

2019

Project Implementation Review (PIR)

**EE in Public Buildings**

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# Basic Data

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| **Project Information** | |
| UNDP PIMS ID | 4114 |
| GEF ID | 5357 |
| Title | Removing Barriers to increase investment in Energy Efficiency in Public Buildings in Ukraine through the ESCO modality in Small and Medium Sized Cities |
| Country(ies) | Ukraine, Ukraine |
| UNDP-GEF Technical Team | Energy, Infrastructure, Transport and Technology |
| Project Implementing Partner | UKR10 (Ukraine) |
| Joint Agencies | *(not set or not applicable)* |
| Project Type | Full Size |

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| **Project Description** |
| The objective of this project is to accelerate implementation of energy efficiency measures in public buildings in Ukraine through the ESCO modality, utilising EPC contracts, by leveraging over significant private sector investment over its five-year implementation period, including through the launching of a financial support mechanism, as well as by introducing a single nationwide energy management information systems (EMIS) for Ukraine. |

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| **Project Contacts** | |
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| GEF Operational Focal Point | *(not set or not applicable)* |
| Project Implementing Partner | Mr. Sergiy Savchuk (sdsavchuk74@gmail.com) |
| Other Partners | *(not set or not applicable)* |

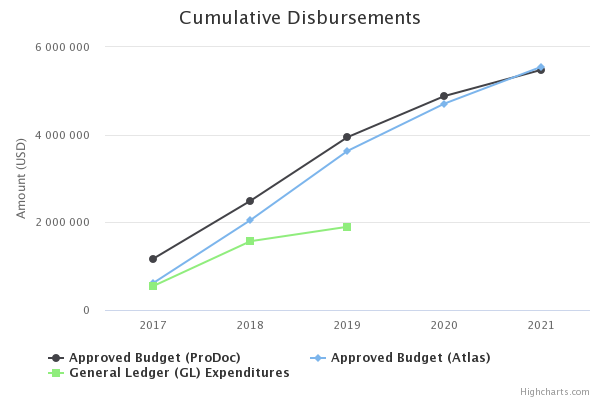
# Overall Ratings

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| Overall DO Rating | Moderately Satisfactory |
| Overall IP Rating | Moderately Satisfactory |
| Overall Risk Rating | Moderate |

# Development Progress

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| **Description** | | | | | | |
| **Objective**  **To assist the Government in addressing the barriers to transform the market for investments in energy efficiency in public buildings in the country.** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Emission reductions (in tCO2 over 20-yr timeline). | The building sector (housing, institutional/communal and commercial) consumes about 40% of total heat and 25% of all electricity in Ukraine making it a major contributor to greenhouse gas emissions. | *(not set or not applicable)* | 8,893 tons of CO2 reduced over 20-year equipment lifetime.  Indirect post-project GHG reduction of 1,440,000 tons of CO2. | An ESCO pilot project in Dubno with ESCO-installed weather regulated heating equipment, has already demonstrated a 15% annual reduction of energy consumption, which is equal to 270 MWh of heat energy. Technical design and installation works were provided by the Project, whereas Ukrgasbank provided a leasing instrument for digital metering and remote regulating equipment in 4 schools and 2 kindergartens. The Project allows ESCO to reduce implementation and maintenance costs, creating opportunities for scaling up and increasing the number of ESCO projects in public buildings, by providing innovative financial and technical solutions.  Another significant source of CO2 emissions reduction is the introduction of EMIS and energy management at a municipal level.  In 2017, the Project achieved a 5% reduction in the energy consumption of public buildings, by implementing ten EMIS and energy management pilot projects in ten cities. This is equal to 300 tonnes of CO2 emissions reduction per year. In addition to this, the launched pilots on energy management and monitoring systems in the Eastern regions of Ukraine (587 buildings) resulted in over 500 tonnes of CO2 emissions reductions. Therefore, the total reduction is equal to 800 tonnes of CO2/year or around 16,000 tonnes of CO2 over 20-year period. | According to the project document, EEPB project should implement 10 pilot ESCO project and 10 pilot EMIS projects (output 4.6: EMIS implemented in at least 10 selected Ukrainian small and mid-size cities). However, emissions reduction target has been established for ESCO projects only. Actually, the EEPB project has established a data gathering system based on the monitoring systems of pilot projects (monitoring implemented under the EPC, which allows estimation of energy savings on a monthly basis; monitoring implemented under EMIS provides data on actual energy consumption. For estimation of energy savings, they were compared with the pre-EMIS consumptions). In addition, five grants that were implemented in 2017-2018 using SGP mechanism also led to GHG emissions reduction of 29.9 t CO2 annually).  As of 30 June 2019, ESCO pilot projects are completed in Dubno and Drogobych. One-year post-implementation monitoring data is available for Dubno and two-month monitoring data (for March-April 2019) for Drogobych.  Pilot ESCO project in Dubno city, Rivne region (6 pilot sites: 4 schools and 2 kindergartens) has demonstrated an annual reduction of 30,8% in thermal energy consumption which is equal to 536 MWth of heat energy since the commissioning of the project, or 102 tons of CO2. Hence the total emission reduction projections for 20-year period are 2056.96 tons of CO2.  5 pilot ESCO project in Drogobych (5 pilot buildings, 4 schools and 1 hospital) demonstrated annual savings of 71.7 tons of CO2 or 1,421 tons of CO2 over 20-year lifetime  In 9 cities, where the EEPB project assisted in installation of EMIS, 120 tons of CO2 emissions reduction has been achieved annually, or 2400 tons over 20-year period.  Pilots implemented using SGP mechanism demonstrated CO2 emissions reduction of 30 tons annually, or 600 tons over 20-year lifetime.  Total CO2 emissions reduction achieved calculated for 20 years lifetime period is equal to 6477 tons of CO2, or 73% of the project target. |
| Investment in energy efficiency. | No investment taking place to improve energy efficiency in existing buildings. | *(not set or not applicable)* | Investment of $ 21 million from ESCOs. | All Project pilot activities, including those performed via the SGP mechanism, envisage co-financing, which, as of today, comprises $400,000. The strategic course on maximizing the participation share of the buildings` owners (municipality) ensures at least a 50% ratio of co-financing. Notably, the ongoing project in Ternopil proved that relatively modest expert facilitation (around $10,000) ensured a placement of €300 000 in investments (funded by EIB), in a targeted soft loan for energy efficiency measures. Based on such experience, the project used this approach in Kaniv to approve a $200,000 loan for the EE project (kindergarten rehabilitation). | The EEPB project has supported EPC contracts of three types: (i) “classic ESCO”; (ii) “Enhanced partnership”; and (iii) “ESCO factoring”. A model of “Enhanced partnership” ESCO, developed by the Project, considers that both parties, ESCO and municipality provide financing and thereby contribute to the implementation of more EE measures compared to a “classic ESCO” model. A model of “ESCO factoring” provides opportunities for an ESCO to use future cash flows (from EPC) to get loans. In fact, this is a financial support mechanism rather than a type of ESCO contract.  As of 30 June 2019, 10 concluded EPC contracts under the “Enhanced ESCO” modality in 6 pilot partner cities committed for USD 153,689 from ESCOs and USD 1,340,740 from municipalities. In addition, EEPB project provided TA for a total amount of USD 141,299.  Investments via a classic ESCO model (100% investments from ESCO) include 29 EPC contracts in 5 partner cities (Nizhin, Slavutich, Odesa, Savran, Drogobych, Dubno where EEPB project has provided technical expert support) totaled USD 322.4 thousand.  A loan issued to an ESCO company (KyivESCO) by a Ukrainian private bank ComInBank using “ESCO-factoring” FSM equals to UAH 2.8 mln or USD 107,800. The loan was issued in the first half of 2019.  On the basis of MoU and Action plan, the EEPB project is providing TA to the city of Kaniv in a complex rehabilitation of two buildings. Financing for this project is secured through NEFCO loan and co-financing from the municipality. The loan agreement is signed between the NEFCO and the city of Kaniv. Once the project design stage and initial reconstruction works are completed, the loan amount of USD 570,000 (interest rate 3%) will be transferred to the municipality for execution of construction/installation works (expected by the end of 2019). Co-investment from municipality is USD 160,000.  The “Municipal ESCO” model, where an ESCO company is created by transforming the city utility service enterprise was probed in Bila Tserkva. As a result, the company invested USD 246,000 in energy efficient modernization of 16 individual heat point regulators in 16 schools.    The EEPB project also assisted the city of Ternopil to start tapping into EUR 32 mln loan from EIB. In particular, through its Project Support Platform, the EEBP Project helped with the design of the technical requirements for energy monitoring equipment that was used in tender process for thermomodernization of public schools in Ternopil city using first tranche from EIB in the amount of EUR 400,000. This case also proves the effectiveness of the Project Support Platform as municipalities often lack capacities to apply for financial resources or develop high quality tender documentation.    The total leveraged investment in energy efficiency, including co-financing, is about USD 3 million so far. |
| Energy saved by capacity installed (MWh/MWhTh). | Energy consumption in existing buildings is on average approximately four times higher than that in Western European countries. | *(not set or not applicable)* | *(not set or not applicable)* | The ESCO project in Dubno saves 270 MWh of thermal energy annually. According to the municipalities’ data (for the past heating period), the introduced energy management and monitoring system resulted in more than 700 MWh of savings. | Energy savings achieved by the Projects are generated by 2 types of EE projects: ESCO projects in municipal buildings and EMIS projects.  The EEPC Project contributed to the implementation of pilot projects in Dubno city by assisting ESCO in attracting loan from Ukrgasbank and introducing an automated energy monitoring and regulating system. The last heating season (2018-2019) has demonstrated energy savings of 536 MWh annually.    Energy saved in March-April 2019 as a result of the recently completed project in Drogobych (5 buildings) equals to 62.7 MWh of thermal energy which means about 220 MWh annually. |
| Number of green jobs created. | *(not set or not applicable)* | *(not set or not applicable)* | 3,000 green jobs created. | The Project’s EMIS activities include extensive education of municipal workers to enable them to perform energy management and monitoring duties. As of today, more than 700 personnel (58% female) have been trained and received new job assignments. | Energy management motivation system introduced in Chortkiv city (Ternopil region) and in Zhytomyr oblast (excluding Zhytomyr city) helped create 17 green jobs – energy managers positions in public buildings. 286 green jobs - energy manager positions in public buildings have been created in 2 eastern oblasts of Ukraine after relevant training provided by the Project. |
| **The progress of the objective can be described as:** | | **On track** | | | | |
| **Outcome 1**  **Streamlined and comprehensive legal and regulatory framework to promote energy efficiency in public buildings through strengthening of monitoring and enforcement mechanisms.** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Existence of adequate policy and regulatory framework. | None available at the present time. | *(not set or not applicable)* | Completed within 12 months of project initiation and approved by Government by the end of year 2. | Extensive work on baseline assessment, identification and actualization of barriers has led to palpable results: a working group of government officials, experts and legal advisors, supported and led by the Project, produced amendment proposals for a number of regulatory acts that aimed to remove barriers and widen implementation opportunities for energy efficiency ESCO projects.  Amendments to the Law on New Investment opportunities in Energy Efficiency (“ESCO Law”) #327 and amendments to Budget Code were submitted to the State Agency for Energy Efficiency (SAEE) on 22.06.2018 and then transferred to Parliament.  Methodology for allocating energy costs in buildings was developed (secondary legislation for "Commercial metering of energy consumption in buildings" Law) and transferred to Parliament in November 2017, adopted in 2018.  EU methodologies for the auditing of buildings were translated and adapted, then transferred to Minregion (Governmental Order of MinRegion № 173 was officially published on 11.07.2018). | The core legislation is set.  Law on New Investment opportunities in Energy Efficiency (“ESCO Law”) #327 adopted in 2015, was amended in January 2019.  Law “On Energy efficiency in buildings” #2118 was adopted in 2018. The EEPB project is working on further amendments to these laws. Amendments are required as a legislative practice in Ukraine discourages the inclusion of specific issues to the key sectoral laws at first readings / during initial approval. As a result, numerous amendments are usually further required along with the secondary legislation to support the enforcement of the law.  The Parliamentary Committees and members of Parliament (MPs) have approved the Draft Law No. 9386 as of 10.12.2018 “On the improvement of the ESCO mechanism” and recommend it to be passed in the first Parliamentary reading.  The document was not voted yet due to dissolution of the Verkhovna Rada (June 2019).  The UNDP/SAEE working group is responsible for the immediate introduction of laws into a voting agenda and approval by the new Parliament when it is elected and operational. Separate working group of experts is created to develop necessary amendments to primary and secondary legislation to make a National EMIS system mandatory. 3 meetings of this group were organized during the reporting period. Amendments to Law “On Energy Efficiency in Buildings” is under the preparation. |
| **The progress of the objective can be described as:** | | **On track** | | | | |
| **Outcome 2**  **Innovative Financing Mechanism is adopted and capacity development is provided for ESCOs to promote investment in support of Energy Efficiency in public buildings.** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Innovative Financing Mechanism established and working. | None exists at the present time. | *(not set or not applicable)* | Completed within 24 months of project initiation and applied by all stakeholders. | Financial support mechanism developed by IFC/UNDP was not operational at the time of writing of PIR. During the meeting with UNDP, Oshchadbank admitted that this banking product requires more time for operationalization. Moreover, the recent rise of the National Bank base rate (17.5% a year) makes commercial loans nominated in the national currency less attractive, and limits commercially beneficial projects to those with a very short pay-back period.  :Project recognised a demand from municipalities to have a bigger role in energy – performance based renovations and keeping savings from EE modernisations to themselves. Project conducted legal study and financed development of procedure that allows municipalities to set up a legal entity – municipal ESCO company. This allows cities to amass savings from EE modernisation projects on special budget account (municipal EE fund) and then use it for further EE improvements. This instrument was tested in Kaniv and with Project’s support city council voted for approval for creation of Municipal ESCO company. Active participation and expert support helped to convince municipal council members to approve a loan from Oshchadbank which required two visits of Project team leadef and Finance CTA and public campaign of activists group.Project also started development of municipal district heating development strategy which will open way for shauffage ESCO projects.  In view of the pending FSM launch, the Project developed the following financial mechanism for municipalities to access affordable loans and investments:  1. a small-scale affordable leasing instrument for small businesses to purchase an EE equipment;  2. Municipal energy efficiency revolving fund,  3. Municipal ESCO company,  4. Green bonds instrument.  Some of the instruments are already working, namely: Kanyv city (EE modernisation of a kindergarten) In Bila Tserkva and Kanyv, municipal-owned ESCO companies were created, whilst a leasing funded project is ongoing in Dubno (6 buildings, ESCO + EMIS + leasing).  The Project supported the launch of a Project Support Platform (PSP), by providing different types of expert support to partner municipalities, facilitating the introduction of local reforms (municipal legislation on introducing performance–based incentives for municipal energy managers) and investments in energy efficiency projects.  As an instrumental part of PSP an "All-Ukrainian Energy Efficiency and ESCO contact centre" (help desk) was created. This online facility regularly receives questions and requests related to energy efficiency and ESCO in municipalities, and provides high-quality answers and practical recommendations from experts. SAEE has already expressed interest in integrating the contact centre into the Agency's outreach activities and development of additional functionality s (ESCO in residential buildings, renewables). | An average ESCO investment for an individual pilot project is below USD 15,000. The relatively small amount of investments required on one hand, and high interest rates of local FIs (25% and above) on the other hand, make ESCOs not interested in loans. Consequently, the FSM created within another ongoing UNDP project (Bioenergy), cannot be effectively utilized by the EEPB project. Therefore, the EEPB project is looking for a different type of FSM. For this purpose, the Project has organized a study tour to Latvia. As a result of the study tour, the key stakeholders had an opportunity to communicate with real practitioners who were involved in the development of the ESCO  financing model in Latvia and shared success stories and (more importantly) the  failures that could be avoided while building the system in Ukraine. The study tour as well as information gathered from different sources helped in identifying the types of FSM potentially viable in Ukraine. Some of those FSMs have been already tested.    With the direct support of the EEPB Project, a Financial support mechanism “ESCO-factoring” has been developed and for the first time successfully applied in Drogobych city. In 2019 “Kyiv ESCO” company implemented a pilot project using new FSM “ESCO-factoring” in cooperation with ComInBank that issued a loan in the amount of 2.8 million UAH (equals to USD 108,000).  Second “ESCO-factoring” credit issued by the same bank InComBank for KyivESCO company, UAH 15.5 mln (USD 607,000) in two tranches, first one 7.5 mln. already disbursed, and it is aimed for EPC in Odessa and Slavutich, and second tranche 8 mln. scheduled for October 2019 for financing EPC in Severodonietsk, Pervomaysk.  Ukrainian ESCO Association informed that besides ComInBank, two other banks – TAScom bank and UkrGASbank offered ESCO-factoring loans, so we already see certain competition here, which might be one of the factors that led to improvements of the terms and conditions: the second loan’s was by 2 percent cheaper (25% instead of 27%) and it is for 2 years instead of 1 year previously.  In contrast to the above, in 2018 the maximum amount of a loan without collateral issued to an ESCO in Ukraine was only UAH 47,000 (USD 1,800) for 2 years. However, in 2018 even this puny amount loan was a unique undertaking between the ESCO UA company and the ComInBank.    For the first time in Ukraine, EPC risks were mitigated by a new insurance instrument. The Project financially assisted the development of a new type of insurance contract covering the risk of non-achieving of targeted energy savings in EPC. The insurance company UTR covered the particular contract in Dubno city.  The Project developed a new ESCO model “Enhanced partnership ESCO”. “Enhanced partnership ESCO” model is co-investment from both, private ESCO and municipality into modernization of a public building. In this model the savings achieved are distributed between two investors not according to the size of investments but depending on the projected effectiveness of EE measures in which ESCO gets better return on energy performance, while municipality pays for and gets return from the investment in less profitable EE measures.  In contrast to the business-as-usual, when necessary EE measures in a building are implemented separately by an ESCO and a municipality (via contractors), and an ESCO only guarantees energy savings from its part of the measures implemented, the “Enhanced partnership ESCO model” allows municipality to obtain ESCO guaranty for the whole EE project. It is important as an ESCO usually seeks high returns through implementing better performing measures and a municipality invests in slow return measures, and when a “slow return part” of the project is executed by external contractors providing no guarantee of energy savings, the whole project risks not to perform as expected by a municipality. The model therefore makes ESCO to ensure the quality both for the EE measures financed by itself as well as for the whole set of EE measures implemented in a particular building.    With support from UNDP, NEFCO soft loan of UAH 14.8 million ($570,000) for 5 years for full thermal modernization of a public school and a kindergarten has been approved for Kaniv city. The terms of the loan are much better compared to the market ones (3% vs 27% of usual commercial interest rate in Ukraine). The case can be considered as a financial instrument available for municipalities. |
| **The progress of the objective can be described as:** | | **On track** | | | | |
| **Outcome 3**  **Pilot projects in selected public buildings which demonstrate energy and cost-saving potential of new energy efficient measures.** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Pilot projects completed. | No such ESCO modality-driven implemented at the present time. | *(not set or not applicable)* | Completed within 48 months of project start. | In line with the recommendations of experts received during the Inception Phase, the Project has taken a course towards maximum possible sustainability of project results, which, in turn, dictates the necessity for the buildings’ owners (municipalities) to take financial and administrative responsibility for the renovation of the buildings. According to this modality, the Project aims for minimal financial contribution to each particular pilot project.  The pilot project in 4 schools and 2 kindergartens in Dubno that started in 2018 has already demonstrated 15% savings thanks to the provided by the Project team’s technical design and installation works.  Project developed an “Enhanced Partnership” model of ESCO in public buildings. It allows municipality and private ESCO combine efforts and investments in EE renovation of municipal buildings in a single tender, and then divide savings proportionally to the expected results from EE measures.  Based on the approach, a contest for pilot projects proposals was designed and announced. As a result, five potential pilot objects and municipal objects were selected, energy audits conducted (where needed) and preparations for municipal ESCO tender has begun. | Pilot projects which consisted of 6 public buildings in Dubno and 5 public buildings in Drogobych are completed and commissioned.  9 more pilot EPC contracts that include co-financing from UNDP in 6 cities (12 pilot buildings) in terms of energy audit and/or smart metering devices have been commenced and are in the construction phase, operations are due to begin in the upcoming heating season (October 2019)  Due to the expert support provided by the EEPB Project, 42 EPC contracts in the partner cities are 100% financed by ESCO companies (EPCs signed, equipment will be commissioned in autumn 2019). |
| **The progress of the objective can be described as:** | | **On track** | | | | |
| **Outcome 4**  **(a): Institutional basis for supporting energy efficiency in public buildings and implementing a nation-wide Energy Information Management System (EMIS) is in place.**  **(b): Documented, disseminated and institutionalized project results providing a basis for further replication.** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Existence of adequate framework. | No such organisational structure exists at the present time    Lack of sufficient information to effectively pursue programme. | *(not set or not applicable)* | Organisational structure in place within 24 months of project initiation.    At least 20 new cities in Ukraine are implementing EMIS by the end of the project and at least 5 cities implementing EMIS by the half way point  Increased awareness among stakeholders in place to promote and develop the market for energy efficiency in public buildings. | With the direct support of the Project, 10 Ukrainian cities have already implemented an EMIS system and continue to use it. These are: Fastiv, Bila Tserkva, Chortkiv, Hotyn, Ternopyl, Dubno, Selidovo, Druzhkivka, Dobropyllia, Sloviansk, together with the demonstrational EMIS project in the SAEE building in Kyiv. To secure sustainability and systematic changes, the Project took a leading role in creating a national EMIS system. This includes setting up the regulatory basis to make the national EMIS system comprehensive and competitive.  The Project completed more than 10 studies and produced important educational materials: improved guidelines for selection of energy efficiency measures, contractors, sample procurement documentation and guidelines for budget entities, recommendations for the creation of municipal funds, a study on green bonds and PPP instruments. | While energy management usually takes a top down approach when the government typically passes legislation to push more efficient energy management requirements through deployment of a particular EMIS system; exactly the opposite has happened in Ukraine. Municipalities has started to randomly implement EMIS thus setting the bottom-up approach to energy management in public buildings. However, as Energy Management and Information Systems (EMIS) comprise a broad family of tools and services to manage building energy use, as of now numerous different EMIS have been deployed in 31,552 public buildings of Ukraine (which is 22,5% of the total 140,000 public buildings) with a prevalence of 5 particular EMIS most commonly found in public buildings across Ukraine. The Project has supported EMIS introduction to 498 public buildings in its 10 pilot cities. However, the main challenge is to lay basis for and implement a national level EMIS.  With this purpose, under the leadership of the State Agency on Energy Efficiency, the Project supported the establishment a Technical Work Group “On design of National EMIS system for Ukraine” that drafted necessary amendments to primary and secondary legislation in order to establish obligatory National EMIS scheme and to set up a common data protocol and data requirements for municipalities. In order to improve capacity of the National counterparts, the Project purchased hardware and software needed to set up a National level monitoring system.  Meanwhile the Project supports municipalities in introducing a municipal energy management and monitoring system that is built on motivation incentives scheme. The scheme envisages payment of performance bonus to municipal/sites energy managers in accordance with saving achieved. The scheme is already operational in Chortkiv city and in Zhytomyr oblast.  The Project developed the minimum requirements for purchasing of new metering devises in accordance with the EU Directives. It is recommended for municipalities to purchase only smart metering devices. Procurement assistance was performed for Ternopil, Odesa, Mykolaiv and Bila Tserkva cities.  Project financed introduction and operationalizing of energy management and monitoring system in 2 eastern regions of Ukraine (25 small cities and 23 towns, 286 public buildings in total). |
| **The progress of the objective can be described as:** | | **On track** | | | | |

# Implementation Progress



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| Cumulative GL delivery against total approved amount (in prodoc): | 34.66% |
| Cumulative GL delivery against expected delivery as of this year: | 48.16% |
| Cumulative disbursement as of 30 June (note: amount to be updated in late August): | 1,899,126 |

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| **Key Financing Amounts** | |
| PPG Amount | 90,000 |
| GEF Grant Amount | 5,480,000 |
| Co-financing | 56,673,195 |

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| **Key Project Dates** | |
| PIF Approval Date | Nov 7, 2013 |
| CEO Endorsement Date | Mar 16, 2016 |
| Project Document Signature Date (project start date): | Dec 14, 2016 |
| Date of Inception Workshop | Jun 23, 2017 |
| Expected Date of Mid-term Review | Jun 14, 2019 |
| Actual Date of Mid-term Review | *(not set or not applicable)* |
| Expected Date of Terminal Evaluation | Sep 14, 2021 |
| Original Planned Closing Date | Dec 14, 2021 |
| Revised Planned Closing Date | *(not set or not applicable)* |

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| **Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2018 to 1 July 2019)** |
| 2017-12-11 |
| 2018-12-20 |

# Critical Risk Management

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| Current Types of Critical Risks | Critical risk management measures undertaken this reporting period |
| Financial | Financing Risk. One critical risk is that government co-financing does not materialize in particular to support the EMIS, including funds for EMIS help desk, EMIS central support unit, and the mandatory energy managers etc ... The project is taking steps to address this by seeking to ensure that co-financing is realized for the EMIS. |

# Adjustments

**Comments on delays in key project milestones**

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| **Project Manager: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.** |
| TThe start of mid-term review was shifted by month (from June 15, 2019 to July 15, 2019) due to additional call for candidates performed by UNDP Procurement unit.  NB The Project Team wasn't engaged in the MTR recruitment process, all respective actions including ToR design were performed by CO M&E unit in line with 2019 Evaluations Guidelines. |

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| **Country Office: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.** |
| *(not set or not applicable)* |

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| **UNDP-GEF Technical Adviser: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.** |
| Mid-term evaluation should have been ready by May 2019. It is delayed by 4-5 months and should be finalized by October 2019. In September 2019, only a draft was ready. The project needs to aim to speed up implementation in order to avoid the need to request a lengthy delay. |

# Ratings and Overall Assessments

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| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **Project Manager/Coordinator** | Satisfactory | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | In the third year of its implementation, the EEPB Project achieved concrete results in all major components of the Project. An Enhanced ESCO model that stimulates larger investments in energy efficiency was developed and made operational. EPC contracts in 10 pilot cities have been signed, pilot projects that cover public educational buildings in two municipalities (Drogobych and Dubno) have been completed and commissioned. The technical expert support provided by the Project made it possible to sign 39 EPC contracts in the Project partner cities. The “ESCO Factoring” Finance Support Mechanism (FSM) was not just developed but actually operationalized through two loans from Ukrainian commercial bank (ComInBank) granted to an ESCO company (KyivESCO LLC) to finance EE modernizations. The FSM both accurately fits into a carefully elaborated UNDP support scheme (which makes about 10% of the total investment amount and is provided in kind either as expert support, equipment or design works etc.) and reduces the effective cost of credit resources down to 17% a year (from usual 27%), including fees, which is really something that was unthinkable before the Project launch. Additional financial and organizational models aimed at applying benefits of ESCO modality are developed and currently being tested: EPC insurance instrument, municipal “Super” ESCO model that envisages creation of a Municipal EE fund, “ESCO management“ – for those cities that have already invested into EE measures now performing worse than expected and an ESCO company can help improve the energy performance. The Project is working on some promising strategic directions that are exceeding initial targets: Municipal Green bonds instrument, automatic smart metering for large municipal energy consumers, public private partnership.  27 municipalities along with 3 City Associations, 2 banks, 1 International organization (GIZ) have become partners of the Project. The Project established working relations with the International financial organization (IFO) NEFCO and supported the granting of a loan of USD 0,58 mln for energy modernization to the municipality of Kaniv. The EEPB project also assisted the city of Ternopil to start tapping into EUR 32 mln loan from EIB. In particular, through its Project Support Platform, the EEBP Project helped with the design of the technical requirements for energy monitoring equipment that was used in tender process for thermomodernization of public schools in Ternopil city using first tranche from EIB in the amount of EUR 400,000.    Hardware and software were obtained for SAEE in order to build a National level energy monitoring system; together with SAEE a Technical Working Group for introduction of legal and organizational provisions is created and operational now, as well as supported by an International advisor. Meanwhile 35% of medium and large cities already have energy monitoring systems in place and the Project is currently developing a model that will make municipal energy monitoring a part of the national energy management.  All the above indicates that Project is fully on track despite unstable political and economic situation, and the Project outputs will exceed initial expectations. Consequently, the Project should be rated as satisfactory.    Component 1 - Satisfactory.  The core legislation that enables EPC contracts and ESCO modality in Ukraine is set (Law on New Investment opportunities in Energy Efficiency (“ESCO Law”) #327, Law “On Energy efficiency in buildings” #2118. The Project is working on improvements that would provide better efficiency and allow for wider selections of fields where the modality could be applied. A working group created by UNDP already filed to the Parliament the amendments intended to improve the dedicated legislation. However, in the worst-case scenario, the progress with ESCO modality and EPC could be achieved even with the current legislation in force.    Component 2 - Satisfactory.  The “ESCO-factoring” Financial support mechanism has been developed and successfully applied in Drogobych city. The “Kyiv ESCO” company performed the first pilot project using new “ESCO-factoring” FSM jointly with ComInBank using a loan of 2,8 million UAH.    “Enhanced partnership ESCO” model developed by the Project enables to combine financing from an owner (municipality), IFO or banks, UNDP and ESCO.  With support from UNDP, NEFCO has provided a soft loan of UAH 14.8 million (or $570,000) for 5 years for full thermal modernization of a public school and a kindergarten in Kaniv city.    Component 3 - Highly satisfactory.  While large-scale renovation projects in municipal buildings are usually expensive and rarely implemented taking the current economic situation in Ukraine, energy efficiency projects with high energy performance proved to be a very efficient option.  In the reporting period the project supported two pilot EE projects that involved 6 public buildings in Dubno and 5 public buildings in Drogobych. The projects were completed and commissioned in 2018 ensuring at least 30% of annual energy savings.  9 pilot EPC contracts that include co-financing from UNDP in 6 cities (12 pilot buildings) have been commenced and are in construction phase, operations are due to begin in the upcoming heating season (October 2019)  When summing already commissioned projects, those in the construction phase, those “signed” and those included in the pipeline, the Project target will be largely overpassed (roughly by 7 times)  Moreover, “Enhanced partnership ESCO” model developed by the Project proved to be highly replicable.  Due to the expert support provided by the Project, 42 EPC contracts in the partner cities are 100% financed by ESCO companies.    Component 4 - Satisfactory.  Technical working group is working on a single data protocol and requirements for National (higher) level of EMIS, while on a Nation-wide (municipal) level up to 35% of public buildings agreed to be included into a single database.  The Project financed the introduction and operationalization of energy management and monitoring system in 2 Eastern regions (25 small cities and 23 towns, 286 public buildings in total). The project has also supported 498 EMIS projects in its 10 pilot cities.    Two all-Ukrainian conferences for municipal energy managers were organized. Several guidebooks and informational materials published and disseminated. | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **UNDP Country Office Programme Officer** | Satisfactory | Satisfactory |
| Overall Assessment | Within the period under review, the Project Team has managed to significantly advance on the achievement of project targets and objectives. In particular, over 70% of CO2 emissions reduction target has been achieved on the level of midterm of the project. Based on this, it is possible to estimate the project will overachieve the target level established during the project development stage.    This Project is about bringing investments into improving the energy efficiency of municipal budget sphere, while ESCO mechanism as well as financial support mechanism (FSM) and energy management informational system (EMIS) and management monitoring are key instruments to achieving this goal.    Outcome 1  The core legislation is in place. The project is facilitating necessary amendments to the legislative framework to enforce the implementation of ESCO and EE related laws. Draft law “On the improvement of the ESCO mechanism” awaits its Parliamentary reading after the new Parliament elected on 21 July 2019 starts its sessions in September 2019. Amendments to Law “On Energy Efficiency in Buildings” is being prepared. An ad hoc group of experts is working on the necessary amendments to primary and secondary legislation to enable setting up of a National EMIS.    Outcome 2  Under the leadership of Project Manager, the EEPB team has introduced a new financial tool – receivables factoring. This tool is not new on a global level, but very new for Ukrainian ESCO market. The factoring mechanism has been developed 40 years ago and well known in countries with advanced ESCO market. Receivable-factoring mechanism is the most feasible way to provide a sort of collateral to banks. It is an affordable tool that allows to implement the FSM at zero cost. The EEPB team managed to negotiate the ‘’factoring’’ modality up to 50% of receivable payments which became a good start to promote this affordable tool among Ukrainian banking sector. As of now, one ESCO uses ‘’ESCO-Factoring’’ instrument allowing for a lower rate loan for implementing EE projects. This achievement is very meaningful for Ukrainian market as the cost of capital is very high in Ukraine.    Outcome 3  Pilot projects (6 public buildings in Dubno and 5 public buildings in Drogobych) are completed and commissioned. 9 more pilot EPC contracts that include co-financing from UNDP in 6 cities (12 pilot buildings) are in the construction phase. The project also provided extensive expert support to the partner cities that helped attract 100% ESCO financing for 42 EPC contracts in public buildings.    Outcome 4  The project has managed to advance the EMIS introduction in 52 municipalities partnering with the project. Each participating municipality has introduced the analytical platform to monitor energy efficiency indicators on municipal level, which in future should be integrated into a national one. Further, the project team has a challenging task to support the establishment of the national level EMIS Platform, which will additionally help to attract EE investments in municipal sector. Establishing the national level EMIS is a very important goal by itself. Successful implementation of the national level EMIS should not only concentrate on the designation (or creation) of a central responsible body, but rather involve spreading EMIS procedures all over the country – something that has taken many years and is still ongoing in Croatia (the most oft-cited example). In the case of EEPB Project in Ukraine, to be truly successful it is crucial to take into account the local situation and the country context (at minimum, in terms of the country size, national EE policy and applicability of the approach compared to the frequently mentioned Croatia case) – something that the Project successfully demonstrates. Adaptive approach used by the Project helped achieve a noticeable progress within a relatively short period of time: dozens of municipalities and hundreds of public buildings have already applied energy management information system and energy management procedures. An ad hoc working group is finalizing the draft legislation to make energy data collection mandatory. In the light of domestic realities, the Project proposed to create a national level EMIS that would accommodate the interests of all stakeholders and could be deployed with low maintenance costs at a low price.    All the above clearly demonstrate the progress toward successful achievement of the Project’s goals, therefore the DO rating for 2019 is Satisfactory.    The IP rating is also Satisfactory, as the Project has managed to achieve more with less resources due to its adaptive management and ad hoc FSM solutions. Financial support mechanism developed by the Project is not only operational, but already demonstrates the sings of sustainability –the third loan is approved at the time of writing this assessment.  Moreover, the Project is well-known and has gained a good reputation. The strategy of both the "ESCO factoring" FSM and the "Enhanced ESCO" model envisages that UNDP project funding is provided only towards completed fulfilment of municipal obligations under an EE project. That means the large part of the Project spending takes part after the completion of construction works i.e. in the second half of the calendar year. However, as for 2019, the annual delivery rate is expected at 98% as the UNDP project finding for EE projects is already fully committed. | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **GEF Operational Focal point** | *(not set or not applicable)* | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | *(not set or not applicable)* | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **Project Implementing Partner** | *(not set or not applicable)* | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | *(not set or not applicable)* | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **Other Partners** | *(not set or not applicable)* | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | *(not set or not applicable)* | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **UNDP-GEF Technical Adviser** | Moderately Satisfactory | Moderately Satisfactory |
| Overall Assessment | The objective of this project is to assist the government in addressing the barriers to transform the market for investments in energy efficiency in public buildings in the country by focusing on ESCO market development and by piloting, replicating, and scaling up an Energy Management Information System (EMIS) for all public buildings in Ukraine. It is an ambitious project which struggled over the first 1 1/2 years but which is now, in my opinion, showing signs of some good improvements.    The project which started in December 2016 and has now been going for just over 2 1/2 years, has improved significantly since last year but I still rate the project as MS or marginally satisfactory for DO and also MS for IP because while the project is greatly improved when it comes to supporting and developing the ESCO market, it continues to struggle on the EMIS implementation and scaling up. In my view, it needs to improve on the integration and scaling up of EMIS in order to get an overall S rating. In addition, despite sucess with the small scale EPC projects the project is a long way off the co-financing targets as the ESCO investments are not being made as part of complete building rennovations meaning that on this basis it is unlikely that the co-financing targets will be met by the end of the project. There are several reasons why the project looks like it is on track to meet some but not all of the project outcomes under the overall project objective. Firstly, while the project has done an excellent job in supporting some 33 ESCO investments in public buildings, the amount of co-financing leveraged from the private sector is still very small at less than $1 million USD and the project has a target of leveraging $15 million in ESCO investments from the private sector. Secondly, the project aimed to leverage another $22 million of cheap loans from a financial institution such as NEFCO and that has not happened. In addition, the IFC-UNDP-Oschadbank financial support mechanism (FSM) focusing on commercial loans to municipalities for investments in energy efficiency and renewable energy has not worked. Last year the Project Manager wrote that a pilot project in Kaniv has been financed through the FSM. Unfortunately, this loan never eventuated. Finally, EMIS related activities are struggling to make real penetration in Ukraine and there is a real risk that there will be no sustainability with the EMIS.    I will now assess each outcome one by one and explain why my rating for the project is MS or marginally satisfactory for both the Development Objective and Implementation Progress. Implementation progress stands at $1.9 million from $4.7 million at the half way point of the project in mid-2019. This is approximately 34% of the budget spent. It represents a marginally satisfactory result which hopefully can be improved upon over the second half of the project.    Outcome 1 focuses on a streamlined and comprehensive legal and regulatory framework to promote energy efficiency in public buildings through strengthening of monitoring and enforcement mechanisms. This component has done a good job on supporting secondary legislation to support the core laws on ESCO and EPC which were already in place when the project began at the end of 2016. The project supports improvements that would provide better efficiency and allow for wider selections of fields where the modality could be applied. However, while this work is commendable, the project needs to also as soon as possible provide greater support to amendments to existing laws to promote the nation wide Energy Management Information System (EMIS). For EMIS to succeed there needs to be legislation that appoints one government body, preferably the SAEE, as nationally responsible for energy management and with a central EMIS support unit located in the SAEE and there needs to be a mandatory requirement for energy reporting as well as a requirement for municipalities and public authorities to appoint energy managements. I recommend that the project start to work on the legislation/regulations/government decrees to support EMIS as soon as possible.    Outcome 2 of the project focuses on an Innovative Financing Mechanism being adopted and providing capacity development for ESCOs to promote investment in support of Energy Efficiency in public buildings. Under the UNDP GEF biomass project, a financial support mechanism was launched with UNDP-IFC and the Oschadbank whereby technical assistance was provided to municipalities, and Oschad launched a commercial lending project for both renewable energy and energy-efficiency projects, focused on the municipal sector. Unfortunately, with high interest rates there has been no uptake of these loans. Last year, the project wrote that the first pilot project is likely to be supported in the City of Kaniv with support of the financial support mechanism. This, unfortunately, did not happen. However, luckily the project undertook adaptive management and now the possible Oschdbank loan has been replaced by a possible $570,000 USD NEFCO loan at a much lower interest rate. In addition, realizing that the original FSM was not working, the project is to be commended for exploring other mechanisms such as a leasing mechanism, super ESCO and the municipal ESCO financial support mechanism (previously tried on the UNDP GEF ESCO Rivne 2002 - 2011 which unfortunately was not successful, partly because appropriate legislation was not in place in Ukraine to support ESCO investments). The project has also been implementing an “ESCO Factoring” Finance Support Mechanism (FSM) which was operationalized through two loans from Ukrainian commercial bank (ComInBank) granted to an ESCO company (KyivESCO LLC) to finance EE modernizations. The project also intends to work on municipal green bonds as a financing mechanism for municipalities, including to support ESCO activities. Priority support for work in this area was identified by the Head of the State Energy Efficiency Agency at a November 2018 Forum in Kiev. However, the project is yet to start work in this area. I rate this component as S or satisfactory, due to the efforts of the project to undertake adaptive management in this area and come up with other financial support mechanisms once it has become clear that the UNDP-IFC-Oschadbank financial support mechanism is not working..    Outcome 3 has focused on developing pilot projects in selected public buildings which demonstrate energy savings and a cost-saving potential on the new energy efficient measures. More concrete results can be found now on this outcome. While the co-financing numbers are still low, the project has done excellent work in this area over the past 12 months. As of mid-2019, some 29 EPC (Energy Performance Contracts) have been implemented in some 5 partner cities around Ukraine. The project reports that for these types of ESCO modality that it uses include classical ESCO, enhanced ESCO, and ESCO factoring projects. The project could do a better job in explaining what it means under these various ESCO approaches. In addition, the project has explored the municipal ESCO approach but has not implemented any project yet with municipal ESCOs. The project has done a good job in getting these new ESCO projects off the ground and the combination of using grants for technical assistance plus a subsidy of up to 10% of the capital cost appears to be working for small scale ESCO projects. The project reports that some CO2 savings of approximately 70% of the 8,893 target have been met from the ESCO projects . However, while the project is 70% towards the CO2 reduction target, the co-financing target of some $56 million is unlikely to be met unless the project can combine ESCO investments with complete building rehabilitations and much larger co-financing amounts can be leveraged from both the private sector and the municipal sector. The largest rennovations of public buildings with the largest savings come from strengthening walls and improving insulsation and the payback period is very long. This means that the ESCO activities that the project supports throuh EPC needs to be done as part of complete building rehabilitations.    Outcome 4 calls for (a): Institutional basis for supporting energy efficiency in public buildings and implementing a nation-wide Energy Information Management System (EMIS) is in place. (b): Documented, disseminated and institutionalized project results providing a basis for further replication. The project called or an organisational structure in place within 24 months of the project initiation. This, unfortunately, has not happened yet. While the SAEE is taking the lead on working with EMIS, there is no formal decree yet appointing it, or another agency, as responsible for the national energy consumption database or for managing and implementing EMIS. In addition, experience from other countries shows that a national EMIS support unit is essential if EMIS is to suceed. Without national legislation and/or regulations in place it is highly unlikely that EMIS will be sustainable. The project calls for at least 20 new cities in Ukraine to be implementing EMIS by the end of the project and at least 5 cities implementing EMIS by the half way point. The project reports that 10 cities and some 498 public buildings in Ukraine now use EMIS. However, it should be noted that while 498 buildings in 10 cities represents a good start, there are over 44,000 public buildings in Ukraine so 498 buildings represents slightly over 1% of the total building stock.    This project, which started out as a NIM project, for slightly over a year working initially with the National Implementing Partner as the Ministry of Regional Development but it was changed to DIM in February 2018 , and after this time, the State Agency of Energy Efficiency (SAEE) became the main implementing partner while still using DIM modality. This appears to be a good decision because firstly the Ministry of Regional Development was not active in working with the project and secondly the SAEE is a logical place to put the EMIS central support unit and the central database of energy consumption in all buildings. However, EMIS will only be successful if there is a strong co-financing commitment from the state budget and there is a Central Support Unit and the appointment of energy managers in municipalities becames mandatory under Ukrainian law. The project has a long way to go in order to make the EMIS sucessful and critical will be the appropriate and adequate raising of proper and real co-financing..    The project also awarded cash to 5 small grants projects (in advance) at the end of 2017 and explained what was done in a note to file in April 2018. This represents a budget deviation which was never approved by the RTA and/or UNDP HQ but done anyways. Repeated follow up to the UNDP CO and to UNDP HQ have been unable to resolve this issue for the past 16 months, a sign that the oversight system of UNDP on GEF projects needs improvement. The project reports that five grants that were implemented in 2017-2018 using SGP mechanism also led to GHG emissions reduction of 29.9 t CO2 annually but it does not mention what types of projects these were or any other information. In addition, if this is the case then it appears that the CO2 reduction targets are met. This should be looked into further and this is a kind reminder once again to UNDP GEF HQ and to the Senior Technical Advisor on Climate Change Mitigation in New York to please follow up on this issue in order to make sure that everything is done by the rule book, given that UNDP HQ has already told UNDP Ukraine in writing that what took place is not allowed.    A critical risk might be that the project does this again and fires off more money to small grants program projects and steps should be taken in terms of improved oversight to stop the project just sending money to another project in order to show accelerated disbursement. The UNDP GEF HQ management and the STA on climate change mitigation in the GEF team needs to look into this issue and decide what needs to be done in order to rectify the situation | |

# Gender

**Progress in Advancing Gender Equality and Women's Empowerment**

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning.  The Project Manager and/or Project Gender Officer should complete this section with support from the UNDP Country Office.

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| **Gender Analysis and Action Plan:** *not available* |
| **Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.** |
| *(not set or not applicable)* |

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| **Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):** |
| Contributing to closing gender gaps in access to and control over resources: No |
| Improving the participation and decision-making of women in natural resource governance: No |
| Targeting socio-economic benefits and services for women: Yes |
| Not applicable: No |

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| **Atlas Gender Marker Rating** |
| **GEN1:** some contribution to gender equality |

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| **Please describe any experiences or linkages (direct or indirect) between project activities and gender-based violence (GBV). This information is for UNDP use only and will not be shared with GEF Secretariat.** |
| N/a |

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| **Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women.**    **Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.** |
| Project has developed a TOR for hiring a specialist to perform a gender analysis. The assigment should be completed by the spring 2020. Meanwhile, a gender component was included in all monitoring activities and data: now all activities of the Project include gender aspect, namely – gender composition of people benefited from pilot projects, energy management, education and trainings are routinely recorded in project’s reports |

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| **Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.** |
| One of the main outcomes of the project is to establish a nation-wide, sustainable energy management practices and systems in small and medium sized cities and villages. This includes the involvement of a large number of workers receiving training required for new job assignments and duties related to daily energy management and monitoring. As it happens, the majority of workers in municipal buildings (especially in kindergartens, schools, medical care facilities) are female.  Women and children are one of the primary target groups of all the Project's activities related to energy efficiency improvement of any kind. Improved heating systems and sanitary conditions in the public buildings have direct positive impact both on the working process and productivity of women as well as the learning process for children. EEPB Project actively engaged women and, by this, contributed to gender equality in energy sector, which is a traditionally male-dominated field in Ukraine. When training people on energy efficiency monitoring, the EEPB Project made sure that new knowledge and skills are distributed equally among men and women. As a result, over 300 people were educated to perform energy monitoring as energy managers in 10 pilot EMIS cities, among which 71.7% are females, 28.3% are males. Overall, more than 600 personnel received new job assignments in all pilot cities 58% of which are females.  EEPB Project in cooperation with GEF SGP in Ukraine settled 10 grants for promoting energy efficiency and energy monitoring throughout Ukraine. 6665 women benefited from them, both in direct and indirect way. |

# Social and Environmental Standards

**Social and Environmental Standards (Safeguards)**

The Project Manager and/or the project’s Safeguards Officer should complete this section of the PIR with support from the UNDP Country Office. The UNDP-GEF RTA should review to ensure it is complete and accurate.

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| **1) Have any new social and/or environmental risks been identified during project implementation?** |
| No |

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| **If any new social and/or environmental risks have been identified during project implementation please describe the new risk(s) and the response to it.** |
| *(not set or not applicable)* |

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| **2) Have any existing social and/or environmental risks been escalated during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.** |
| No |

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| **If any existing social and/or environmental risks have been escalated during implementation please describe the change(s) and the response to it.** |
| *(not set or not applicable)* |

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| **SESP:** [SESP 15-02-2015.docx](https://undpgefpims.org/attachments/4114/213082/1649325/1649606/SESP%2015-02-2015.docx)  **Environmental and Social Management Plan/Framework:** *not available* |
| **For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.** |
| *(not set or not applicable)* |

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| **3) Have any required social and environmental assessments and/or management plans been prepared in the reporting period? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.** |
| Not Applicable |

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| **If yes, please upload the document(s) above. If no, please explain when the required documents will be prepared.** |
| *(not set or not applicable)* |

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| **4) Has the project received complaints related to social and/or environmental impacts (actual or potential )?** |
| No |

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| **If yes, please describe the complaint(s) or grievance(s) in detail including the status, significance, who was involved and what action was taken.** |
| *(not set or not applicable)* |

# Communicating Impact

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| **Tell us the story of the project focusing on how the project has helped to improve people’s lives.**  **(This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.)** |
| Chortkiv Success Story: Power monitoring scheme saves Ukrainian town energy and money    Wasted energy means wasted money, wasted resources and even wasted opportunity for future generations to fully enjoy the wealth of nature.    Energy saving and energy efficiency are the opposites of waste. When it comes to energy use, energy management is the process of monitoring, controlling and saving energy in a building or an organization. Energy management typically involves metering energy consumption, collecting and analyzing the data, finding opportunities and taking actions to save energy and then monitoring the results.    Energy management can be organized both in a very straightforward way through “manually” gathering and controlling energy data, or involve sophisticated equipment and technology for data collection, analysis and forecast. However, any approach to energy management in municipal buildings is able to contribute to energy savings, prolonged equipment lifetime and better facility management. A rural Ukrainian town prompts that it is able to improve people’s life as well.    ….The lights are going out in Chortkiv, a pretty town in rural Ternopil Oblast, in the west of Ukraine.    But there’s no catastrophe here: Rather, the town has been energized by a new, simple and affordable energy monitoring and management system, introduced with the support of UNDP, which is encouraging locals to save energy – and thousands of hryvnias for the local budget.    The idea behind the system is simple, and it didn’t require major capital investments. Instead, public sector employees working in public buildings, schools and kindergartens were trained to periodically collect energy meters data and fill in electronic and paper forms.    The data collected is sent to an energy management team at the city administration, who sift through to look for “leaks” of energy or other resources and work out ways to plug those leaks quickly. Sometimes the action taken can be as simple as turning out the lights or tightening a leaky valve.    The results of the project, which kicked off late in 2017, have been impressive. During the first year, 2018, around UAH 900,000 in budget funds were saved. And using less energy means less climate-changing CO2 going into the atmosphere: Electricity consumption in the town’s public buildings last year was down by 111.5 megawatt hours, or 4.9 percent, which translates into a reduction of 26.1 tonnes of CO2 emissions.    This year the town has already saved a total of UAH 326,000 – more than 11 percent of which, or UAH 38,000, has been handed out as bonuses to the council energy managers.    Volodymyr Shmatko, Chortkiv’s young and energetic city mayor, has given some of the money saved through the project as prizes to reward the town’s best energy savers.  He describes the rationale behind the bonus scheme.    “Collecting monitoring data often means climbing down into a dimly lit and wet basement every day – not the most enjoyable of tasks – and people are naturally reluctant to do it,” Shmatko says.    So this year UAH 38,000 – around 11 percent of the money saved – has already been handed out as bonuses to the council employees operating the energy management system.    “When, for the first time ever, during celebration of Sustainable Energy Day in Chortkiv, in front of the local community and activists, we handed over a well-deserved prize of UAH 5,000 ($192) to ‘the best energy manager’ – previously a school janitor – it was big news in our town!” Shmatko says.    UNDP project experts recommended that Chortkiv implement a system that motivates the workers of the energy management system. But while the idea of such a motivational scheme has been mooted in Ukraine for some time, so far only the authorities in Chortkiv have been bold enough to use it. With legal support from the UNDP and approval from the city council, the relevant motivational energy management provision was adopted in Chortkiv in 2018.    That boldness has paid off: Monitoring conducted this year as part of the project has proved that the new, motivational energy-management system not only maintained a low level of consumption of energy, but also made the town’s use of energy in the municipal sector 36 percent more efficient.    And with the money saved, the town not only has money to give out in bonuses to encourage energy-saving behaviour – there are more funds for repairs or modernizations, which have the potential to feed back into even more savings for the budget.    On top of that, locals now better understand what it really means to save energy and, more importantly, how to do it on a day to day basis, which, according to one of the town’s young energy managers, Yulia Demkovych, has changed their behaviour. “People have literally competing to chase after energy losses, switching off unnecessary lights everywhere!” Demkovych laughs. |

**Knowledge Management, Project Links and Social Media**

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| **Please describe knowledge activities / products as outlined in knowledge management approved at CEO Endorsement /Approval.**    **Please also include: project's website, project page on the UNDP website, blogs, photos stories (e.g. Exposure), Facebook, Twitter, Flickr, YouTube, as well as hyperlinks to any media coverage of the project, for example, stories written by an outside source. Please upload any supporting files, including photos, videos, stories, and other documents using the 'file lirbary' button in the top right of the PIR.** |
| Project website: http://eepb.org.ua/  UNDP website: http://www.ua.undp.org/content/ukraine/uk/home/projects/energy-efficiency-in-public-buildings-in-ukraine-.html  YouTube: https://www.youtube.com/channel/UCN1IIAs97fP\_sQEBfhYip-Q/about?view\_as=subscriber |

# Partnerships

**Partnerships & Stakeholder Engagment**

Please select yes or no whether the project is working with any of the following partners. Please also provide an update on stakeholder engagement. This information is used by the GEF and UNDP for reporting and is therefore very important!  All sections must be completed by the Project Manager and reviewed by the CO and RTA.

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| **Does the project work with any Civil Society Organisations and/or NGOs?** |
| Yes |

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| **Does the project work with any Indigenous Peoples?** |
| No |

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| **Does the project work with the Private Sector?** |
| Yes |
| Yes |

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| **Does the project work with the GEF Small Grants Programme?** |
| No |

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| **Does the project work with UN Volunteers?** |
| Yes |

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| **Did the project support South-South Cooperation and/or Triangular Cooperation efforts in the reporting year?** |
| Yes |

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| **CEO Endorsement Request:** [FOR SUBMISSION - PIMS 4114\_RCE\_Endorsement\_EE\_Buildings (version of 10 December 2015).docx](https://undpgefpims.org/attachments/4114/213082/1649343/1649624/FOR%20SUBMISSION%20-%20PIMS%204114_RCE_Endorsement_EE_Buildings%20%28version%20of%2010%20December%202015%29.docx) |
| **Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description of the Stakeholder Engagement Plan as documented at CEO endorsement/approval (see document below). If any surveys have been conducted please upload all survey documents to the PIR file library.** |
| *(not set or not applicable)* |

# Annex - Ratings Definitions

**Development Objective Progress Ratings Definitions**

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

**Implementation Progress Ratings Definitions**

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.