology and public and private stakeholders on LEDS submission to the United Nations Framework Convention for Climate Change (UNFCCC) process, including the Inter Ministerial Commission on UNFCCC Implementation meeting.

Implementation of Paris Agreement Provisions: National GHG Inventory Enhancement

MERP finalized its assistance to MinEcology National GHG Inventory Center and coordinated communication between the Center and city municipalities that are signatories of the CoM initiative, aimed at unifying approaches to the national grid emission factor and other national emission factors at the national and municipal levels.

MERP presented and submitted to MinEcology the “Analytical Report on Lessons Learned during MRV [Monitoring, Reporting, and Verification] Training Courses.”

The Project contributed to the 7th National Communication on Climate Change. The Project developed draft elements of the section on policies and measures for GHG emissions reduction and absorption, which outlined and analyzed national and regional policies leading to GHG emissions reduction in Ukraine during 2013–2016.

The Project continued its support to SAEF on the implementation of *EU Directive 2009/28/EC*. During the reporting period, MERP finalized the text of the national standard on liquid biofuels and bio liquids based on the comments and suggestions from the stakeholders.

B. DETAILED DESCRIPTION OF PROGRESS/ ACCOMPLISHMENTS DURING THE REPORTING PERIOD

B.1 PROJECT TEAM AND PROCUREMENT ACTIONS

B.1.1 CONSULTING AGREEMENTS

B.1.2 SUBCONTRACTS

B.1.3 GRANTS

B.2 COSTS

B.3 ENVIRONMENTAL COMPLIANCE

MERP is taking steps to conform to USAID environmental regulations, 22 *Code of Federal Regulations (CFR)* 216. The Project incorporated environmental mitigation measures as a standard component of its program management. The Project assessed and developed a plan to meet USAID and Ukrainian environmental requirements through mitigating and monitoring environmental risks. MERP does not foresee any significant adverse environmental impacts from Project activities. This is confirmed by the initial environmental examination (IEE) recommendation of “categorical exclusion” for the most Project tasks and activities. “Negative determination with conditions” was defined for Project Tasks 1.2, 1.6, 2.2, 2.4, and 2.5. MERP assessed the possible environmental risks for these tasks and started implementing measures recommended by the IEE (4.3.1–4.3.4). The Project submitted to USAID the “MERP Environmental Compliance Report,” based on Task Order (TO) Contract ANNEX 1 – Initial Environmental Examination. The report includes the following items: Environmental Legislation Requirements, Environmental Determination, Mitigation Measures Plan (MMP), and Monitoring Plan.

It is anticipated that many Project activities will have no effect on the environment and human health in Ukraine. Although some Project activities may have some effect, in most cases any environmental/health effects are expected to be positive; increased EE and greater use of CE will reduce energy consumption and GHG emissions.

The preliminary environmental assessment of the Project activities found the following potential environmental impacts and recommended environmental determinations:

- a) Categorical Exclusion: The activity is not likely to have an effect on the natural or physical environment. No further environmental review is required.
- b) Negative Determination with Conditions: The activity does not have potentially significant adverse environmental, health, or safety effects, but may contribute to minor impacts that can be eliminated or adequately minimized by appropriate mitigation measures.

B.3.1 PROJECT ACTIVITIES

Activity 1. Improve the CE Regulatory and Legislative Enabling Environment

All the activities during the reporting period were assessed against the IEE and Project Monitoring Plan. It was determined that because all activities meet the definition of a categorical exclusion and per 22 *CFR* 216.2(c)(2)(i), (iii), (v), and (xiv), neither an IEE nor an environmental assessment is required. However, it is recommended that the principle of aiming to prevent the depletion of natural resources and deterioration of environmental components (air, water, land, and plant and animal life) is mainstreamed into the draft laws and regulations that may be developed as a result of Project activities.

Activity 2. Promote Investment in CE Technologies and Applications

During the reporting period, the Project developed 24 documents/sets of documents that fall under negative determination with conditions. In particular, these include:

1. Catalogue of investment projects of Kramatorsk City
2. Investment strategy for sustainable energy development until 2030 of Kramatorsk City
3. Investment prefeasibility study of the project, Increasing Energy Efficiency in Pre-school Educational Institutions of Sumy City
4. Report entitled, "Integration of Heating Networks in Zaporizhzhia City" (2nd revision)
5. Report entitled, "Integration of Heating Networks in Vinnytsia City"
6. Report on prefeasibility study, "Assembly of Thermal Networks of Boiler Plants on Streets Citrusova, 9 and K.-Karocho, 21b" (preliminary version)
7. Report on prefeasibility study, "Using Waste Heat of MK «ZAPORIZHSTAL» for Heat Supply of Zaporizhzhia" (preliminary version)
8. Prefeasibility study, "Installation of Individual Heating Points in the Houses of the Oleksandrovsky, Voznesenivsky, Dniprovsky and Komunarivsky Districts of the City of Zaporizhzhia"
9. Report on the results of the development of potential packages of energy efficiency measures for the project, Improving the Energy Efficiency of Buildings in the Budget Sphere of Odesa City, for submission to the EBRD (five files with annexes)
10. Sustainable Energy and Climate Action Plan until 2030 for Myrnohrad City
11. Report on energy audit with recommendations on EE measures, RE sources, and investment projects for SECAP of Myrnohrad City
12. Investment Strategy for Sustainable Energy and Climate Action Plan until 2030 for Myrnohrad City
13. Sustainable Energy and Climate Action Plan until 2030 for Pokrovsk City

14. Report on energy audit with recommendations on EE measures, RE sources, and investment projects for SECAP of Pokrovsk City
15. Investment Strategy for Sustainable Energy and Climate Action Plan until 2030 for Pokrovsk City
16. Sustainable Energy and Climate Action Plan until 2030 for Rubizhne City
17. Report on energy audit with recommendations on EE measures, RE sources, and investment projects for SECAP of Rubizhne City
18. Investment Strategy for Sustainable Energy and Climate Action Plan until 2030 for Rubizhne City
19. Prefeasibility study, "Construction of Boiler/Central Heating Plant Working on Biomass in Teplodar City of Odesa Oblast"
20. Reports on energy audits of six public buildings in Donetsk Oblast (six files)
21. Prefeasibility study, "Project of Energy Modernization of 60 Public Buildings in Kharkiv City" (10 documents with annexes)
22. Report, "Concept of Centralized Water Supply and Sewage Systems in Settlements of the Odesa Region in Which There Are No Such Services"
23. Reports on preparation of preliminary typical technical heating solutions for the group of objects in Luhansk Oblast (26 files)
24. Prefeasibility study, "Support for the Implementation of Energy Efficient Measures in Buildings of Kropyvnytskyi City" (74 files with annexes and presentation)

No adverse environmental impact is likely, although, according to 4.3.5 of the IEE, it is recommended to advise the assisted municipalities to integrate environmental and/or health considerations into the project/plans because they may have an adverse effect on the local environment. According to the Project MMP, the SEAP projects involving the construction of the new energy supply/heating facilities or upgrade of existing facilities should undergo the national environmental assessment process, including the preparation of an environmental impact assessment (EIA) in line with DBN A.2.2-1-2003. Feasibility studies shall include an Air and Environment Protection section.

Following Project recommendation, an EIA section has been introduced into all feasibility studies so that, during project implementation, all the available and applicable environmental protection measures for reducing adverse environmental impacts would be taken into consideration.

The rest of the activities were assessed against the IEE and Project Monitoring Plan. It was determined that all activities meet the definition of a categorical exclusion and, per 22 CFR 216.2(c)(2)(i), (iii), (v), and (xiv), neither an IEE nor an environmental assessment is required.

Activity 3. Capacity Building and Dissemination

There were no activities conducted during the reporting period.

Activity 4. Enhance Capacity for the GOU in LEDS

All activities conducted during the reporting period were assessed against the IEE and Project Monitoring Plan. It was determined that all activities (except for one) meet the definition of a categorical exclusion and, per 22 CFR 216.2(c)(2)(i), (iii), (v), and (xiv), neither an IEE nor an environmental assessment is required. However, it is recommended that the principle aimed at preventing the depletion of natural resources and the deterioration of environmental components

(air, water, land, and plant and animal life) is mainstreamed into the draft laws and regulations that may be developed as a result of the Project activities.

The conclusions are that USAID MERP complies with Ukrainian and contract requirements on all implemented activities, and the MMP and Project Monitoring Plan are up to date and compliant with all requirements. The Project regularly monitors its activities for compliance with environmental regulations.

B.4 PROGRESS AND ACCOMPLISHMENTS BY ACTIVITY

B.4.1 ACTIVITY 1: IMPROVE CE REGULATORY AND LEGISLATIVE ENABLING ENVIRONMENT

B.4.1.1 Task 1.1: Developing an Enabling Legislative and Policy Environment

During the reporting period, MERP continued supporting the GOU in developing CE policies, legislation, and regulations. The assistance is based on EU Energy Community requirements and best international practice.

Law on Commercial Metering of Heat Energy and Water Supply

The *Law of Ukraine on Commercial Metering of Heat Energy and Water Supply*¹⁰ was adopted on June 22, 2017. According to the law, 16 pieces of secondary legislation (by-laws) are to be developed and adopted, including 9 GOU resolutions, 1 NEURC resolution, and 6 orders of MinRegion. For development of these by-laws, MinRegion established a working group and, for each of the by-laws, members of the working group formed informal subgroups.

During the reporting period, the Project developed and provided to MinRegion two documents: “Methodology on Allocation of Consumed Services in the Building to Individual Consumers” and “Order for Taking on Record Customer Meters.”

Law on Housing and Communal Services

On November 9, 2017, the VR adopted the *Law on Housing and Communal Services* (reg. #1581-d dated 10/12/2015¹¹). The law was developed and passed with assistance from MERP. The law came into effect on December 10, 2017. The law shall be implemented by June 10, 2018.

National Energy Strategy until 2035

The Draft Action Plan to Implement National Energy Strategy until 2035 was announced by the Ministry of Energy (MinEnergy).¹² The draft plan includes actions on the legal framework for biomass market organization, competitive thermal energy market development, and liquid biofuels market. The draft action plan still must pass through an administrative process; however, thus far, it demonstrates commitment to implementing market-based principles in the areas of district heating and biomass. USAID MERP worked on selected areas of the draft strategy.

¹⁰ The name of the law is different from the name of draft bill, *Commercial Metering of Communal Services*. See: http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=59553

¹¹ http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=57371

¹² http://mpe.kmu.gov.ua/minugol/control/uk/publish/article.jsessionid=1D769C8619D5747180AED4C10FBE1BB7.app2?art_id=245265499&cat_id=35109

Municipal Energy Sector Reform

The CMU adopted *Resolution #951*, aiming to monetize state subsidies at the level of utilities (partial monetization) as of January 1, 2018. In particular, the resolution provides for payment of subsidies, based on actual consumption of services, directly to the service provider's account for a special regime opened at the Treasury. The funds, received by utility on its special account in the Treasury, shall be used solely to pay providers of energy resources, including providers of thermal energy. The amendment eliminates unequal treatment of energy source providers and evidences strategic direction to full monetization of subsidies and privileges by the State. (See: <http://zakon2.rada.gov.ua/laws/show/951-2017-%D0%BF>.) MERP supported these changes by providing analytical inputs to MinRegion.

Biomass Market Development

SAEE was provided with the report, “Recommendations on the Organization of the Solid Biofuels Market in Ukraine.” The report provides an analysis of the functioning of the biomass market in different EU Member States (MS), formulates recommendations for Ukraine regarding biomass sector organization, analyzes legal barriers preventing efficient biomass sector organization, and provides the package of draft legal acts implementing the concept of biomass sector organization in market principles. The draft legal package provided to SAEE contains draft laws as well as draft GOU resolutions.

In particular, the following principles are recommended. The draft amendments to the law on alternative types of biofuels provide legal grounds on which to establish an electronic platform for trading biomass in Ukraine. This electronic platform is intended to accommodate increasing usage by both suppliers and consumers, and to provide transparent and market-oriented ways of trading solid biomass. The platform provides a nondiscriminatory and competitive way to incentivize both supply and demand sides of the emerging market; moreover, the electronic platform would be designed to ensure that energy generators (monopoly entities) use market-based prices for the resource rather than prices concluded in direct nonregulated contracts. The draft amendments to the *Law on Public Purchases* provide for using the electronic platform for trading biomass as a means of conducting public purchases. The draft amendments to the *Law on Code of Forestry of Ukraine* provide obligations for the residuals of the forestry business to be transported closer to forest roads. A draft amendment to the GOU resolution on planning the forestry industry mandates that the State forestry agency include residuals in its annual plans of activity. The draft amendments to the *Law on Code of Administrative Offenses of Ukraine* provide for administrative fines for noncompliance with the obligation to use the electronic platform for trading biomass; further, the draft *Law on Licensing Economic Activities* provides the licensing norm for the electronic platform operator.

The suggestions for biomass sector organization were discussed with SAEE in a dedicated meeting, and the final report reflects the views of SAEE expressed during the meeting.

The draft legislative package, provided in the report, was developed by the USAID Project.

District Heating

The Project finished the first part of technical modelling for TPA in selected cities (i.e., Zaporizhzhia and Vinnytsia). SAEE was supplied with a summary analytical report on improving technical and economic efficiency of DH systems by means of integration and optimization in both cities (for comments). In Zaporizhzhia, eight possible scenarios have been identified for network integration and third-party access provision on both banks of the Dnipro River, including cases with “Zaporizhstal” and “Zaporizhzhia Ferroalloy Plant” as third parties. In Vinnytsia, three scenarios were identified in the framework of existing infrastructure elements. The analyzed scenarios include technical analysis and investment request for each scenario.

Each scenario is economically assessed, and the economic assessment of the technical scenarios demonstrates that the simple payback period varies from 10.13 to 1.86 years for Zaporizhzhia and 16.93 to 4.56 years for Vinnytsia (assuming that all other factors are fixed). The technical modelling provided in the report was developed by The USAID Project.

Zaporizhzhia City requested that the Project continue working in more detail on a couple of the suggested scenarios, to assist the city in preparing to implement the scenarios and to utilize industrial residual thermal energy in the framework of third-party access. The Project started to provide expanded technical assistance (TA) at the request of Zaporizhzhia.

The training seminar, Prospective Planning for Heating Supply to Cities and Settlements in Ukraine, was conducted. The seminar was attended by 82 participants from 23 cities of Ukraine, including 27 participants from municipal administrations and 21 participants from DH entities. The first event, dedicated to long-term DH infrastructure planning, held great interest for municipal stakeholders that learned about the current methodology on long-term planning and procedures for heating systems.

Economic and legal work for the framework of third-party access to existing DH infrastructure was completed. In the area, administrative barriers to third-party access functioning in the current DH system were analyzed, and the economic market model for TPA was developed. While developing an economic model, the following principles were utilized as the baseline. The TPA economic system shall be constructed in such a way that its functioning would decrease prices for final consumers. The economic model, inter alia, includes annual auctions for thermal energy, organized by single-buyer operator, with submission of two separate price bids for the heating and non-heating seasons; setting the size of mandatory reserve capacities of operator to be paid by third parties; and setting the upper limit for HE price at the auction for independent HE producers on the level of 90 percent of the tariff set for the operator in this competitive system (i.e., the system that is defined as the one having at least 50 gigacalories per hour [Gcal/h] connected consumer heat load in heating season). The model includes sensitivity analysis conducted in case of an increase in natural gas prices for the target consumer groups. The legal package was developed according to the economic model suggested, and it includes draft major amendment of the *Heat Supply Law*, draft amendment of the *Law on Privatization of State Property*, draft amendment of the *Law on State Regulation of Communal Services*, and draft amendment of the *Law on Communal Services*.

Advocacy Campaign to Support Legal and Regulatory Changes

To support the approval process for the key legal acts, the Project conducted an extensive advocacy campaign. Specific activities included the following:

- participating in working groups of the VR;
- holding a series of talks with representatives of the CMU and Members of Parliament; and
- advocating the need for adoption through media events and various communication activities.

B.4.1.2 Task 1.2: Assistance to NEURC

During the reporting period, the Project conducted three training seminars for NEURC and licensees (heating companies) from partner cities, summarized below.

1. In October 2017, the Project held a training seminar on the reports submitted to NEURC by licensees operating in heating sector. The seminar was conducted to present main provisions of NEURC *Resolution #717 on Approval of Reporting Rules for Reports*

*Submitted to NEURC by Licensees Operating in Heating and Centralized Water Supply and Sewage Sectors.*¹³

2. In November 2017, the Project held a training seminar on the service quality monitoring in the DH sector: methodology, tools, utilization of results. The seminar was conducted for NEURC and licensees (heating companies), and presented service quality indicators for heating sector; drafts of reporting forms developed for collecting monitoring information; and tools for monitoring service quality indicators developed with MERP assistance.
3. In December 2017, the Project held a training seminar on benchmarking in the DH sector. The seminar was conducted to present MERP recommendations and to discuss the organizational, methodological, and other issues related to introduction of the benchmarking system in the DH sector. The seminar covered the following topics: use of benchmarking in regulatory activities; goals, objectives, and main stages of the comparative analysis; specifics of necessary information; key performance indicators (KPIs) recommended by the Project for HE production, transportation and supply; results of clustering for heating companies and results of the comparative analysis of operations for heating companies, and publishing of benchmarking results.

IFI Loans

In August 2017, as part of the public consultation process, NEURC posted on its website¹⁴ the Draft Resolution on approval of the order for concurring with NEURC the loans from IFIs attracted for investment projects by entities dealing with generation of heat energy (except heat energy generated at heat and power plants, thermoelectric power stations, nuclear plants, and cogeneration plants which use nonconventional or renewable energy sources), transportation of heat energy by main and local (distribution) networks, and supply of heat energy.

As of December 31, 2017, comments on the draft resolution provided by MERP and other stakeholders (EBRD and licensees) were not posted on NEURC's website, and the date for public hearings on the draft resolution is yet to be set.

Development of Service Quality Monitoring Methodology

Heating Sector

During the reporting period, the Project finalized assistance to NEURC with developing reporting forms and automated monitoring tools for monitoring service quality in the heating sector. In November 2017, the Project presented these materials at the seminar and submitted them to NEURC.

Support Changes to the Asset Valuation Methodology for Natural Monopolies in the DH and Water and Wastewater Sectors

Valuation of Assets: Heating Sector

In October 2017, the Project participated in the meeting on changes in the Asset Valuation Methodology at the State Property Fund of Ukraine. The meeting was organized to present draft ARVIs for HE transportation that were developed by the Scientific Institute of Building

¹³ The resolution prepared with MERP assistance came into effect on September 14, 2017.

¹⁴http://www.nerc.gov.ua/data/filearch/Proekty/poekty_oznaky_regulatoryh_aktiv/2017/pr_274/pr_274_09.08.2017.pdf

Production and tested by Deloitte & Touche during pilot valuation of assets¹⁵ for Kyivenergo and Chernihiv Heating Company “Oblteplocomunenergo.”

As a result of the meeting, it was agreed that draft ARVIs for HE transportation will be provided to NEURC for review and comment. If no comments are received from NEURC,¹⁶ ARVIs will be introduced in the Asset Valuation Methodology.

The additional meeting was planned to discuss the optimization coefficient and useful lifetime for the operation of assets. At the meeting, the State Property Fund of Ukraine confirmed their readiness to make changes to the Asset Valuation Methodology.

Valuation of Assets: Centralized Water Supply and Wastewater Treatment Sector

During the reporting period, the Project participated in several meetings on valuation of assets in the centralized water supply and wastewater treatment sectors. These meeting are summarized below.

- In November 2017, the Project experts participated in a meeting initiated by NEURC to discuss changes in the Asset Valuation Methodology with WSS companies. The meeting was attended by the representatives of six water supply and sewage companies (Kyiv, Bila Tserkva, Kharkiv, Lviv, Ternopil, Chernihiv), Deloitte & Touche, and the Scientific Research and Design Technological Institute of Municipal Economy. As a result of the meeting, it was agreed that: (1) WSS companies will fill out special asset tables prepared by Deloitte & Touche; (2) Scientific Research and Design Technological Institute of Municipal Economy will determine the cost of work on development of ARVIs for WSS sector and negotiate allocation of costs between the WSS sector companies; and (3) WSS companies will start negotiations with Deloitte on the cost of pilot valuation of assets.
- In December 2017, the Project experts participated in a meeting to discuss draft Classifier of Assets (prepared by the Scientific Research and Design Technological Institute of Municipal Economy), and payment for services on development of ARVIs and relevant schedule. The meeting was attended by “Ukrvodokanalekologia,” the Association of Water Supply and Sewage Companies; five WSS companies (Kyiv, Bila Tserkva, Ternopil, Kharkiv, Chernihiv); NEURC; and the Scientific Institute of Building Production.

In Q18, comments on the draft Classifier of Assets will be collected from six WSS companies and Association of Water Supply and Sewage Companies “Ukrvodokanalekologia.” It is expected that the Scientific Research and Design Technological Institute of Municipal Economy will begin development of ARVIs in January 2018.

The Ternopil-based WSS company “Ternopilvodokanal,” which is receiving assistance from the Project to calculate incentive-based tariffs, formally applied¹⁷ to the World Bank (WB) for assistance with financing of valuation of assets and development of changes to the Asset Valuation Methodology. The WB responded that it is currently developing SoWs for tariff methodology, asset valuation, and management to be implemented using funds available to

¹⁵ Pilot valuations for heat energy transportation and ARVIs development were financed by heating companies.

¹⁶ In January 2018, NEURC approved the proposed ARVIs and a formula to calculate optimization coefficient. NEURC also initiated a meeting with the State Property Fund of Ukraine, Deloitte & Touche, and other stakeholders to discuss further steps in finalizing the changes and Asset Valuation Methodology (Methodology #293).

¹⁷ As the city participating in the World Bank Second Urban Infrastructure Project (UIP2).

support WB water sector projects in Ukraine. “Ukrvodokanalekologia” submitted a similar request to the WB.

Improvement of Regulatory Reporting Forms

During the reporting period, the Project developed and submitted to NEURC reporting forms and instructions for licensees in DH and centralized water supply and sewage sectors, which will apply incentive-based tariffs. Two sector-based draft resolutions by NEURC are provided for improvement of regulatory reporting forms.

The new reporting forms are based on the existing reporting approach,¹⁸ but include indicators (e.g., regulatory assets base) needed for incentive tariff regulation. It is anticipated that these reporting forms will be approved by NEURC during Q18 of the Project.

Assist NEURC in the Gradual Introduction of Incentive Tariff Regulation for Heating and Water Utilities

In Q16, the Project assisted NEURC in developing eight draft NEURC resolutions to implement incentive-based tariff regulation in the DH transportation, and water supply and wastewater treatment sectors: four resolutions for the heating sector and four resolutions for the water supply and sewage sector. As of the end of the reporting period, the resolutions had not come into effect.¹⁹

Heating Sector

In December 2017, Project experts completed and submitted to NEURC the first test calculations of incentive-based tariffs for HE. These calculations are based on the data received from the Chernihiv-based utility company. The company conducted an evaluation of its assets in 2016, so the valuation is relatively current. The test calculations demonstrated that significant cross-subsidies between HE generation, transportation, and supply still exist. A new tariff-setting approach will eliminate cross-subsidies; as a result, the HE transportation tariff will increase and HE generation and supply tariffs will decrease. The overall price for integrated service (HE generation, transportation, and supply) will stay approximately the same. In the case of the Chernihiv utility, for example, residential consumers’ HE transportation tariff should increase from 90 UAH/Gcal to 280 UAH/Gcal (or +190 UAH/Gcal); HE generation tariff should decrease from 1,140 UAH/Gcal to 972 UAH/Gcal (or -168/Gcal); and HE supply tariff should decrease from 6 UAH/Gcal to 2.5 UAH/Gcal (or -3.5/Gcal). Thus, the overall price increase to the end-consumer of HE is 18.5 UAH/Gcal, or approximately 1.5 percent.

Because the test calculation shows significant cross-subsidies among activities, the financial unbundling initiated by NEURC with MERP assistance can be considered a timely and necessary regulatory measure.

In the letter dated January 11, 2018, NEURC stated that they “highly appreciate the work done by the USAID Project and that the results achieved can be used during practical assistance to utility companies transitioning to incentive-based regulation.”

Centralized Water Supply and Wastewater Treatment Sector

In December 2017, the Project completed the draft manual, Methodological Recommendations for Licensees on Development of Long-Term Investment Programs in Water Supply and Sewage Sector under Incentive-Based Tariff Regulation. On December 19, 2017, the draft document was submitted to NEURC for review and comment.

¹⁸ Current reporting forms were introduced by NEURC *Resolution #717* of May 31, 2017.

¹⁹ In January 2018, all resolutions took effect and were published in the Government newspaper, *Uryadovyi Kurier*.

Development of a Mechanism to Use Benchmarking Indicators Based on an Analysis of Best International Practice

Heating Sector

In December 2017, the Project submitted to NEURC a revised list of KPIs for the heating sector. The revised list was brought in line with the new reporting forms approved by NEURC Resolution #717 dated 14/09/2017.

The Regulator, in the letter dated January 11, 2018, stated that they “highly appreciate the results of the work done. The specified list of KPIs and the proposed calculation algorithm will help the Commission to establish efficient benchmarking system for DH sector.”

The Project experts revised clustering features and tested the methods of the comparative analysis in the areas of HE generation, transportation, and supply. The approaches to clustering and comparative analysis proposed by the Project were discussed during several meetings with NEURC and fully supported by the Regulator.

On December 21, 2017, the “Report on Benchmarking of Utility Companies Operating in the Heating Sector” was submitted to NEURC.²⁰

Develop Methodological Recommendations on Accounting for Licensed Types of Activities

Heating Sector

On October 10, 2017, NEURC approved Resolution #1223 on Approval of the Procedure (Rules) on Separated Accounting by Licensed Activity by Business Entities Operating in the Heating Sector (DH, cost+).²¹ On November 9, 2017, the resolution was published in the Government newspaper, Uryadovyi Kurier. and on November 11, 2017, it came into effect.²²

During the reporting period, the Project experts developed a draft Procedure (Rules) for separated accounting by licensed activity (DH) to reflect the specifics pertinent to incentive-based regulation. The development process involved several meetings with NEURC (held in October–November 2017) to discuss the structure and contents of the document. On December 7, 2017, the final draft of the Procedure (Rules) for the DH sector was submitted to NEURC.²³

It is expected that the draft Procedure (Rules) will be considered at NEURC’s meeting in January 2018.

Centralized Water Supply and Sewage

In September 2017, NEURC considered the draft Resolution on Approval of the Procedure (Rules) for Separated Accounting by Type of Licensed Activity by Business Entities Operating in the Centralized Water Supply and Sewage Sector (cost+).²⁴ On October 9, 2017, the draft resolution was posted on NEURC’s website for public consultation.

²⁰ In the letter dated January 11, 2018, NEURC expressed appreciation for the work done by the USAID Project regarding development of the methodology for clustering of heating companies and implementation of benchmarking based on KPIs. NEURC stated that the data obtained may be used in its regulatory activities.

²¹ <http://www.nerc.gov.ua/?news=6560>

²² <http://www.nerc.gov.ua/?id=28703>

²³ In the letter dated January 11, 2018, NEURC noted the high quality standards of the document prepared. The Regulator stated that the Procedure (Rules) document complies with the tasks set and may be used in the regulatory activities.

²⁴ <http://www.nerc.gov.ua/?news=6476>

On November 15, 2017, the draft NEURC Resolution on Approval of the Procedure (Rules) for Separated Accounting by Type of Licensed Activity by Business Entities Operating in the Centralized Water Supply and Sewage Sector (cost+) was considered at the open meeting at NEURC.²⁵

The Project provided assistance to NEURC to revise the draft resolution to reflect the results of the open discussion and comments received during the public consultation process. The Resolution on Approval of the Procedure (Rules) for Separated Accounting by Type of Licensed Activity by Business Entities Operating in the Centralized Water Supply and Sewage Sector (cost+)” was approved by NEURC on December 27, 2017. It is expected to be published in the Government newspaper *Uryadovyi Kurier* in Q18 of the Project.

During the reporting period, the Project experts developed a Procedure (Rules) for Separated Accounting by Type of Licensed Activity (WSS) to reflect the specifics pertinent to incentive-based regulation. Following discussions with NEURC, the Project experts prepared the draft document and submitted it to NEURC in December 2017.

B.4.1.3 Task 1.3: Supporting Improvement of the Social Safety Net for the Vulnerable

The task was completed in Q16.

B.4.1.4 Task 1.4: Supporting EE Standards

MERP finalized the development of the national standard, *Rules for the Energy Labelling of Translucent Building Envelope Structures*. The standard was approved and submitted for publication on December 27, 2017.

B.4.1.5 Task 1.5: Public Information and Awareness Campaign

Survey Reveals Effectiveness of MERP Outreach Campaign and Activities

The USAID Project received first data on the results of the survey conducted to evaluate the effectiveness of the USAID Project outreach campaign. The survey was conducted in September 2017 by the Kyiv International Institute of Sociology. The research was done in 110 cities and villages in all oblasts of Ukraine. The survey found that about 86.9 percent of the adult population of Ukraine (+/-2%, and not counting population of temporarily occupied territories) strongly support or rather support EE/CE measures. More than 18 percent of the adult population of Ukraine (+/-2%, and not counting population of temporarily occupied territories) recognize USAID Project information materials, and more than 20 percent of Ukrainians saw at least one episode of the MERP TV program, *Your Home*.

Launch of EE Campaign in the Most Popular Ukrainian Online Media

The USAID Project team, together with the most popular Internet media outlet, *Obozrevatel*, launched a joint social information project—a series of publications on the most pressing issues of energy saving, EE, and management of HOA buildings. The publications are issued on a weekly basis. These e-publications feature ways to reduce energy consumption and energy bills, make a home more energy efficient and comfortable, provide information on where to obtain funds for EE measures implementation, how to effectively manage HOAs, and offer useful tips on thermal modernization and introduction of energy-saving technologies in residential and private buildings. Nine articles had already been published in the column, “Consumer’s Basket,” and were viewed by about 110,000 Internet users.

²⁵ The results of the open meeting were posted on NEURC’s website: <http://www.nerc.gov.ua/?news=6934>

Video PSAs

The USAID Project team finalized production of four video PSAs that will be released on TV and in the social media as part of the USAID Project outreach campaign. This series is designed to appeal to consumers of communal services to advocate for their rights on service quality, installation of metering equipment, verification of energy consumption, and use of “warm loans” programs to improve EE in their dwellings. The PSAs were produced in cooperation with representatives of CMU, MinRegion, and SAEE. Final pickshots of all PSAs include reference to the USAID Project website (merp.org.ua), governmental portal (teplo.gov.ua), and hotline number on EE, to link the audience with more detailed and comprehensive information on relevant topics.

During the reporting period, the USAID Project team released all video PSAs into the social media. The first video, [“Defend your rights on utility services quality,”](#) appeals to communal service consumers who want to learn more about their rights and control the services they receive from providers, and wish to be able to claim reimbursements and improvements if the service is not satisfactory. The video, [“Make your buildings feel like home - Create HOA!”](#) is aimed at co-owners of multi-apartment buildings, and provides information on creating HOAs that enable them to take responsibilities for the environmental comfort in their dwellings and common areas. The video PSA, [“Where are we heading to? To energy independence!”](#) focuses on energy-saving measures that can be implemented in most private houses. These successful PSAs featured creative scenarios, a colorful and engaging production approach, appealing actors, and simple but very useful energy-saving tips. Moreover, these PSAs were reposted by Ukraine’s Prime Minister Volodymyr Groysman on his Facebook page, and on the Facebook pages of numerous municipalities, district entities, etc. The third in a series of four video PSAs created for this season campaign, [“Change the way you take care of your home and you will change the world around!”](#) appeals to Ukrainians to care about EE in private homes, to create HOAs in multi-apartment buildings, and to make their homes a better place to live. All Video PSAs were placed on USAID Project and partners pages on Facebook and YouTube, as well on the governmental portal, teplo.gov.ua, and on the Civil Network OPORA web portal Zhytlo and its Facebook page. During the reporting period, about 148,374 people viewed the new video PSAs in SMM, while more than 276,284 were reached through Facebook.

To broadcast these videos via national and regional TV channels on a free-of-charge basis, the Project team applied to the National Commission of TV and Radio of Ukraine to give these video PSAs a status of social advertisement (i.e., to confirm that they are not commercial in nature). Confirmation was received at the end of December 2017, and plans have been made to launch them in rotation on TV channels by the end of January 2018.

Outdoor Campaign

During the reporting period, about 123 billboards and 166 city lights have been placed free of charge in USAID Project partner cities as part of the USAID Project outreach campaign, dedicated to the issues of HOA establishment, implementation of energy-efficient technologies, and defending rights of communal services consumers on services quality. The free placement of billboards was provided as part of the social project between MERP and BigMedia Company, the largest outdoor advertisement agency in Ukraine. Thanks to this partnership, in December 2017 alone the Project saved more than USD55,000 in placement costs, which BigMedia took over as part of the joint socially oriented effort.

Your Home TV Program

The MERP TV program *Your Home* rose to among the top five most highly rated programs of the UA-One National channel. Since the beginning of the third season in October, 12 episodes

have been released. The 26-minute program is broadcast by UA-One National TV every Friday during prime time (7:00 p.m.). The potential audience of *Your Home* viewers on UA-One is about 1.5 million. In addition to the national channel, the program is rotated among 25 regional TV channels, which substantially expands its audience. The rating analysis shows that the topics of legal issues related to commercial metering, maintenance of multi-apartment buildings, protection of co-owners' rights, and tariffs regulation are the most popular among our viewers. *Your Home* is also placed in social networks, such as YouTube and Facebook, where it has already been viewed by 1.7 million users.

Dispelling Myths Related to New Legislation

To dispel myths related to the *Law on Housing and Communal Services* that VR adopted in a second reading on November 11, 2017, the Project launched an information campaign in social networks. Using Q&A format and infographics, we answered the most frequently asked questions and debunked the most common myths. We also explained why such a law was needed, what it will change, and others. The explanation campaign was launched in the USAID Project website and Facebook page, as well as in the SMM venues of our partners and governmental portal, www.teplo.gov.ua.

Hotline on EE/AE and “Warm Loans” Program

Due to wide advertisement through USAID Project video PSAs, billboards, Internet resources, as well as excellent professional reputation of the operator, the USAID Project Hotline on EE is in high demand among Ukrainians. During a 1-year period, it served about 9,738 clients. During the reporting period, we provided answers to 1,426 Ukrainians. Most of their questions were related to the conditions of the “warm loans” state program and subsidies for communal services; the rest included issues related to the establishment and effective management of HOAs, energy-saving measures in multi-apartment buildings, and legal aspects of the relationship between consumers and their energy suppliers. The hotline was launched in 2016 by MERP in cooperation with Kyiv City Administration and SAEE to address the most urgent issues faced by Ukrainian communal service consumers.

In addition, MERP promotes “warm loans” programs via its video PSAs, billboards, brochures, and *Your Home* TV program. MERP also demonstrates the benefits of “warm loans” through media events, study tours to EE sites, and trainings for journalists.

Educating Journalists on EE/AE and Correct Terminology

During the reporting period, the USAID Project team completed a series of six trainings for journalists, entitled Key Information on Energy Efficiency in Media. Overall, the 2-day trainings were conducted in six partner cities, and gathered about 150 journalists from all oblasts of Ukraine. The first day of our trainings included interactive lectures and practical exercises on a variety of topics, such as modern energy-efficient technologies, the specifics of construction of energy-efficient and passive buildings, correct use of key terminology related to housing and communal services sector, as well as myths on subsidies, tariff regulation, and the establishment and functioning of HOAs. The first day always ended with site visits to the most energy-efficient residential buildings in town. During the second day of trainings, the journalists learned about new technologies in presenting information and the importance of adapting their materials to new media realities and different platforms. As part of the practical exercise, they were grouped into mini-editorial boards and worked on the development of interesting and motivating media articles based on the problems and situations that are typical for most Ukrainian multi-apartment buildings. Authors of the best materials were awarded with USAID-branded souvenirs.

Public Outreach Materials and Events to Support Energy Sector Reform

As of December 31, 2017, the Project team disseminated 392,000 brochures and posters to raise awareness about EE/AE, tariff regulation, HOA creation and management, and new legislation in the communal sector. Informational materials were developed and/or updated, printed, and published on the MERP website and Facebook page.

Printed materials were delivered to 18 HOA/CE RCs for dissemination. In addition, they were distributed via targeted events, including conferences, workshops, Sustainable Energy Weeks and EE Days in MERP partner-cities.

Public Outreach and Media Events on the National and Municipal Levels

Sustainable Energy Day in Khmelnytskyi

The USAID Project supported the Sustainable Energy Day in Khmelnytskyi. The Project team set up the information camp, consisting of three booths that distributed professional advice on energy saving, establishment of condominiums, use of AE sources, tariff setting, and informational materials developed by the USAID Project on relevant subjects. At the USAID Project information kiosk, both adults and children had a chance to participate in the quizzes on EE/AE and win useful prizes. In addition, children researched AE sources in the scientific laboratory and enjoyed master classes on making paper windmills. During the event, the Project's experts distributed about 1,500 brochures and posters to visitors and interested citizens.

XIII International Congress on Reforming Housing and Public Utilities Sector

The USAID Project COP Diana Korsakaite participated in the XIII International Congress, Institutional and Technical Aspects of Reforming Housing and Communal Services, organized by MinRegion, and delivered the presentation, "Four Years of Assistance to Communal Sector Reform by USAID Project," providing an overview of the USAID Project's impact on the communal sector in terms of legal framework and support to particular cities and utilities. The plenary session was attended by Vice Prime Minister Hennadiy Zubko and chaired by Deputy Minister of MinRegion Eduard Kruglyak.

IX International Investment Forum on Energy Efficiency

USAID Project provided support to the IX International Investment Forum, Renewable Energy and Energy Efficient Modernization of Industry, organized by SAEE and attended by more than 600 participants. MERP COP delivered the presentation, "International Best Practice to Stimulate Demand and Supply of Thermal Energy from Renewable Sources," providing an overview of the diversity of practices to organize biomass for the energy sector and to increase biomass consumption by thermal energy entities.

B.4.2 ACTIVITY 2: PROMOTE INVESTMENT IN CE TECHNOLOGIES AND APPLICATIONS

B.4.2.1 Task 2.2: Assisting Municipalities with Planning, Preparing, and Financing for CE Projects

Energy Planning

MERP continued assisting partner cities with the approval of SEAPs. To date, 15 new SEAPs have been prepared (first and second groups of cities), and 14 of them have been approved by the city councils.

Kyiv SEAP

It is expected that the SEAP for Kyiv will be considered by the city council in February 2018.

Kherson SEAP

During the reporting period, the Project finalized the Kherson SECAP so that it meets CO₂ emissions reduction targets established by the CoM. The new SECAP was approved on December 22, 2017.

Assistance to the Cities of Lutsk and Izmail to Prepare Responses to the Comments by the European Commission on Submitted SEAPs

Lutsk and Izmail requested assistance from the Project in preparing responses to comments by the CoM on the SEAPs. The comments received were mainly on completion of SEAP templates. MERP experts supported the cities in preparing responses. As a result, both plans were accepted.

Assistance to Sumy to Prepare Responses to the Comments by the European Commission on Sumy SEAP

The City of Sumy requested assistance from the Project to revise and update the SEAP based on CoM comments. The updated version of the plan was provided to the city in December 2017.

Assistance to Zaporizhzhia to Prepare Responses to the Comments by the European Commission on Sumy SEAP

The City of Zaporizhzhia requested assistance from the Project to revise and update the SEAP based on CoM comments. The updated version of the plan was provided to the city in November 2017.

Assistance to Lutsk to Prepare the Monitoring Report on SEAP Implementation for the European Commission

The City of Lutsk requested assistance from the Project to prepare the monitoring report on SEAP implementation for the European Commission and to fill out a corresponding template in the city's profile on the website of the CoM. In December 2017, the city received assistance as requested.

Investment Mobilization: New Projects Development

During the reporting period, the Project supported cities in mobilizing funding for EE/CE investments.

Kropyvnytskyi

During the reporting period, MERP experts conducted energy audits (EAs) of 50 public and residential buildings for the city. Based on energy audits results and IFI (EBRD) lending options, the Project prepared a prefeasibility study for complex thermomodernization of 38 public buildings. The prefeasibility study envisions four financing options (variations of city and grant funding levels) for the project valued at approximately USD12.5 million, with the payback ranging from 9 to 12 years.

Chernihiv – Transport Sector

The USAID Project finalized preparation and conducted a presentation of a prefeasibility study (based on EIB requirements) to increase efficiency of the public transportation system for the City of Chernihiv. The study, including relevant technical, economic, financial, and ecological analysis, was conducted based on the city's request to start implementation of the EIB-funded Municipal Public Transport of Ukraine project (<http://mtu.gov.ua/news/27947.html>). Based on USAID Project support, the city will be able to mobilize up to EUR8 million to procure 40 new trolleybuses and improve EE of the electric transportation system. The project will also result in reduced CO₂ emissions. <http://www.chernigiv-rada.gov.ua/news/view/10275>.

Previously, the USAID Project prepared similar projects and mobilized funding (EBRD) for the city of Ivano-Frankivsk.

Kamianets-Podilsky – Landfill Gas Utilization

The USAID Project received a letter from Kamianets-Podilsky City Council expressing gratitude for the assistance provided in preparation of the Degasification and Landfill Gas Utilization project. USAID Project assistance covered preliminary assessment of the landfill's capacity for generation and utilization of the landfill gas, preparation of a prefeasibility study, and assistance in searching for private investors. The city council identified this project as priority among the actions envisioned under the solid waste management program developed with USAID Project support. The on-site operations (degasification and electricity generation) are to start at the beginning of 2018.

Kremenchuk - Public Buildings

EBRD approved the project concept to provide a senior loan of up to EUR6 million to the City of Kremenchuk set up to manage energy-saving projects in public buildings in the city. The loan is to be complemented by a grant of up to EUR1.5 million, proposed for co-financing from the EBRD SSF, and a concessional loan of up to EUR1.5 million from the CTF. The proposed investment will enable the city to finance EE measures in 66 public buildings, including 38 kindergartens, 23 schools, and 5 hospitals through energy performance contracts implemented by private construction/engineering or energy service companies selected by competitive tender. It is envisaged that the project will lead to reductions in energy consumption of approximately 20,000 megawatt hours (MWh) per year, CO₂ savings of approximately 5,300 tons per year, and improved comfort levels at kindergartens, schools, and hospitals. The prefeasibility study for the project was prepared by MERP.

Zaporizhzhia

MERP provided support to update of the feasibility study for thermomodernization of public buildings in Zaporizhzhia for potential Kreditanstalt für Wiederaufbau (KfW) funding.

MERP experts updated the feasibility study for installation of an individual heating substation (IHS) in the districts of Zaporizhzhia and submitted the final version to the city.

A summary of information on the projects supported by MERP is presented in **Table 4**.

Status	Number of Projects
New requests received ²⁶	
Projects with MERP support	66
<i>Of them:</i>	
<i>Post-signing support provided</i>	5
<i>New project proposals developed</i>	61
<i>Project proposals under development</i>	0
Stopped/Suspended	21
Total	87

The details on the current projects pipeline by area and type are presented in **Table 5**.

²⁶ With the exception of support to updates of feasibility studies: Sumy and Khmelnytskyi.

Table 5. Current Project Pipeline

Area	# of Projects	Approximate Value, USD Million		
		New Projects	Post-signing Support	Total
District Heating	26.0	162.1	54.9	217.0
Energy Management	2.0			
Public Buildings	29.0	198.0	19.1	217.0
Residential Buildings	1.0	7.5		7.5
Solid Waste	12.0	10.3		10.3
Street Lighting	6.0	2.4		2.4
Transport	5.0	80.9		80.9
Water/Wastewater	6.0	27.8		27.8
Total	87.0	489.0	74.0	562.9

In total, the pipeline includes 61 project proposals valued at approximately USD489 million. As of the end of the reporting period, the Project mobilized funding for 16 new projects valued at USD120.4 million.

Post-signing Support

In addition (as of the end of the reporting period), MERP was instrumental in providing post-signing support to five projects funded by IFIs, including EBRD, the WB, and the Nordic Environment Finance Corporation (NEFCO), valued at approximately USD74 million.

Development of the Catalogs of Investment Projects

Development of the Catalog of Investment Projects and Investment Strategy of Kramatorsk

The final draft of the *Catalog of Investment Projects (Catalogue)* and draft *Investment Strategy of Sustainable Energy Development for the City of Kramatorsk* were submitted in October 2017 and November 2017, respectively, to the City of Kramatorsk.

The *Investment Strategy of Sustainable Energy Development for the City of Kramatorsk* is an integral part of the city's *Catalogue* and substantiates the Investment Program for Kramatorsk for the period 2018–2030. The *Investment Strategy* consists of three parts: Financial Framework for Kramatorsk; Forecast on Key Indicators; and Investment Program of Sustainable Energy Development for the period 2018–2030.

Total investment necessary for the proposed investment projects during 2018–2030 is estimated at UAH5,664.5 million. The financial framework²⁷ for Kramatorsk SECAP envisions the following funding sources: development budget (UAH2,329.1 million); borrowings (UAH1,587.9 million); and own funds of utility companies (UAH413.1 million). The Forecast of Key Indicators section of the strategy discussed the approaches to forecasting and level of forecasted prices (and tariffs) on main energy carriers and tariffs for services, as well as forecasting on price indexes for construction and assembly works. The investment strategy focused on key issues in the *Investment Program of Sustainable Energy Development* for the period 2018–2030. The

²⁷ Considering investment needs.

Investment Program of Sustainable Energy Development consists of ten special-target programs in:

1. Heating Sector
2. Water Supply and Wastewater Sector
3. Transport Sector
4. Exterior Lighting Sector
5. Public Buildings Sector
6. Residential Buildings Sector
7. Household Waste Management Sector
8. Landscaping Sector
9. Implementation of Clean Energy Demonstration and Pilot Projects in Various Sectors
10. Public Outreach and Information Dissemination

On November 30, 2017, both documents, *Investment Strategy* and *Catalogue*, were presented at the expanded meeting of the Working Group at Kramatorsk City Council. Attending the presentation were representatives of local utility companies and relevant departments of City Council who expressed appreciation for the work done by the USAID Project.

Development of the Concept of the Project for Increasing Effectiveness of Public Transport of Kramatorsk

In October 2017, the Project experts presented the Concept Paper for Increasing Effectiveness of Public Transport of Kramatorsk. The presentation was attended by the representatives of Kramatorsk City Council, managers of transport companies, representatives of CSOs, and media.

The concept reflects the results of the comprehensive analysis and modelling for the transport system of Kramatorsk. It contains several project proposals and recommendations for the following areas:

- Recommendations on development of the municipal street and road system
- Recommendations on improvement of the route network, public transport stock structure, and improved functioning of the public transportation system
- Project proposal on capital renovation and modernization of trolleybuses
- Project proposal on installation of electricity meters on rolling stock and incentivizing the drivers to save electricity
- Project proposal on introduction of the automated dispatch and control systems (ADCS) and recordkeeping of fare payment (RFP)
- Project proposal on organization of transport connection between Kramatorsk and Sloviansk by trolleybuses with possibility of autonomous power supply
- Comprehensive project proposal for development of bicycle infrastructure
- Project proposal on construction, expansion, reconstruction of road sections, improvement of traffic management
- Comprehensive project proposal for development of the automated traffic control system

- Project proposal on reconstruction and renovation of the main traffic arteries of Kramatorsk

The city expressed appreciation for the detailed analysis of existing problems in public transport sector, and outlined the importance of results and recommendations. The city will use the results of the analysis, project proposals, and recommendations in the new strategic programs and to attract loans and grants for the development of the transport infrastructure.

Funding Mobilized for Residential EE

As a result of the joint MERP and SAEF campaign on “warm loans” promotion and other program support actions, 274,662 loans (value of ~USD195 million), including 1,248 loans to HOAs, were issued under the State program to support residential EE.[1] Before the campaign began in June 2015, such loans had been taken by only 3,984 households and one HOA in the amount of UAH71 million (<USD3 million). **Table 6** below provides information on the loan program disbursements in 2015–2017.

Table 6. EE “Warm Loans” Program Disbursements 2015–2017				
Reporting Date	Loans Issued during the Year²⁸ in “000” UAH	Exchange Rate USD/UAH	Loans Issued during the Year in “000” USD	Cumulative, “000” USD
September 30, 2015	575,316.36	0.04613	26,539.34	26,539.34
September 30, 2016	1,815,031.12	0.03831	69,533.84	96,073.19
September 30, 2017	2,332,352.52	0.03741	87,253.31	183,326.49
December 31, 2017	329,500.00	0.03529	11,628.06	194,954.55
TOTAL	5,052,200.00		194,954.55	

B.4.2.2 Task 2.3: Introduction of Energy Management Systems

Municipal Level

MERP selected municipalities to provide support for certification in accordance with ISO 50001 (Energy Management Standard). The selection process was conducted on a competitive basis through RFAs. The Project received 11 applications. As a result of the evaluation process, the MERP Grant Committee decided to support certification for the Department of Education and Culture (the most energy consuming department) of the Sumy City Council. The selection was approved by USAID and the certification process started in December 2017.

B.4.2.3 Task 2.4: Development Credit Authority (DCA) Loan Guarantee

As of the end of the reporting period, Bank Lviv had received 48 applications and issued 22 loans for a total of UAH9,684 million, EUR1.95 million, and USD0.55 million (total value of ~USD 3,024 million). Cumulative utilization percent of DCA guarantee, according to the Bank’s Credit Monitoring System, is 37 percent.

[1] As of December 31, 2017.

²⁸ Project and/or USAID reporting year.

B.4.2.4 Task 2.5: Support Mechanisms That Mobilize Private Sector Investment

Support to ESCO Mechanisms Implementation

EBRD New Loan Program

Based on the precedent of the Kremenchuk project,²⁹ EBRD established a EUR100 million Ukraine Public Sector Energy Efficiency Framework to provide loans to municipal energy management companies in Ukraine to finance energy-saving improvements in public buildings and street lighting infrastructure. This framework (facility) will enable the municipalities to finance EE efforts in public buildings and street lighting through EnPCs implemented by private construction, engineering, or ESCOs. The investments are expected to significantly improve EE in public buildings and thereby lead to energy savings and reduced GHG emissions, as well as improved comfort levels at kindergartens, schools, and hospitals included in subprojects under the framework.³⁰

Based on EBRD lending parameters, MERP prepared feasibility studies (assessments) for the cities of Kharkiv, Odesa, Kryvyi Rih, Kropyvnytskyi, and Kremenchuk. The estimated value of the proposed projects (EE measures) is approximately USD47 million.

Support to Odesa Region Localities

During the reporting period, the Project provided support for introduction of energy service in the public buildings of Odesa Oblast localities. Project experts conducted analysis of energy service potential in the public buildings sector for the cities of Bilhorod-Dnistrovskyi, Chornomorsk, Odesa, and for buildings under the purview of the Odesa Oblast administration. The Project also provided consulting support to the municipalities to prepare relevant procurement documentation. It is expected that up to 10 energy service contracts will be signed in January and February 2018.

Support to HOA/CE RC Operations

Generating Responsible Home Ownership through Support of HOA/CE RCs

MERP continued providing its 18 HOA/CE RCs with capacity-building, outreach, legal, technical, economic, ecological, and other key areas of support related to EE/AE projects and the attraction of investments for their implementation in residential buildings.

To date, as a result of active outreach efforts, MERP RCs conducted more than 5,928 public outreach events at the local level (including trainings and meetings on establishing HOAs), and 14,629 initiative groups or/and individuals received consultations on legal, administrative, and technical issues. Some 4,046 new condominiums were created (since the beginning of 2015 through December 31, 2017), which is about 34.2 percent of all new HOAs established in Ukraine (11,876) during the same period.

During the reporting period, MERP continued supporting capacity-building efforts related to successful HOA development and management. Thus, the USAID Project experts worked as trainers during a number of events attended by HOA/CE RCs and HOA representatives from all parts of Ukraine, including the All-National Homeowners Associations Forum, conducted in Lviv on November 24–25. The event was conducted by the city administration and IQ Energy project. During this event, MERP experts explained the most relevant aspects related to the newly adopted *Law on Housing and Communal Services* and *Law on Commercial Metering of Thermal Energy and Water Supply*, which were developed with MERP assistance. In addition, they gave

²⁹ See Section on Task 2.2.

³⁰ <http://www.ebrd.com/work-with-us/projects/psd/ukraine-public-sector-energy-efficiency-framework.html>

a number of presentations on the use of correct terminology related to HOAs, the housing and communal services sector, and the importance of EE in the residential sector.

The Project also took part in the conference, Energy Efficiency in the Residential Sector: The Way to the Country's Energy Independence. The conference was conducted in Kyiv on December 14, 2017. The USAID Project legal expert provided training during the workshop on HOAs, which was part of the event. It was organized by the All-Ukrainian Council of Home Owners Associations Heads with financial support of the IFC project, Energy Efficiency in the Residential Sector of Ukraine. In his presentation, MERP expert revealed key concepts and approaches to the work of HOAs in the context of the adoption of the *Law of Ukraine on Housing and Communal Services* and the *Law on Commercial Metering of Thermal Energy and Water Supply*. USAID Project experts also took part in the discussion focused on the practical significance of these legislative changes for the provision of housing and communal services and energy conservation. A major part of the discussion forum was focused on the "warm loans" program extension for 2018; HOA success stories in implementation of EE measures; residential sector development and financing strategy; and the possibility of launching an Energy Efficiency Fund in 2018. The event was attended by Mr. Hennadiy Zubko, Vice Prime Minister of Ukraine, Mr. Sergiy Savchuk, Head of SAEE; Ms. Natalia Oliynyk, President of the All-Ukrainian Council of HOAs Heads; Ms. Sofia Lynn, IFC Project Manager for the Energy Efficiency in the Housing Sector of Ukraine project.

Support to Implementation of CE Demonstration Projects in Multifamily Residential Buildings

During the reporting period, the Project worked on design and cost documentation and on preparation for obtaining state expertise statements for the demo projects. The current status of design documentation development for residential sector demo projects and corresponding project values are provided in **Table 7**.

Table 7. Current Status of Design and Cost Documentation Development for Residential Sector Demo Projects

#	City/HOA	Description	Status of Design Documentation	Project Value, "000" UAH
1	Zaporizhzhia "Charivnyi Svitanok"	Reconstruction of the heating system in the 9-story 144-apartment building (change from vertical to horizontal pipe system with installation of individual regulation and metering devices)	Finalized, awaiting expertise	7,017
2	Lviv "Initsiativa"	Development of design and estimate documentation for the project on reconstruction of the artificial electrical lighting system in the staircases with use of photovoltaic cells, and of the hot water supply system with use of solar collectors in the 9-story 107-apartment building	Finalized, positive expertise received	5,570

Table 7. Current Status of Design and Cost Documentation Development for Residential Sector Demo Projects

#	City/HOA	Description	Status of Design Documentation	Project Value, "000" UAH
3	Kamyanets – Podilsky "Lermontova-2"	Development of design and estimate documentation for the project on reconstruction of the artificial electrical lighting system in the staircases of a 5-story 30-apartment building and adjacent territory with use of photovoltaic solar cells	Finalized, positive expertise received	186.0
4	Lviv "MZHK-1"	Reconstruction of the heating system of a 212-apartment building	Finalized, positive expertise received	3,787
5	Dnipro "Krasnopilska 4A"	Reconstruction of the artificial electrical lighting system in the staircases of a 9-story 108-apartment building and adjacent territory with use of photovoltaic solar cells	Finalized, positive expertise received	299.0

B.4.2.5 Task 2.7: Implementing Sub-Activity 2 Tasks in Odesa Oblast and Ukrainian Territories Affected by the Conflict with Russia

Eastern Ukraine

Myrnohrad, Pokrovsk, Rubizhne SECAPs

During the reporting period, the Project finalized energy audit reports, SECAPs, and investment strategies for the cities of Myrnohrad, Pokrovsk, and Rubizhne.

On November 29, 2017, Rubizhne City Council adopted a SECAP for the period through 2030. It is expected that implementation of the 72 EE/CE measures (projects) included in the SECAP will result in a CO₂ emissions reduction of 44.6 thousand tons annually and a 177 MWh decrease in annual energy consumption.

On December 13, 2017, Myrnohrad city council adopted a SECAP for the period through 2030. It is expected that implementation of the 79 EE/CE measures (projects) included in the SECAP will result in a CO₂ emissions reduction of 28 thousand tons annually and a 99 MWh decrease in annual energy consumption.

On December 12, 2017, Pokrovsk city council adopted a SECAP for the period through 2030. It is expected that implementation of the 90 EE/CE measures (projects) included in the SECAP will result in a CO₂ emissions reduction of 67 thousand tons annually and a 255 MWh decrease in annual energy consumption.

Energy Audits and Specific Project Support

During the reporting period, the Project supported cities in identification of EE/CE measures and projects, including the following:

- Finalized in-depth energy audit of the DH system of Mariupol. The presentation of energy audit results is scheduled for January 2018.

- Finalized prefeasibility study for complex thermomodernization of 51 public buildings (educational and health care facilities) in Kharkiv using IFI resources. The project proposal covers four alternative options (packages of EE measures) valued at USD3–16 million. The study results were presented in December 2017.
- Conducted energy audits of public buildings in Donetsk Oblast, which should allow the oblast to draw state budget financing.
- In cooperation with Oblast Administration, the Project conducted assessment of 60 public buildings in Luhansk Oblast (Rubizhne, Severodonetsk, Lysychansk, and Pryvillya). The assessment covered walk-through energy audits of 60 public buildings and development of typical technical solutions for installation of more efficient gas-fired boilers and replacement of fossil fuels used for heating with locally available renewable sources (biomass). The assessment was presented in December 2017.
- The Project completed biomass assessment for Donetsk and Luhansk oblasts. The comprehensive assessment covered regional, district, and producer levels. The assessment was presented in December 2017.

Odesa Oblast

Energy Planning

The current status of SECAPs development and approval for Odesa Oblast is presented in **Table 8**.

City	SECAP Status / Comments	Approval Date
Izmail	Approved, implementation started	March 31, 2017
Bilhorod-Dnistrovskiy	Approved, implementation started	April 20, 2017
Reni	Approved, implementation started	July 26, 2017
Balta	Approved, implementation started	October 28, 2017
Yuzhne	Final Version prepared and presented	TBD
Chornomorsk	Final Version prepared and presented	TBD
Bolhrad	Approved, implementation started	November 22, 2017

Energy Audits and Specific Project Support

USAID Project experts conducted a presentation on the energy audit for the Odesa Heat Supply Company (“Odesa TGO”) and key EE measures in heat supply, energy management concepts for heat supply and municipalities, feasibility studies for hot water supply using solar collectors (aimed at budgetary institutions) and thermomodernization of public buildings. The presentation was attended by USAID COR, representatives of utility companies, and the municipality. The majority of proposed measures and projects were included in the City of Odesa Energy Efficiency program for the period 2017–2022. It was suggested that USAID Project expert analysis will be reviewed, specifically for DH network modernization, and used to provide a substation for city budget allocation.

Based on the updated feasibility study for thermomodernization of buildings prepared by MERP, the City of Odesa decided to proceed with City Council committee discussion regarding an EBRD financing option in the amount of up to EUR12 million, including an EBRD senior loan, an EBRD SSF grant, and a CTF concessional loan.

The Project finalized development of a comprehensive solid waste management program for Odesa Oblast. Among other measures, the program identified projects related to landfill gas utilization (for significant CO₂ emissions reduction) and will provide information necessary for preparation of a regional sustainable energy plan (RSEP) for Odesa Oblast.

The project updated a feasibility study for biomass boiler house construction for the town of Tepلودar. The city announced selection of a company to operate the local heating system.

Regional Energy Plan (REP)

During the reporting period, the Project continued to collect the necessary information for the development of the REP of Odesa Oblast, and developed several chapters of the Odesa REP.

On December 22, 2017, Project experts organized a public presentation to share technical chapters of the REP and the REP financial framework with local authorities.

It is anticipated that the final draft of the Odesa REP will be presented at the fourth meeting of the Advisory Committee on REP development in January 2018.

Demonstration Projects

During the reporting period, the Project supported development of the design and cost documentation for demonstration projects to be implemented in Odesa Oblast and Eastern Ukraine. The Project received USAID approvals for three environmental review checklists (ERCs) for demo projects to be implemented in Odesa Oblast:

- Modernization of Teremok Kindergarten Building in Izmail
- Modernization of T.P. Bondar Secondary School Building in Bendzary Village, Balta
- Modernization of Zhuravlyk Kindergarten Building in Bolhrad

The current status of design documentation development for demonstration projects in public buildings is presented in **Table 9**.

Table 9. Current Status of Design and Cost Documentation Development for Public Buildings Demo Projects

#	Location	Description	Status of Design Documentation	Project Value, "000" UAH
1	Izmail	Development of design and estimate documentation for the project, Capital Renovation with Installation of Individual Heat Substation, Window Replacement, Installation of Solar Collectors and Lighting Modernization in Kindergarten # 33 at 5/1, Shevchenka Street, Izmail	Finalized, obligatory expertise pending	2,620

Table 9. Current Status of Design and Cost Documentation Development for Public Buildings Demo Projects

#	Location	Description	Status of Design Documentation	Project Value, "000" UAH
2	Bolhrad	Development of design and estimate documentation for the project, Comprehensive Thermal Modernization of Kindergarten # 5 "Zhuravlyk" of Bolhrad City Council in Bolhrad, Odesa Oblast, with Installation of Solid Fuel Boiler House, Introduction of Hot Water Supply System with Solar Collectors and Local Supply and Exhaust Ventilation with Recuperation, Reconstruction of Heating System, Replacement of Old Wooden Windows and Wall Insulation	Finalized, obligatory expertise pending	2,470
3	Severodonetsk, Rubizhne	1. Thermal Modernization (Reconstruction) of Building of V. Dal Eastern Ukrainian National University, Severodonetsk Technological Institute (Laboratory Building) at 41, Donetska Street, Severodonetsk 2. Thermal Modernization (Reconstruction) of Building of V. Dal Eastern Ukrainian National University, Severodonetsk Technological Institute (Training Building) at 41, Donetska Street, Severodonetsk 3. Thermal Modernization (Reconstruction) of Building of Severodonetsk Chemical-Mechanical College (Training Building) at 72, Tsentralna Street, Severodonetsk 4. Thermal Modernization (Reconstruction) of Building of V. Dal Eastern Ukrainian National University, Severodonetsk Technological Institute (Dormitory) at 41B, Druzhby Narodiv Street, Severodonetsk. 5. Thermal Modernization (Reconstruction) of Building of V. Dal Eastern Ukrainian National University, Dormitory of Institute of Chemical Technologies at 4, Mendeleieva Street, Rubizhne.	Under development	167,950
4	Balta	Complex modernization of the building of Bendzarivska T.P. Bondar Secondary School of Balta City Council, Odesa Oblast, with installation of ventilation systems with energy recuperation, automated control of heat consumption, energy-saving lighting with solar batteries, door replacement, and switching heating system from coal to electricity, with deep heat insulation of the building envelope and attic	Finalized, obligatory expertise pending	4,020

Table 9. Current Status of Design and Cost Documentation Development for Public Buildings Demo Projects

#	Location	Description	Status of Design Documentation	Project Value, "000" UAH
5	Bahmut	Development of design and estimate documentation for the project, Reconstruction (complex thermal modernization) of Kindergarten # 52 "Raiduha" located at 166, Sybirtseva Street, Bakhmut	Finalized, obligatory expertise conducted	1,060
6	Dobropillya	Development of design and estimate documentation for the project, Reconstruction (complex thermal modernization) of Kindergarten # 35 "Kazka" located at 18a, Sonyachniy residential area, Dobropillya	Finalized, obligatory expertise conducted	7,260
7	Mariupol	Developing design estimate documentation for Comprehensive Thermal Modernization Project of Mariupol General Educational School of Levels I-III, #52, at 57, Troitska Street	Finalized, obligatory expertise conducted	16,700
8	Mariupol	Developing design estimate documentation for Comprehensive Thermal Modernization Project of Mariupol Technology Lyceum at 133, Nikopolskyi Avenue	Finalized, obligatory expertise conducted	6,070

B.4.3 ACTIVITY 3: CAPACITY BUILDING AND DISSEMINATION

All tasks under this activity have been finalized.

B.4.4 ACTIVITY 4: ENHANCE CAPACITY FOR THE GOU IN LEDS

Task 4.1: Strengthening Institutional Capacity in Planning LEDS-Resource Efficiency Development Strategies (REDS)

Paris Agreement Implementation: State Climate Policy Action Plan

During the reporting period, MERP continued its support to MinEcology on implementing the State Climate Policy Concept and State Climate Policy Concept Action Plan that was adopted by the GOU. The action plan outlines specific activities, policies, and measures to be implemented by the GOU agencies, ministries, and local authorities to move into the LED pathway and to implement Paris Agreement provisions.

Paris Agreement Implementation: LEDS Policy Document

During the reporting period, MERP finalized the national policy document, Low Emission Development Strategy, and submitted it to MinEcology. MinEcology placed the strategy on the official website for public comments and discussions, at: <https://menr.gov.ua/timeline/Zminaklimatu-ta-ozonoviy-shar.html> (news from November 3, 2017). During the reporting period, MERP also supported consultations between MinEcology and public and private stakeholders

on LEDS submission to the UNFCCC process, including the Inter-ministerial Commission on UNFCCC Implementation meeting.

Implementation of Paris Agreement Provisions: National GHG Inventory Enhancement

During the reporting period, MERP finalized its assistance to the MinEcology National GHG Inventory Center, and coordinated communication between the center and city municipalities that are the signatories of the CoM initiative to unify approaches to the national Grid Emission Factor and other national emission factors on national and municipal levels. MERP also presented and submitted to MinEcology the “Analytical Report on Lessons Learned during MRV Trainings Courses.” The analytical report outlines lessons learned and provides recommendations on how to proceed with the next steps on establishing a comprehensive, efficient, and reliable national MRV system in Ukraine.

During the reporting period, MERP developed a draft policies and measures on GHG emissions reduction and absorption for Seventh National Communication on Climate Change. The draft outlined and analyzed national and regional policies leading to reducing GHG emissions reduction in Ukraine during 2013–2016.

The Project continued its support to SAEE on the implementation of *EU Directive 2009/28/EC*. The Project conducted consultations with key stakeholders, including profile technical committees. During the reporting period, MERP finalized the text of the national standard on liquid biofuels and bio liquids based on the comments and suggestions from the stakeholders.

Task 4.2: Implementing LEDS-REDS through Support in Developing and Introducing CE Technologies and Energy Services

The details on the current portfolio of CE projects are provided under the Activity 2 section of the report.

Task 4.3: Developing a Uniform Database on LEDS-REDS and Exchanging Experiences and Best Practices with Other Countries Participating in Enhanced Capacity for Low Emission Development Strategies (EC-LEDS)

The Project transferred the UA-LEDS database (<http://www.lowemission.org.ua>) for Ukraine to the partner organization, Institute of Economics and Forecasting of National Academy of Science of Ukraine.

Crosscutting Activities

Anticorruption

During the reporting period, the Project engaged civil society and the public sector in the fight against corruption in the energy sector. The Project supported and coordinated a network of organizations capable of identifying corruption in the energy sector and demanding transparency. The network includes civil society groups, anticorruption “watchdog” organizations, and investigative journalists. Specific activities included the following:

- Conducting research and preparing analytical materials focusing on anticorruption issues in the energy and housing and communal services sectors.
- Informing the public about the mechanisms of consumer protection in communal services.
- Developing informational materials and distributing information on the “ZHYTLO” webpage (<https://zhytlo.in.ua>) about potential corruption and/or abuse.

- Moderating the “ANTILAPA” open group on Facebook (<https://www.facebook.com/groups/750680041724827>). The page collects information on corruption cases and corruption risks in the energy, housing, and communal services sectors.
- Ensuring regular communication and the exchange of information with the leading anticorruption and journalism organizations, and advocating for transparency in the energy sector. These activities included participation in several public and media events, presentation and distribution of informational materials related to increasing the transparency of tariff calculations, utility companies’ reporting on investment programs, and increasing the transparency of procurements by utility companies.

Donor and Other Project Cooperation

USAID Project Deputy COP and USAID COR had a coordination meeting with EBRD representatives (Municipal & Environmental Infrastructure). The discussion focused on the following: (1) current status of USAID Project feasibility studies prepared for potential EBRD funding in public buildings (Kremenchuk, Kryvyi Rih, Odesa,); and (2) potential support of EBRD for initiatives in the sector after USAID Project completion.

Gender and Inclusive Development

Per contract requirement, MERP ensures that men and women are equally supported through Project activities and that gender awareness and gender dynamics are taken into consideration. Gender issues are crosscutting for all MERP’s activities. Strengthening women’s roles in the design, implementation, management, and use of sustainable energy solutions is critical for reaching development goals. During the reporting period, women were actively involved in Project activities at both national and local levels: 237 persons took part in MERP events, including 135 women (57 percent) and 102 men (43 percent).

MERP works with a wide range of people, ensuring inclusive development for all groups of the populace. The Project provides opportunities for everyone to take part in the seminars, workshops, roundtables, etc., regardless of age, sex, ethnic origin, health status, family structure, sexual orientation, education, employment, income, housing, food security, safety, or any other dimensions of human diversity.

C. DELIVERABLES

MERP's Seventeenth Quarter (Q17) deliverables and reports are as follows:

- MERP Sixteenth Quarterly Report, July 1 – September 30, 2017
- Standard MERP Task Order (MTO) PowerPoint presentation
- Basic talking points on main assistance areas (part of MTO PowerPoint presentation)
- List of MTO accomplishments by tasks and activities
- MTO Fact Sheet
- MERP Closeout plan

The list of the most important documents and materials produced under MERP during Q17 of the Project is presented in **Table 10**.

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
1	Activity 1	Task 1.2 (Subtask 1.2.3)	November	Letter to Mr. Vovk of November 13, 2017, on submission of tools for automated monitoring of quality of DH services	Ukrainian
2	Activity 1	Task 1.2 (Subtask 1.2.3)	November	Tools for automated monitoring of quality of DH services	Ukrainian
3	Activity 1	Task 1.1	November	Letter to Mr. Savchuk of November 7, 2017, on submission of Recommendations on the Organization of the Solid Biofuels Market in Ukraine (first draft)	Ukrainian
4	Activity 1	Task 1.1	November	Recommendations on the Organization of the Solid Biofuels Market in Ukraine (first draft)	Ukrainian
5	Activity 1	Task 1.1	November	Letter to Mr. Savchuk of November 10, 2017, on submission of summary analytical report on improving technical and economic efficiency of DH systems by means of integration and optimization in Zaporizhzhia and Vinnytsia (first draft)	Ukrainian
6	Activity 1	Task 1.1	November	Summary analytical report on improving technical and economic efficiency of DH systems by means of integration and optimization in Zaporizhzhia and Vinnytsia (first draft)	Ukrainian
7	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Letter to Mr. Vovk of December 7, 2017, on submission of Draft Rules of Accounting Separation for DH entities under incentive-based regulation	Ukrainian

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
8	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Draft Rules of Accounting Separation in DH entities under incentive based regulation	Ukrainian
9	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Letter to Mr. Vovk of December 14, 2017, on submission of Draft Rules of Accounting Separation for Water and Wastewater entities under incentive-based regulation	Ukrainian
10	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Draft Rules of Accounting Separation for Water and Wastewater entities under incentive-based regulation	Ukrainian
11	Activity 1	Task 1.1	December	Letter to Mr. Savchuk of December 14, 2017, on submission of Recommendations on the Organization of the Solid Biofuels Market in Ukraine	Ukrainian
12	Activity 1	Task 1.1	December	Recommendations on the Organization of the Solid Biofuels Market in Ukraine	Ukrainian
13	Activity 1	Task 1.2 (Subtask 1.2.3)	December	Letter to Mr. Vovk of December 19, 2017, on submission of Draft Methodology on Development of Long-term Investment Programs by entities working with incentive-based tariffs in Water and Wastewater sector	Ukrainian
14	Activity 1	Task 1.2 (Subtask 1.2.3)	December	Draft Methodology on Development of Long-term Investment Programs by entities working with incentive-based tariffs in Water and Wastewater sector	Ukrainian
15	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Letter to Mr. Vovk of December 21, 2017, on submission of Report on the Comparative Analysis (benchmarking) in Thermal Energy Production, Transportation and Supply	Ukrainian
16	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Report on the Comparative Analysis (benchmarking) in Thermal Energy Production, Transportation and Supply	Ukrainian
17	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Letter to Mr. Vovk of December 21, 2017, on submission of list of key performance indicators (KPIs) for DH	Ukrainian
18	Activity 1	Task 1.2 (Subtask 1.2.4)	December	List of key performance indicators (KPIs) for DH	Ukrainian
19	Activity 1	Task 1.2 (Subtask 1.2.3)	December	Letter to Mr. Vovk of December 26, 2017, on submission of pilot calculations of incentive-based tariffs for thermal energy transportation (working paper)	Ukrainian
20	Activity 1	Task 1.2 (Subtask 1.2.3)	December	Pilot calculations of incentive-based tariffs for thermal energy transportation (working paper)	Ukrainian

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
21	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Letter to Mr. Vovk of December 28, 2017, on submission of draft rules/procedures on reporting to NEURC by subjects of economic activities operating in heating sector and applying incentive-based tariffs for HE transportation by main and local (distribution) networks (working version)	Ukrainian
22	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Draft rules/procedures on reporting to NEURC by subjects of economic activities operating in heating sector and applying incentive-based tariffs for HE transportation by main and local (distribution) networks (working version)	Ukrainian
23	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Letter to Mr. Vovk of December 29, 2017, on submission of draft rules/procedures on reporting to NEURC by subjects of economic activity operating in centralized water supply and sewage sector that apply incentive-based tariffs (working version)	Ukrainian
24	Activity 1	Task 1.2 (Subtask 1.2.4)	December	Draft rules/procedures on reporting to NEURC by subjects of economic activity operating in centralized water supply and sewage sector that apply incentive-based tariffs (working version)	Ukrainian
25	Activity 1	Task 1.1	December	Proposals to the project for distribution methods of volume of utility services between consumers in a building	Ukrainian
26	Activity 1	Task 1.1	December	The draft procedure for the acceptance of meters to the subscriber's account	Ukrainian
27	Activity 1	Task 1.1	December	Proposals for improvement of methodology of planning in the area of DH (based on the materials of the USAID Seminar, Prospective Planning in the Heat Supply of Cities and Settlements of Ukraine, December 6, 2017, Kyiv)	Ukrainian
28	Activity 1	Task 1.4	November	The first draft of <i>National State Standard Rules of Energy Labeling of Translucent Walling (Windows)</i>	Ukrainian
29	Activity 1	Task 1.5	October	Videos: <i>Your Home</i> 3. Episodes 1-12 (12 video files)	Ukrainian
30	Activity 1	Task 1.5	November	Videos of PSAs (4 video files)	Ukrainian
31	Activity 2	Task 2.2	October	Concept of improving the efficiency of public transport in Kramatorsk City (1 report in doc format and 3 presentations in pptx format)	Ukrainian
32	Activity 2	Task 2.2	November	Sustainable Energy and Climate Action Plan until 2030 for Kherson City (in pdf and doc formats) with SECAP presentation	Ukrainian
33	Activity 2	Task 2.2	November	Catalog of investment projects of Kramatorsk City	Ukrainian
34	Activity 2	Task 2.2	November	Project, Development and Rationale for a Plan of Development and Ways of Efficiency Growth of the Public Electric Transport of Chernihiv City (2	Ukrainian

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
				documents in doc and pdf formats)	
35	Activity 2	Task 2.2	November	Presentation of the project, Development and Rationale for a Plan of Development and Ways of Efficiency Growth of the Public Electric Transport of Chernihiv City	Ukrainian
36	Activity 2	Task 2.2	December	Renovation of the rolling stock of the municipal electric transport company of the City of Chernihiv	Ukrainian
37	Activity 2	Task 2.2	November	Expected results from the implementation of the Sustainable Energy and Climate Action Plan of Kramatorsk City	Ukrainian
38	Activity 2	Task 2.2	November	Investment Strategy for Sustainable Energy Development until 2030 of Kramatorsk City	Ukrainian
39	Activity 2	Task 2.2	November	Investment prefeasibility study of the project, Increasing Energy Efficiency in Preschool Educational Institutions of Sumy City	Ukrainian
40	Activity 2	Task 2.2	November	Letter from Sumy City mayor, Mr. Lysenko, to Ms. Korsakaite of November 6, 2017, requesting support to integrate comments of Mr. Solomaha to the SEAP of Sumy City	Ukrainian
41	Activity 2	Task 2.2	November	Comments of Mr. Solomaha to the SEAP of Sumy City	Ukrainian
42	Activity 2	Task 2.2	November	Report, "Integration of Heating Networks in Zaporizhzhia City" (2nd revision)	Ukrainian
43	Activity 2	Task 2.2	November	Presentation, Research of the Technical and Economic Efficiency of the Integration of Heating Networks in Zaporizhzhia City	Ukrainian
44	Activity 2	Task 2.2	November	Report, "Integration of Heating Networks in Vinnitsa City"	Ukrainian
45	Activity 2	Task 2.2	November	Presentation, Integration of Heating Networks in Vinnitsa City	Ukrainian
46	Activity 2	Task 2.2	November	Conceptual project of CHPP-1 Modernization of «Vinnytsyamis'kteplokomunenerho»	Ukrainian
47	Activity 2	Task 2.2	December	Report on prefeasibility study, "Assembly of thermal networks of boiler plants on streets Citrusova, 9 and K.-Karohe, 21b" (preliminary version)	Ukrainian
48	Activity 2	Task 2.5	December	Report on prefeasibility study, "Using waste heat of MK «ZAPORIZHSTAL» for heat supply of Zaporizhzhia» (preliminary version)	Ukrainian
49	Activity 2	Task 2.5	December	Letter from Director of "Instytut Mista" Mr. Kobzarev, to Ms. Korsakaite of December 1, 2017, expressing gratitude for support in organization of VII All-Ukrainian Forum of HOAs on November 24-25, 2017, in Lviv City.	Ukrainian
50	Activity 2	Task 2.7	September	Prefeasibility study, "Installation of Individual Heating Points in the Houses of the Oleksandrovsky, Voznesenivsky, Dniprovsky, and	Ukrainian

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
				Komunarivsky Districts of the City of Zaporizhzhia”	
51	Activity 2	Task 2.7	October	Report on the analysis of the current state of the solid household wastes treatment system in Odesa Oblast for 2013-2017 (7 files with annexes)	Ukrainian
52	Activity 2	Task 2.7	November	Report on the results of the development of potential packages of EE measures for the project, Improving the Energy Efficiency of Buildings in the Budget Sphere of Odesa City, for submission to the EBRD (5 files with annexes)	Ukrainian
53	Activity 2	Task 2.7	November	Sustainable Energy and Climate Action Plan until 2030 for Myrnohrad City	Ukrainian
54	Activity 2	Task 2.7	November	Report on energy audit with recommendations on EE measures, RE sources, and investment projects for the SECAP of Myrnohrad City	Ukrainian
55	Activity 2	Task 2.7	November	Investment Strategy for Sustainable Energy and Climate Action Plan until 2030 for Myrnohrad City	Ukrainian
56	Activity 2	Task 2.7	November	Sustainable Energy and Climate Action Plan until 2030 for Pokrovsk City	Ukrainian
57	Activity 2	Task 2.7	November	Report on energy audit with recommendations on EE measures, RE sources, and investment projects for the SECAP of Pokrovsk City	Ukrainian
58	Activity 2	Task 2.7	November	Investment Strategy for Sustainable Energy and Climate Action Plan until 2030 for Pokrovsk City	Ukrainian
59	Activity 2	Task 2.7	November	Presentation, Concept and Road Map for the Creation of a Municipal Energy Management System for Odesa City	Ukrainian
60	Activity 2	Task 2.7	November	Presentation of the program, Transfer to the Annual Full-time Hot Water Supply of Budgetary Institutions of the Department of Education and Health with the Use of Solar Energy in Odesa City for 2018-2020 Years	Ukrainian
61	Activity 2	Task 2.7	November	Presentation, Energy Audit of District Heating System in Odesa City	Ukrainian
62	Activity 2	Task 2.7	November	Creation of a system of energy management in the communal enterprise «Teplopostachannya mista Odesy»	Ukrainian
63	Activity 2	Task 2.7	November	Sustainable Energy and Climate Action Plan until 2030 for Rubizhne City	Ukrainian
64	Activity 2	Task 2.7	November	Report on energy audit with recommendations on EE measures, RE sources, and investment projects for the SECAP of Rubizhne City	Ukrainian
65	Activity 2	Task 2.7	November	Investment Strategy for Sustainable Energy and Climate Action Plan until 2030 for Rubizhne City	Ukrainian, English
66	Activity 2	Task 2.7	November	Decision of City Council of Rubizhne City, “On Approval of Sustainable Energy and Climate	Ukrainian

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
				Action Plan until 2030 for Rubizhne City"	
67	Activity 2	Task 2.7	November	Prefeasibility study for Construction of Boiler / Central Heating Plant Working on Biomass in Teplodar City of Odesa Oblast.	Ukrainian
68	Activity 2	Task 2.7	November	Reports on Energy audits of 6 public buildings in Donetsk oblast (6 files)	Ukrainian
69	Activity 2	Task 2.7	December	Prefeasibility study for the Project of Energy Modernization of 60 Public Buildings in Kharkiv City (10 documents with annexes)	Ukrainian
70	Activity 2	Task 2.7	December	Report, "Concept of Centralized Water Supply and Sewage Systems in Settlements of the Odesa Region in Which There Are No Such Services"	Ukrainian
71	Activity 2	Task 2.7	December	Reports on preparation of preliminary typical technical heating solutions for the group of objects in Luhansk Oblast (26 files)	Ukrainian
72	Activity 2	Task 2.7	December	Prefeasibility study, Support for the Implementation of Energy-efficient Measures in Buildings of Kropyvnytskyi City (74 files with annexes and presentation)	Ukrainian
73	Activity 2	Task 2.7	December	Support for the implementation of a decentralized heating project for public buildings in Luhansk Oblast (1 presentation and 1 annex)	Ukrainian
74	Activity 2	Task 2.7	December	Audit report, "Technically Achievable Potential of Solar Energy in the Region for Odesa Oblast"	Ukrainian
75	Activity 4	Task 4.1	August	Analytical report on the results and conclusions obtained in the course of conducting training courses on the MRV system	Ukrainian
76	Activity 4	Task 4.1	December	Report on scientific research work on modeling and developing policies and measures for the Seventh National Communication on Climate Change and the Strategy of Low Carbon Development of Ukraine. The Results of Task 1, "Policies and measures aimed at reducing emissions and increasing the absorption of greenhouse gases in Ukraine"	Ukrainian
77	Activity 4	Task 4.1	December	Report on scientific research work on modeling and developing policies and measures for the 7th National Communication on Climate Change and the Strategy of Low Carbon Development of Ukraine. The Results of Task 2, "Forecasts, overall impact of policies and measures, implementation of the Kyoto Protocol mechanisms, the Paris Agreement, and the Strategy for low carbon development of Ukraine "	Ukrainian
78	Activity 4	Task 4.1	November	Section LULUCF of the Strategy of Low Emission Development of Ukraine until 2050	Ukrainian

Table 10. Most Important Documents and Materials Produced under MERP during Q17 of the Project

#	Activity	Task/Subtask	Month	Document Title	Language
79	Activity 4	Task 4.1	September	Presentation, Sector of Land Use and Forestry Agriculture, in the Context of Low Carbon Development of Ukraine	Ukrainian
80	Activity 4	Task 4.1	December	Letter from Minister of Ecology and Natural Resources of Ukraine, O. Semyrak, to Ms. Susan Frits, of December 27, 2017, on summary of cooperation with USAID MERP	Ukrainian
81	Activity 4	Task 4.1	December	Report of Iryna Trofimova, expert on climate policy, about the work performed for the period December 1-21, 2017, in accordance with the contract No. MER/38-12-17 on Objective Services in the Field of Climate Policy Analysis	Ukrainian
82	Activity 4	Task 4.1	November	Report of Iryna Trofimova, expert on climate policy, about the work performed for the period October 18–November 17, 2017, in accordance with the contract No. MER/31-09-17 on Objective Services in the Field of Climate Policy Analysis	Ukrainian
83	Activity 4	Task 4.1	October	Report of Buksha Ihor (short-term senior expert on carbon sequestration) on results of execution of tasks under Activity 4 EC-LEDS	Ukrainian
84	Activity 4	Task 4.1	December	Action Plan for the Execution of the Concept of the State Policy on Climate Change for the Period until 2030, Approved by the order of CMU No. 878-p, from December 6, 2017	Ukrainian
85	Activity 4	Task 4.1	November	Action Plan on the Implementation of the Association Agreement between Ukraine, from the one side, and the European Union, The European Atomic Energy Community and their Member States, on the other.	Ukrainian
86	Activity 4	Task 4.1	October	Presentation of Climate Policy in Ukraine	Ukrainian
87	Activity 4	Task 4.1	November	Strategy of Low Emission Development of Ukraine until 2050	Ukrainian
88	Activity 4	Task 4.1	October	Protocol for coordination of positions on the draft Resolution CMU "On Approval of the Action Plan for Implementation of the Concept for the Implementation of the State Policy in the Field of Climate Change for the Period until 2030"	Ukrainian
89	Activity 4	Task 4.1	October	Protocol for coordination of positions on the draft Resolution CMU "On Approval of the Action Plan for Implementation of the Concept for the Implementation of the State Policy in the Field of Climate Change for the Period until 2030" with comments of Ministry of Justice	Ukrainian

This page is intentionally left blank.

D. MILESTONES

The list of milestones for Q17 of the Project and completion status are presented in **Table 11**, **Table 12**, and **Table 13**.

Table 11. Q17 Milestones for Activity 1: Improve CE Regulatory and Legislative Enabling Environment

Task/Milestone	Deadline	Status	Comments
Task 1.1. Developing Enabling Legislative and Policy Environment			
M 1.1.1 Law on Housing and Communal Services adopted by VR	Dec 31, 2017	Completed	
M 1.1.2 Laws for DH market operations registered by VR	Dec 31, 2017	Not completed	New deadline is February 15, 2018
M 1.1.3 Draft secondary legislation to support implementation of EU Directive 28/2009/EU submitted and discussed with key stakeholders	Oct 31, 2017	Completed	The approval process will be supported through February 15, 2018
Task 1.2. Assistance to National Energy & Communal Services Regulatory Commission (NEURC)			
Subtask 1.2.2. Capacity Building			
M 1.2.2.1 Capacity of NEURC improved	Dec 31, 2017	Completed	
Subtask 1.2.3. Improving Heat Tariff Setting			
M 1.2.3.1 Suggestions and recommendations developed, verified, agreed with NEURC and sent to State Property Fund of Ukraine.	Dec 31, 2017	Completed	
M 1.2.3.2 Methodological recommendations (Manual) for licensees on the long-term Business Plans (investment programs) development, in area of water & wastewater, agreed with NEURC and published on website	Dec 31, 2017	Completed	
M 1.2.3.3 Test calculations of tariffs for water & wastewater, DH (transportation) based on the incentive-based regulation submitted to NEURC	Dec 31, 2017	Partially completed	Test calculations of tariffs for DH are submitted to NEURC. New deadline is February 15, 2018
M 1.2.3.4 Quality of Services assurance mechanisms prepared and presented to NEURC	Dec 31, 2017	Completed	
Subtask 1.2.4. Developing Utility Benchmarking			
M 1.2.4.1 Rules on accounting by licensed	Oct 31, 2017	Completed	

Table 11. Q17 Milestones for Activity 1: Improve CE Regulatory and Legislative Enabling Environment

Task/Milestone	Deadline	Status	Comments
type of activity in DH sector published and adopted by NEURC M 1.2.4.2 Rules on accounting by licensed type of activity in water & wastewater sector published and adopted by NEURC			
M 1.2.4.3 Report on efficiency of operations system by benchmarking mechanisms for DH sector submitted to NEURC M 1.2.4.4 Report on efficiency of operations system by benchmarking mechanisms for water & wastewater sector submitted to NEURC	Dec 31, 2017	Completed	
Task 1.4. Supporting Energy Efficiency Standards			
M 1.4.1 Two new energy standards developed	Dec 31, 2017	Partially completed	One energy standard developed

Table 12. Q17 Milestones for Activity 2: Promote Investment in CE Technologies and Applications

Task/Milestone	Deadline	Status	Comments
Task 2.2. Assisting Municipalities with Planning, Preparing and Financing for Clean Energy Projects			
M. 2.2.1 Kyiv SEAP approved by the city council	Dec 31, 2017	Not completed	SEAP consideration is scheduled for February 2018
M 2.2.2 CE Demo projects in residential buildings supported	Nov 30, 2017	Completed	
Task 2.3. Introduction of Energy Management Systems			
M 2.3.1 One city prepared for ISO 50001 certification	Nov 30, 2017	Completed	
Task 2.5. Support Mechanisms That Mobilize Private Sector Investment			
M 2.5.2 At least one public-private partnership (PPP) initiated as a result of U.S. Government assistance.	Dec 31, 2017	Completed	
Task 2.7. Implementing Sub-Activity 2 Tasks in Odesa Oblast and Ukrainian Territories Affected by the Conflict with Russia			
M 2.7.1 At least 10 ESCO/EPCs for municipal end use EE initiated	Dec 31, 2017	Completed	
M 2.7.2 Energy plans approved by local communities	Oct 31, 2017	Partially completed	Two SECAPs to be approved

Table 12. Q17 Milestones for Activity 2: Promote Investment in CE Technologies and Applications

Task/Milestone	Deadline	Status	Comments
M 2.7.3 REP developed and discussed	Dec 31, 2017	Partially completed	New deadline is February 15, 2018
M 2.7.4 At least five projects initiated and/or implemented with U.S. Government assistance	Dec 31, 2017	Partially completed	Eight projects initiated. The implementation support is to be provided. New deadline is February 28, 2018

Table 13. Q17 Milestones for Activity 4: Enhance Capacity for the GOU in LEDS

Task/Milestone	Deadline	Status	Comments
Task 4.1. Strengthening Institutional Capacity in Planning LEDS-REDS			
M 4.1.1 LEDS Action Plan Process finalized and LEDS policy document developed	Dec 31, 2017	Completed	
M 4.1.2 Paris Agreement analytical reports developed	Dec 31, 2017	Completed	
M 4.1.3 State Climate Policy Concept Action Plan adopted	Dec 31, 2017	Completed	
M 4.1.4 Section 4 and 5 of 7th National Communication on Climate Change submitted	Dec 31, 2017	Partially completed	To be finalized in Jan 2018
Task 4.2. Implementing LEDS-REDS through Support in Developing and Introducing Clean Energy Technologies and Energy Services			
M 4.2.1 LEDS-related legislation proposals developed	Dec 31, 2017	Completed	
Task 4.3. Developing a uniform database on LEDS-REDS and Exchanging Experiences and Best Practices with Other Countries Participating in EC-LEDS			
M 4.3.1 LEDS Database populated and transferred to partner agency	Dec 31, 2017	Completed	

This page is intentionally left blank.

E. PROBLEMS

The list of key challenges affecting MERP implementation are presented below:

- Lack of finance and limited capacity at the local (municipal) level prevent effective (rapid) implementation of EE projects identified in SEAPs and affect the implementation of EM.
- The macroeconomic situation (e.g., interest rates) has a considerable effect on lending and investment provided by commercial lending organizations and IFIs.

Despite these challenges, the Project continued to make substantial progress in accomplishing the SoW and corresponding Work Plan.

This page is intentionally left blank.

F. PLANS

F.1 ACTIVITY 1: PLANNED ACTIVITIES IN QUARTER 18

F.1.1 Task 1.1: Developing Enabling Legislative and Policy Environment

- Conduct cost–benefit analysis (modeling) to assess potential introduction of DH market-based operations for selected cities and utility companies. Discuss the results with donor community, SAEE, MinRegion, and NEURC.
- On as-needed basis (upon request), provide assistance to MinRegion expert groups to initiate and develop legal and regulatory documents on municipal energy sector reform.
- Assist GOU with implementation of the National Action Plan on RE and/or EE by developing sublaws, incentive mechanisms, and methodologies.

F.1.2 Task 1.2: Assistance to NEURC

Subtask 1.2.3: Improving Heat Tariff Setting

- Improve the methodology for valuation of assets of natural monopolies and entities operating in adjacent markets and dealing with cogeneration (production of electricity and HE), with focus on valuation of assets of entities operating in the centralized water supply and wastewater and DH sectors.
- Finalize test calculations of tariffs for water & wastewater based on the incentive-based regulation submitted to NEURC.

F.1.3 Task 1.5: Public Information and Awareness

- Disseminate information related to CE/EE, social safety net, and tariff reform through participation in media events, social media (including Facebook pages), MERP websites, and partners' websites.
- Develop and disseminate informational materials, outdoor materials, and video PSAs, as well as advertisements for social media on issues related to:
 - EE;
 - Investments in EE in the residential sector (state and municipal programs);
 - Promoting the understanding of incentive-based tariff regulation to guarantee the effectiveness of the work of communal enterprises;
 - Social protection measures for low-income consumers;
 - Monetization of communal subsidies as a tool to stimulate EE in the residential sector;
 - Benefits of HOA creation; and
 - Other topics as requested by MinRegion, SAEE, MinSocPolicy, and GOU.
- Support telephone hotline counselling on state/municipal loan compensation programs for EE measures; EE measures implementation; EE saving potential, and related topics.

- Finalize production of a third season of the TV program *Your Home* to highlight the progress made by USAID/MERP, partners, and donors in EE reform in the residential sector.
- Support expert briefings for media on a range of story options, including benefits of EE in the residential sector, AE resources, benefits of HOAs, and incentive-based tariff reform.
- Promote topics through social media (including Facebook), MERP websites, and partners' websites.
- Cooperate with local HOA/CE RCs, manufacturers of EE materials and equipment, utility companies, Regional Social Protection Offices, national, regional, and local nongovernmental organizations (NGOs), and MERP partner cities to enhance the outreach campaign on EE and distribute informational materials among residents of municipalities.
- In cooperation with MinRegion, SAEE, partner cities administrations, NGOs, the HOAs/CE RCs conduct various activities, including an EE Marathon event aimed at disseminating MERP results and best practices in EE/AE; support for a series of press briefings with participation of MinRegion/SAEE, and partner cities administrations; and study tours for national and regional journalists to visit the MERP partner cities with best results in AE/EE or to other sites where the most innovative projects have been implemented.
- Create a MERP Best Practices Catalogue to feature the Project's success stories and most prominent achievements, and ensure the catalogue's distribution during MERP's closeout conference and through other channels. Demonstrate video on MERP achievements.

F.2 ACTIVITY 2: PLANNED ACTIVITIES IN QUARTER 18

F.2.1 Task 2.2: Assisting Municipalities with Planning, Preparing, and Financing for CE Projects

F.2.2 Task 2.3: Introduction of Energy Management Systems

- Support certification of cities in EM in accordance with ISO 50001.
- Disseminate information on the experiences of certified cities to other cities in the region through roundtables, webinars, and other venues.

F.2.3 Task 2.7: Implementing Sub-Activity 2 Tasks in Odesa Oblast and Ukrainian Territories Affected by the Conflict with Russia

- Assist with investment attraction and implementation of municipal EPCs.
- Assist partner cities in Eastern Ukraine and the Odesa region in preparing EM documentation, procedures, and tools.
- Conduct energy audits for key municipal service areas, key utility companies, and public buildings to identify the most promising long-term investment proposals, GHG emissions baseline, and reduction potential.
- Develop RSEP for Odesa Oblast with appropriate budget support.
- Support implementation of demonstration projects promoting CE use and energy conservation.

F.3 ACTIVITY 4: PLANNED ACTIVITIES IN QUARTER 18

F.3.1 Task 4.1: Strengthening Institutional Capacity in Planning LEDS-REDS

- Provide technical and expert assistance for the 7th National Climate Change Communication Report to MinEcology, specifically, drafting Section 4 and Section 5 of the report.

The updated list of milestones for Q18 of the project is presented in **Table 14**, **Table 15**, and **Table 16**.

Table 14. Q18 Milestones for Activity 1: Improve CE Regulatory and Legislative Enabling Environment

Task/Milestone	Deadline	Comments
Task 1.1. Developing Enabling Legislative and Policy Environment		
M 1.1.2 Laws for DH market operations registered in VR	February 15, 2018	
Task 1.2. Assistance to National Energy & Communal Services Regulatory Commission (NEURC)		
Subtask 1.2.3. Improving Heat Tariff Setting		
M 1.2.3.3 Test calculations of tariffs for water & wastewater and DH (transportation) based on the incentive-based regulation submitted to NEURC	February 15, 2018	
Task 1.5. Public Information and Awareness		
M 1.5.1 National public awareness campaign to promote EE, energy conservation, and RE implemented, tariff regulation reform	February 28, 2018	

Table 15. Q18 Milestones for Activity 2: Promote Investment in CE Technologies and Applications

Task/Milestone	Deadline	Comments
Task 2.2. Assisting Municipalities with Planning, Preparing and Financing for Clean Energy Projects		
M. 2.2.1 Kyiv SEAP approved by the city council	February 28, 2018	
Task 2.7. Implementing Sub-Activity 2 Tasks in Odesa Oblast and Ukrainian Territories Affected by the Conflict with Russia		
M 2.7.3 REP developed and discussed	February 15, 2018	
M 2.7.4 At least five projects initiated and/or implemented with U.S. Government assistance	February 28, 2018	

Table 16. Q18 Milestones for Activity 4: Enhance Capacity for the GOU in LEDS

Task/Milestone	Deadline	Comments
Task 4.1. Strengthening Institutional Capacity in Planning LEDS-REDS		
M 4.1.4 Sections 4 and 5 of 7th National Communication on Climate Change submitted	February 28, 2018	

G. PERFORMANCE INDICATORS

No reporting for the period.

This page is intentionally left blank.

U.S. Agency for International Development

1300 Pennsylvania Avenue, NW

Washington, DC 20523

Tel: (202) 712-0000

Fax: (202) 216-3524

www.usaid.gov