

Sustainable Energy Efficiency in Municipal Services (SEEMS)

Part I: Project Information

GEF ID 10896

Project Type MSP

Type of Trust Fund GET

CBIT/NGI CBIT No NGI No

Project Title Sustainable Energy Efficiency in Municipal Services (SEEMS)

Countries

Ukraine

Agency(ies) World Bank

Other Executing Partner(s) Ukrexim Bank GEF Focal Area Climate Change **Executing Partner Type** Government

Taxonomy

Focal Areas, Influencing models, Stakeholders, Gender Equality, Integrated Programs, Capacity, Knowledge and Research, Partnership, Type of Engagement, Beneficiaries, Gender Mainstreaming, Knowledge Exchange, Peer-to-Peer, Climate Change, Climate Change Mitigation, Energy Efficiency, Financing, Convene multistakeholder alliances, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Deploy innovative financial instruments, Local Communities, Private Sector, Financial intermediaries and market facilitators, Communications, Behavior change, Awareness Raising, Public Campaigns, Consultation, Information Dissemination, Gender-sensitive indicators, Sex-disaggregated indicators, Gender results areas, Capacity Development, Innovation, Knowledge Generation, Learning, Theory of change, Enabling Activities

Rio Markers Climate Change Mitigation Climate Change Mitigation 2

Climate Change Adaptation Climate Change Adaptation 0

Duration 60 In Months

Agency Fee(\$) 156,032.00

Submission Date 11/24/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directio	ns Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-1-3	GET	1,642,441.00	300,000,000.00
	Total Project Cost (\$)	1,642,441.00	300,000,000.00

B. Indicative Project description summary

Project Objective

The project aims to scale up the use of energy-efficient technologies in municipal facilities and services in Ukraine, thereby contributing to a reduction of energy consumption (energy savings) that will reduce GHG emissions and improve air quality in cities. The World Bank and GEF funds will be channeled and managed through Ukrexim Bank to municipalities, to finance eligible capital investments and technical assistance activities which will enable a better-managed energy consumption, energy savings, and a reduction of the municipal energy bill. This viable approach for expanding municipal EE financing in Ukraine will also demonstrate and contribute to the sustainability of municipal services while improving the financial performance of municipalities.

Project Outcomes

1. Improvement of quality and efficiency of municipal energy services ?

2. Strengthening of municipal capacity to prepare and plan municipal EE projects

Project Component	Financin g Type	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. EE investments and credit enhancement mechanism (Investment)	Investment	GET	1,442,441.00	299,000,000.00
2. Promotion of enabling environment for municipal Energy Efficiency investments (TA)	Technical Assistance	GET	200,000.00	1,000,000.00
	Sub T	otal (\$)	1,642,441.00	300,000,000.00

Project Management Cost (PMC)

Project Management Cost (PMC)

Sub Total(\$)	0.00	0.00
Total Project Cost(\$)	1,642,441.00	300,000,000.00

C. Indicative sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co- financier	Type of Co- financing	Investment Mobilized	Amount(\$)
GEF Agency	World Bank	Loans	Investment mobilized	300,000,000.0 0
		Total	Project Cost(\$)	300,000,000.0 0

Describe how any "Investment Mobilized" was identified

The Investment Mobilized is the US\$300,000,000 IBRD Loan.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agenc y	Trus t Fun d	Countr y	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
World Bank	GET	Ukraine	Climat e Chang e	CC STAR Allocation	1,642,441	156,032	1,798,473.0 0
			Total GE	F Resources(\$)	1,642,441.0 0	156,032.0 0	1,798,473.0 0

E. Project Preparation Grant (PPG) PPG Required **false**

PPG Amount (\$)

PPG Agency Fee (\$)

Agenc y	Trust Fund	Country	Foca I Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
			Total F	Project Costs(\$)	0.00	0.00	0.00

Core Indicators

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	3105000	0	0	0
Expected metric tons of CO?e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	3,105,000			
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting	2023			
Duration of accounting	20			

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)	24,433,277,13 7			

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

	Capacity		Capacity	Capacity
	(MW)	Capacity (MW)	(MW)	(MW)
Technolog	(Expected at	(Expected at CEO	(Achieved at	(Achieved
у	FIF)	Endorsement)		al IE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	363,468			
Male	276,532			
Total	640000	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Indicators 6.2 and 6.4: Three types of public infrastructure subprojects were selected for energy consumption reduction and associated CO2 reduction analysis: (i) public buildings thermal retrofit, (ii) public buildings internal heating system upgrade and (iii) street lighting renovation. The sampling of three types of projects were selected from the list of already implemented projects in Ukraine in the period 2013-2018 which provides detailed information about investments in EE measures, actual energy consumption measured before project implementation and after https://misto-em.org.ua/proekty/#projects . Subprojects analysed included the following investments: - Building heating system upgrade: installation of individual thermal point (ITP), installation of an automatic weather-dependent regulator, replacement of the distribution pipeline with insulation, energy management. -Thermal retrofit of building: insulation of building envelope, replacement of windows, heating system, ventilation, and lighting improvements. - Street lighting renovation: replacement of lamps with fastening like LVD-150, fixing some columns, laying of the SIP cable. Actual energy savings reported in the implemented projects were converted to the primary energy savings using conversion to primary energy factors 1.3 for DH thermal energy and 2.3 for electricity, based on the Primary factors and Member States regulation and on the EC Comprehensive study of building renovation activities. Emission factors for conversion of kWh primary energy saved to the tons of CO2 savings were based on Ukraine?s Greenhouse Gas Inventory 1990-2019 report. For DH heat thermal energy savings was used 0.0002709 tCO2/kWh conversion factor and for electricity 0.0010110 tCO2/kWh. Table 1 in Annex 1 presents a summary of the energy savings and CO2 emissions reductions by subproject. Based on this analysis, energy savings from the project are expected to amount to 24,433,277,137 MJ over the project lifetime. Reduction of CO2 emissions for the lifetime

of investments (see Table 2 in Annex 1), were calculated based on the different lifecycle of investments for three types of project technologies analyzed: 20 years lifecycle was used for public building thermal retrofit investment, 15 years for heating system and 10 years for street lighting modernization. The total value of CO2 reduction is estimated at 846,000 tCo2 over the project duration (by end 2026) and 3.105 million tCo2 over the lifetime of investments. Total beneficiaries have been estimated based on a portfolio of 57 municipalities of various population sizes (large, medium and small). It is estimated that total indirect and direct beneficiaries amount to 6,4 million inhabitants, of whom 10% are direct beneficiaries who are using improved municipal energy services while the rest of the population in the targeted cities could benefit from a reduction in tariffs (resulting from expected decrease in marginal cost of electricity) as well as better allocation of scarce municipal resources in key sectors such as health and education.

Part II. Project Justification

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

Note that activities are expected to be undertaken in 57 municipalities throughout Ukraine. Coordinates for 12 indicative cities are provided:

Lutsk: 50.7472? N, 25.3254? E

Khmelnytsky: 49.4230? N, 26.9871? E

Slavutych: 51.5222? N, 30.7457? E

Kyiv: 50.4501? N, 30.5234? E

Poltava: 49.5883? N, 34.5514? E

Dnipro: 48.4647? N, 35.0462? E

Odesa: 46.4825? N, 30.7233? E

Kherson: 46.6354? N, 32.6169? E

Mariupol: 47.0971? N, 37.5434? E

Severodonetsk: 48.9482? N, 38.4879? E

Kropivnitskiy: 48.5079? N, 32.2623? E

Zaporizhzhia: 47.8388? N, 35.1396? E



2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities

Civil Society Organizations

Private Sector Entities No

If none of the above, please explain why: Yes

During the early stage of preparation, the project team met with several entities in the Government (Ministry of Energy, Ministry of Finance, Ukrexim Bank) as well non-Government entities such as the Association of energy auditors, the Covenant of Mayors, the Energy Efficiency Fund and key International Financing Institutions (IFIs) involved in Energy Efficiency in Ukraine (USAID, GiZ, NEFCO, EBRD, EIB) to assess gaps in the municipal energy efficiency market and discuss possible solutions. Further consultation with a wider group of stakeholders will be carried out as project preparation proceeds.

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

During project preparation, Ukrexim Bank will prepare a Stakeholder Engagement Plan (SEP) to ensure that a consistent, comprehensive, coordinated, and culturally appropriate approach towards stakeholder engagement during preparation and implementation. The table below summarizes the various stakeholders under the project. A stakeholder Grievance Redress Mechanism (GRM), as part of the SEP, will be operationalized for the project to allow for feedback and complaints, building on the existing experience of Access to Long-Term Finance in Ukraine. The first step for the preparation of this plan will consist of a stakeholder analysis to identify key stakeholders including vulnerable and disadvantaged groups such as elders, female stakeholders, and persons with disabilities. Such stakeholders include participating municipalities and various municipal entities benefitting from the project (such as District Heating and Water companies), as well as communities hosting the subprojects (including through associations representing these communities, such as women's associations, etc.), private sector EPC/ESCO companies. UEB will carry out consultations on project activities with key stakeholders, ensuring that they are inclusive and accessible (in terms of the format, language, and location), and will propose differentiated measures to effectively engage such groups, taking into account restrictions due to COVID. Means of engagement will include: publication of information on the project proposed activities on the UEB website, virtual/in person meetings to present the project to identified stakeholders and receive feedback, and in person/virtual focus groups with select civil society groups (such as associations representing more vulnerable beneficiaries).

Please see below matrix of key stakeholder groups and their roles in project implementation.

Ukrexim Bank (UEB) and Project Implementation Unit	UkreximBank is the main stakeholder of the project, as the Financial Intermediary of the IBRD loan. With the support of its PIU, UEB will provide EE loans to municipalities. UEB and PIU will receive training and capacity building to ensure adequate implementation of the project.
Ministry of Regional Development (MoRD)	MoRD develops local-level policies and programs and has played an important role in the implementation of EE initiatives at the municipal level. The project will actively coordinate with MoRD pipeline identification, engagement with and selection of municipalities to ensure synergies/lack of duplication.
Municipalities	Municipalities are the main beneficiaries of the proposed project alongside with their communities. Dynamic engagement during preparation and at the onset of implementation will be key -

Stakeholder group

Role

Ministry of Energy	The Ministry of Energy (MoE) supervises the energy sector, including energy efficiency policy. The project will engage with the Ministry, focusing on how to ensure alignment on efforts to promote a more conducive EE environment at the municipal level.
Urban communities	Communities living in targeted municipalities are the main beneficiaries of the project. The SEP will help identify and define how to best inform them about the project, obtain feedback and keep them engaged throughout the project, taking into account any mitigation measures needed to address potential E&S adverse impacts. Special attention will be brought on how to ensure participation of women and young girls in the project.
EE equipment contractors/providers	Private contractors will provide EE equipment and systems. Early on, the project will provide transparent information on activities in order to ensure level playing field for the private sector to participate in the project and optimize technical quality.

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

A preliminary analysis of gender inequalities in the energy sector points towards high gender inequalities in the labor market in Ukraine, including in the energy sector. The energy sector is male dominated, as in many other countries in the region: whilst women account for 54 percent of the overall workforce, this number falls to 33 percent in energy supply and 24 percent in mining. This is due, among other factors, to protective provisions of the national legislation, which prohibited women until 2017 to do certain jobs with difficult or dangerous work conditions (the restriction remains in place in the mining sector) as well as traditional perception of gender roles at the individual and professional levels. The situation in the financial sector (where UEB operates) is better, as illustrated by the 65% share of female staff at UEB. Consultations on the SEP will help refine this preliminary analysis. Several gender actions are being proposed to be implemented as part of the capacity building activities (such as: gender specialist in the Project Implementation Unit (PIU), Capacity development training and coaching support on gender aspects for staff in UEB; development and revision of workplace Gender Equality Policy/Strategy in UEB, job coaching and mentoring for women in leadership positions in participating municipalities, EE companies and ESCOs, Gender based violence prevention and response awareness creation trainings for staff, leaders and managers, both in UEB, participating municipalities and ESCOs/contractors involved in the project etc). The

project will include gender specific indicators that track the progress in implementing the proposed actions.?????

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women. Yes

Will the project?s results framework or logical framework include gender-sensitive indicators?

Yes 4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The project seeks to help develop a market for private sector investments in municipal EE infrastructure, by demonstrating the viability of municipal EE financing and therefore allowing for a gradually increasing participation of the private sector in this market. First, EE equipment and system private companies will be contracted under the Project to carry out the required works. Second, the project will strive to involve ESCOs. Eventually, by helping assess and confirm capabilities, risks, costs, and opportunities of EE investments and the private companies/ESCOs involved, it is expected that the project will create a path for commercial banking to meet much larger needs in the short, medium, and long term.

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

	CEO Endorsement/Approva		
PIF	1	MTR	TE

Medium/Moderate

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Environmental Risk Rating: Moderate

The environmental risk is assessed as Moderate because the anticipated risks and impacts associated with the implementation of small-scale civil works on Component 1 sub-project level are localized, site-specific with low probability of serious adverse effects to human health, safety and/or environment, limited in time, predictable and small in magnitude. At the same time, generation of demolition debris and excess material and potentially some hazardous waste (old light bulbs, asbestos containing material) is expected, and will require proper handling to avoid negative impacts on the health and safety of workforce, communities and the natural environment. To manage these risks, a project-level environmental and social management system (ESMS) will be established prior to the sub-project approval process. In summary, Project activities are not expected to have large-scale, significant, and/or irreversible environmental and social impacts. The Borrower is committed to managing the environmental risks and their capacity in managing these risks and adverse impacts is satisfactory.

Social Risk Rating: Moderate

Social risks and impacts of the project are moderate as activities will not take place in any residential buildings; the project is aimed at improving services provided in various public buildings. No physical or economical displacement is anticipated under the project. Land acquisition and any activities which cause restrictions on land use and/or involuntary resettlement will not be an eligible capital investment under the Project. The proposed Project?s activities will include launching of dissemination campaigns to increase municipal awareness on Energy Efficiency, with technical training programs on energy efficiency targeted at women. E&S documents to be prepared for this project will include Labor Management Procedures (LMP) and a Stakeholder Engagement Plan (SEP); they will take into account coordination and consultation with project affected people (PAPs), workers in municipal energy companies and other stakeholders according to ESS 2 and ESS10. The project-level Grievance Redress Mechanism (GRM) will be established and operationalized throughout the project life, as part of the SEP. Based on the above, the social risk is considered to be moderate.

Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Risk Rating: Low

SEA/SH risks will be assessed further during preparation. At this stage, the SEA/SH risk is estimated to be Low based on the scale of activities, existing analysis of the country context with regard to gender-based violence and of the relatively wide availability of referral mechanisms and support services.

Supporting Documents

Upload available ESS supporting documents.

Title

Submitted

Concept ES Review Summary (ESRS)

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name	Position	Ministry	Date
Ms. Olena Miskun	Head of Division on International Agreements and Projects	Ministry of Environmental Protection and Natural Resources of Ukraine	11/19/2021

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

Please see section 1b above.