UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

SUSTAINABLE DEVELOPMENT GOALS

Project Implementation Report

(1 July 2022 – 30 June 2023)

Project Title:	*Introduction of Energy Management System Standard in Ukrainian Industry*
GEF ID:	*4784*
UNIDO ID:	*120321*
GEF Replenishment Cycle:	*GEF-5*
Country(ies):	*Ukraine*
Region:	*ECA - Europe and Central Asia*
GEF Focal Area:	*Climate Change Mitigation (CCM)*
Integrated Approach Pilot (IAP) Programs[1]:	*n/a*
Stand-alone / Child Project:	*n/a*
Implementing Department/Division:	*ENE / ESI*
Co-Implementing Agency:	*n/a*
Executing Agency(ies):	*UNIDO*
Project Type:	*Full-Sized Project (FSP)*
Project Duration:	*60*
Extension(s):	*3*
GEF Project Financing:	*5,550,000*
Agency Fee:	*555,000*
Co-financing Amount:	*34,000,000*
Date of CEO Endorsement/Approval:	10/21/2013
UNIDO Approval Date:	10/21/2013
Actual Implementation Start:	1/21/2014
Cumulative disbursement as of 30 June 2023:	*4,896,919.96 (including 1.5 mio USD obligated for the LGF)*
Mid-term Review (MTR) Date:	12/7/2017
Original Project Completion Date:	1/21/2019
Project Completion Date as reported in FY22:	12/31/2023
Current SAP Completion Date:	12/31/2023
Expected Project Completion Date:	12/31/2025

[1] Only for **GEF-6 projects**, if applicable

Expected Terminal Evaluation (TE) Date:	10/1/2025
Expected Financial Closure Date:	9/30/2026
UNIDO Project Manager[2]:	*Marco Matteini*

I. Brief description of project and status overview

Project Objective

Project "Introduction of Energy Management System Standard in Ukrainian Industry" (UKR IEE project) is to contribute to a sustainable transformation of industrial energy usage practices in Ukraine. The Project aims to do this by supporting and promoting the concepts of Energy Management System (EnMS) and Energy Systems Optimisation (ESO), along with the introduction and promotion of the ISO50001 Energy Management Standard and all EnMS related standards of ISO 50000 family. The UKR IEE project's primary initial target industrial sectors are chemicals, production of construction and building materials, metallurgy and mining. In order to achieve the goal of increased energy efficiency in these subsectors as well as others, the UKR IEE project will stimulate the demand of energy efficient services through: (i) the formulation and implementation of enabling policy and regulatory frameworks for EnMS and ESO adoption; (ii) the creation of the necessary institutional capacity to implement programmes on EnMS, awareness raising, energy audits, and demonstration projects; (iii) support the supply of energy efficient services by building the institutional capacities to accredit and certify EnMS compliance under the ISO50001 standard; (iv) training local trainers and consultants in EnMS implementation and ESO; and (v) putting in place a financial incentive mechanism to support the uptake of EnMS and ESO within the project pilot enterprise programme. The UKR IEE project contains three primary components and M&E component.

The UKR IEE project is in line with the national priorities of Ukraine to ensure the energy security of the country, reduce fossil fuel consumption and thus, reduce the country's dependence on imported fuel, which will in its turn reduce the CO2-equivalent emissions and increase of competitiveness of the national economy.

Project Core Indicators		Expected at Endorsement/Approval stage
	Reduction of the Greenhouse Gas Emissions (metric tons of CO2e)	580,000 tonnes of CO2 eq saved over a 10 year timeframe (3,305 GWh direct savings over 10 years)

Baseline

The Ukrainian economy is highly energy intensive when compared with other economies. In 2010 Ukraine consumed 0.55kg of fuel per $1,000 of GDP compared to 0.1kg for Germany, 0.2kg for Poland and 0.46kg for Russia (Draft Energy Strategy of Ukraine to 2030, 2012)). This is partly due to the economy being based on energy intensive industries, technology that lags the developed countries, and price subsidies in the internal energy markets. This results in poor energy independence and poor competitiveness in an increasingly global market.

The energy infrastructure is highly depreciated – in electricity generation and distribution, in the energy using infrastructure in energy intensive industry and in buildings and their heat systems. Energy tariffs are inappropriate for their costs of production with the result that modernising equipment is not financially attractive. Monopolies in electricity generation and in coal mining also result in significant inefficiencies.

Ukrainian industries are typically 3-4 times more energy intensive than similar industries in the EU. This is partly due to fixed assets which are old and inherently inefficient, but also due to the fact that Energy Management and Energy Efficiency have traditionally been given low priority within Ukraine.

The baseline project consists of a set of initiatives supported by the government of Ukraine through laws, government resolutions, presidential decrees, by laws, regulations, norms, standards, guidelines as well as strategies promoting sustainable energy use. The prevalence of formal EnMS is low and awareness of ESO is limited. 18 months after ISO50001 was published, only 1 site in Ukraine had an EnMS certified to ISO50001. While there are adequate amounts of finance available for investment in energy efficiency, the take up of these funds is low. Without the project it is likely that this situation would gradually improve, but very slowly due to the barriers identified below.

According to the UNFCCC report on the 5th National Communication (UNFCCC, 2011), C02 emissions will reach 561 million tonnes

[2] Person responsible for report content

CO2eq by 2020 – an increase of over 60% above 2010 levels.

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e. FY23. Please also provide a short justification for the selected ratings for FY23.

In view of the GEF Secretariat's intent to start following the ability of projects to adopt the concept of adaptive management[3], Agencies are expected to closely monitor changes that occur from year to year and demonstrate that they are not simply implementing plans but modifying them in response to developments and circumstances or understanding. In order to facilitate with this assessment, please introduce the ratings as reported in the previous reporting cycle, i.e. FY22, in the last column.

Overall Ratings[4]	**FY23**	**FY22**
Global Environmental Objectives **(GEOs)** / Development Objectives **(DOs)** Rating	*Moderately Satisfactory (MS)*	*Moderately Satisfactory (MS)*
The project activities are largely expected to deliver on GHG emissions reductions planned for the project.		
Implementation Progress **(IP)** Rating	*Moderately Satisfactory (MS)*	*Moderately Satisfactory (MS)*
The war in Ukraine has had a severe impact on industrial infrastructure, businesses and population at large. Despite the continued major challenges posed by the conflict the project implementation of most of the activities is in substantial compliance with the original plan.		
Overall **Risk** Rating	*High Risk (H)*	*High Risk (H)*
The war in Ukraine has brought about an unprecedented scale of suffering, death and destruction. In economic terms, the war has triggered cascading shocks that are reverberating around the globe. The Russian invasion of Ukraine has continued to cause massive disruption of economic activity in Ukraine and damage to infrastructure, environment and livelihoods of Ukrainian people. This has had a substantial negative impact on all project stakeholders, and in particular industry and private sector ability and willingness to invest capital in energy efficiency projects.		

II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Please fill in the below table or make a reference to any supporting documents that may be submitted as annexes to this report.

[3] Adaptive management in the context of an intentional approach to decision-making and adjustments in response to new available information, evidence gathered from monitoring, evaluation or research, and experience acquired from implementation, to ensure that the goals of the activity are being reached efficiently

[4] Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
Component 1 – Policy and institutional support for the introduction of a national energy management system standard corresponding to ISO 50001				
Outcome 1: The policy and institutional framework supporting the national implementation of energy management system standard in industry is created				
Output 1.1: ISO50001 'Energy Management Systems Standard' is adopted as a national standard.	Ukrainian version of the standards available and technical discussions completed.	No standards from ISO 50000 family are adopted as national	Adoption of: ISO 50001, ISO50002, ISO50003, ISO50004, ISO50006, ISO 50015,	The ISO50001 standard is adopted as the state standard of Ukraine (DSTU) The Project has successfully initiated, managed and assisted in nationalization of the ISO 50000 series standards, in particular: (1) Nationalization (acceptance as a state standards) of five standards of the ISO 50000 family has been implemented: • DSTU ISO 50002:2016 - Energy audits -- Requirements with Guidance for Use; • DSTU ISO 50003:2016 - Energy Management Systems -- Requirements for Bodies Providing Audit and Certification of Energy Management Systems ISO 50003: 2016 Energy Management Systems; • DSTU ISO 50004:2016 - Energy Management Systems -- Guidance for the Implementation, Maintenance and Improvement of an Energy Management System; • DSTU ISO 50006:2016 - Energy Management Systems -- Measuring Energy Performance using Energy Baselines (EnB) and Energy Performance Indicators (EnPI) -- General Principles and Guidance; • DSTU ISO 50015:2016 - Energy Management Systems -- Measurement and Verification of Energy Performance of Organizations -- General Principles and Guidance. (2) Nationalization (acceptance as a state standards) of seven standards: • DSTU EN 15900: 2018 (EN 15900: 2010, IDT) Energy efficiency services – Definitions and requirements; • DSTU EN 16231: 2018 (EN 16231: 2012, IDT) Energy efficiency benchmarking methodology; • DSTU ISO / IEC 13273-1: 2018 (ISO / IEC 13273-1: 2015) Energy efficiency and renewable energy sources — Common international terminology — Part 1: Energy efficiency; • DSTU ISO / IEC 13273-2: 2018_ (ISO / IEC 13273-2: 2015) Energy efficiency and renewable energy sources - Common international terminology - Part 2: Renewable energy sources; • DSTU ISO 17741: 2018 (ISO 17741: 2016, IDT) General technical rules for measurement, calculation and verification of energy savings of projects; • DSTU ISO 17742: 2018 (ISO 17742: 2015, IDT) Energy efficiency and savings calculation for countries, regions and cities; • DSTU ISO 17743: 2018 (ISO 17743: 2016, IDT) Energy saving. Definition of a methodological framework applicable to calculation and reporting on energy savings. (3) Update of three national standards of the ISO 50000 series been initiated have been prepared and finalized by the Project. • ISO 50001: 2018 Energy Management Systems; • ISO 50007: 2017 Energy services - Guidelines for the assessment and improvement of the energy service to users (Energy Services: A Guide to Assessing and Improving Energy Services for Consumers); • ISO 50047: 2016 Energy savings - Determination of energy savings in organizations (Energy savings in organizations). Standards development with the project support was carried out by the Technical Committee for Standardization TK-48 "Energy Saving".

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
				The most recent three standards (50001:2018 - replacing the old version; and new ISO 50007 and ISO 50047) were adopted as National standards on September 15, 2020. The functions of the national standardization body (NOS) are performed by the Ukrainian Agency for Standardization (State Enterprise "Ukrainian Research and Training Center for Standardization, Certification and Quality" (State Enterprise "UkrNDNTS") The Project provided expert advice to the DSTU in reviewing new ISO standards and versions such as ISO 50005:2021, ISO 50003:2021 and ISO 50006:2023 and supported the national adoption process.
Output 1.2: Policy establishing a voluntary scheme to accelerate the introduction of EnMS is developed.	Improved awareness of the policy makers on best practices of other countries.	No voluntary scheme ever used as policy instrument for industrial energy efficiency	30 policy makers trained (with at least 10% being women).	With extension of the project duration and the progress previously achieved, the major objectives and activities related to this component are dedicated on the following: 1. Assistance, support, and engagement in the process of the EE legal Framework development. Project experts have very actively participated in the development of the draft of the EE Law of Ukraine as transposition of the EED 2021/27. The draft law has passed the 1st reading in the Parliament (on 04/03/2021; registered #4507) and is currently in preparation for the 2nd reading and the final voting. It was already articulated by the State Agency for Energy Efficiency and Energy Savings (SAEE) and its supervising state authority – the Ministry of Energy – that as soon as the EE Law is adopted, the development of secondary legislation and guidelines is required. Specific (acknowledged) contribution of the project consisted of: - Participation in the working groups under the chairmanship of the SAEE and the Energy Community Secretariat - On request by the Ministry of Energy, support in organization and carrying out dedicated round tables and "the Energy Efficiency Marathon" – experts and politicians 2-days event to boost the development of the EE Law. The project inputs have been recognized as critical for transposition of the Articles 7 (EE obligations and alternative measures, including VA schemes), 8 (Energy audits and energy management systems) and 16 (Availability of qualification, accreditation and certification schemes) of EED. - Consultation of the main stakeholders and state officials on the benefits of EnMS and suggested requirements to be reflected in the legislation. 2. On request by SAEE, revision and input to the National Energy Efficiency Plan (NEEP). With received input, it is expected that the project will take a more central role in assisting SAEE with the development of the new NEEP, work on which is expected to start at the end of 2021. 3. Promotion and piloting of an EnMS-IEE Leadership Award for Industry as additional policy instruments to showcase Ukrainian' success stories and leadership, in so doing inspiring and promoting more implementation actions within industry and other adjacent sectors. Structural setting and identification of the international and national partners have been concluded. Upon finalization of contractual arrangements, active phase of implementation of the National IEE Award Scheme will begin (expected Q3-Q4, 2021). 4. The project started the process for the design of a Voluntary Agreement Scheme on energy efficiency in industry. The project has engaged an international

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
				consultant to assist in finalization of the VA framework and design process. Active engagement of stakeholders and presentation of a VA Scheme draft was planned for March-April 2022 but had to be put on hold. As of June 2023 these activities are still on hold. In the course of carrying out this component, the project gained good reputation and acknowledgement of the expert input by the top state officials (Minister and Deputy-Ministers of the Ministry of Energy, Head and acting Head of SAEE). Project principal expert is included in the international organization expert advisory board to the Ministry of Energy (with SAEE). The Project regularly liaises with national key players and actively participates in the Donors Coordination Group, dedicated to Energy Efficiency.
Output 1.3 Accreditation scheme for EnMS service providers and Certification scheme for industries is established.	The minimum requirements for a framework for accreditation and certification discussed.		Identification and scoping assessments of the minimum requirements for a framework for accreditation and certification for training experts who can provide recognized certification audit services for enterprises.	Following extensive training previously provided by the project to the Ukrainian personnel certification bodies and the National accreditation authorities, the project has approved and issued Licence Agreements for ISO 50001:2018 Lead Auditor training course and qualification exam with 2 national accredited personnel certification bodies. Very good progress and results were achieved with activities related to the Ukrainian conformity assessment infrastructure for ISO 50001 energy management systems (EnMS). The project conducted during the last few years extensive and in-depth training programmes for certification bodies, the Ukraine accreditation body and individual professionals like lead-auditors and implementers. In 2020 the project signed a non-exclusive License Agreement with 2 Ukrainian entities, e.g. the Ukrainian Association of Quality (UAQ) and the Personnel Training Center (both accredited by the National Agency for Accreditation of Ukraine (NAAU)) for the use of the UNIDO UKR IEE's "ISO 50001-EnMS Lead Auditor" qualification training programme. UAQ has further obtained accreditation of the qualification programme by NAAU and the qualification programme is now recognized in the EU for the training and certification of Ukrainian specialists on conformity assessment of EnMS according to International standards ISO 50001 and ISO 50003. Thus, project's work is already being replicated and it will sustainably continue behind the project timeframe.
Output 1.4 National monitoring, reporting & verification methodology and structure to track energy performance at enterprise/sectoral / national level is set up.	MRV methodology and structure in place.		Institutional needs assessment for MRV; Institutional capacity building (technical and equipment); MRV programme design and launch.	1. Development of MRV institutional structure is under way with the MRV host (SAEE). The requirements for the establishment and operation of the MRV have been integrated into the draft of the National legislation (the EE Law of Ukraine). 2. Provision of technical expert recommendations and knowledge sharing with the Ministry of Energy, Ministry of Economy and SAEE with regard to national energy monitoring and verification scheme. Preparation of case-studies (10) with results IEE implementation in various industries. 3. The project supported development of Green Book and White Book on Energy Efficiency (prepared by GIZ on request from the Ministry of Economy) with specific input of the role of fiscal (financial instruments) and non-fiscal incentives in EE policy and regulation.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
				4. The project has developed 1st Edition 2020 of Guidebook for EnMS implementation according ISO 50001: 2018 to further stimulate promotion of EnMS best practices among all practitioners. 5. As part of the development of a series of national standards harmonized with international standards, ISO 50015 Energy Management Systems. Measurement and verification of energy efficiency of organizations. General principles and guidelines adopted as a state (DSTU ISO 50015: 2016) 6. Project builds synergies with other international donor-funded proejcts in Ukraine. As an example, collaboration with the Ukrainian-Danish Energy Center has been established for assistance in setting up the National Monitoring Center. the Project has provided equipment for the National Monitoring Center to the State Agency for Energy Efficiency and Energy Saving of Ukraine (SAEE) that meets the project's objective and is provided in accordance with agreed plans. As a practical support of the real business sector, the project has created a database of experts and companies, which can provide professional services on EnMS establishment, ESO and MRV, and have free but registered access to the project measuring equipment. Project has received appreciation for such support in successful implementation of various projects on by the Ukrainian Energy Consulting Group (UECG) Ventilation Systems Optimization (Black & Veatch projects). 7) On 11th April 2023 the Ukrainian Parliament approved the introduction of a carbon tax for industry whose revenues would flow in an approved and to-be-established State Fund for Decarbonization and Energy Efficiency Transformation (hereinafter simply the State Fund). Upon request of SAEE the project has started to provide direct expert advice to SAEE for the design and development of the State Fund and of a National Decarbonization Platform meant to complement and lever the State Fund resources.
Output 1.5: National award scheme for outstanding energy management performance is proposed.	Active energy management national award scheme.	No award scheme in place as policy instrument for promoting energy management and energy efficiency in industry	z	The project has completed structural setting and finalized the contractual arrangements to progress to active phase of implementation of the National IEE Award Scheme. On December 8th, 2021, the All-Ukrainian Award: Pacesetters for Energy Management is the first of its kind in Ukraine, which recognizes leading organizations for their energy management achievements was launched. On February 24, 2022 as result of the Russian Federation's invasion of Ukraine, the acceptance of applications from enterprises to participate in the Program was suspended. The project reached out so far more than 6000+ partners for participation at NAS. Before February 24, more than 100 representatives of enterprises were interested in the NAS and took part in the webinars. Cooperation was established with the expert associations, international technical assistance projects to disseminate information about the program: ✓ Project "Promotion of energy efficiency and implementation of the EU Directive on energy efficiency in Ukraine", GIZ ✓ Ukrainian Union of Industrialists and Entrepreneurs ✓ Center for resource efficient and clean production ✓ Energy Managers Training Center, EUREM ✓ Association of Ecologists of Ukraine ✓ Lviv Chamber of Commerce and Industry

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
				✓ Educational and scientific institute of energy saving and energy management, link to the announcement, link to the announcement ✓ Federation of trade unions of Ukraine, The following webinars were prepared: 1) The All-Ukrainian Award: Pacesetters for Energy Management: rules and benefits for enterprises, December 23, 2021.The webinar was attended by 40 participants, and in Facebook it has +130 views. 2) The All-Ukrainian Award: Pacesetters for Energy Management: rules and benefits for enterprises, January 20, 2022. The webinar was attended by 62 participants, and in Facebook it has +159 views. 3) The New legal obligations for industry: energy management system and energy audit, January 27, 2022, Information about the Program and rules of participation was presented at this webinar. The webinar was attended by 135 participants, and in Facebook it has +361 views. 4) The filling out the application for participation in the Program and answering common questions, February 3, 2022 The webinar was attended by 14 participants 5) The filling out the application for participation in the Program and answering common questions, February 17, 2022.The webinar was attended by 100 participants. Following requests for updates about the Award from few enterprises, in May-June 2023 the project team resumed discussion with Ukrainian partners for the relaunch of the All-Ukrainian Award: Pacesetters for Energy Management, which is now planned for Sep-Oct 2023.
Component 2 – Building the national capacity on the planning, implementation & certification of energy management systems and system optimization				
Outcome 2.1: National capacity for implementation and certification of energy management systems standards in industry is developed				
Output 2.1: National training program on energy management systems is implemented	EnMS Training materials available in Ukrainian		EnMS Training materials adapted and available in Ukrainian	A national training program on Energy Management System (EnMS) was implemented. 22 enterprises took part in the UNIDO Expert training programme, 7 of which are already certified according to the ISO 50001 standard.
	Number of practitioners trained on implementation of Energy Management Systems disaggregated by gender		20 practitioners trained on implementation of Energy Management Systems disaggregated by gender	During the current FY the project has developed National EnMS Guidebook to support practitioners in EnMS implementation according to ISO 50001:2018. The Project had continued to actively engage with partner companies, specifically on: 1. Preparation of case-studies on EnMS-ESO-IEE implementation 2. Development of new EnMS promotion and support modality, more commercially-based oriented.
	Number of energy managers trained on EnMS disaggregated by gender		150 energy managers trained on EnMS implementation disaggregated by gender	The project has prepared database of project qualified EnMS-ESO experts which were successfully used by other TA projects, service providers and industrial enterprises that aim to implement IEE. Through capacity building component the project has ensured the solid background for market transformation and the readiness for launching project financial mechanism.
	Number of company managers/owners trained on EnMS implementation.		300 company managers/owners trained	

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
			disaggregated by gender.	
Output 2.2: National training program on System Optimization is implemented	ESO Training materials available in Ukrainian. Number of local practitioners trained in ESO disaggregated by gender. Number of vendors trained in ESO disaggregated by gender.		ESO Training materials adapted and available in Ukrainian. 20 practitioners trained on ESO in industry disaggregated by gender. 50 vendors trained on ESO disaggregated by gender.	A national Energy System Optimization (ESO) training program was implemented. The Project has continued to actively engage with partner companies, in particular on supporting project trained/ qualified technical experts in replicating ESO assessments and measures on a commercial basis, and promoting use of project measuring equipment. Impact of the project trained technical capacity (specifically in ESO ventilation) was acknowledged as critical and State and private sector beneficiaries All together 211 experts took part in the training workshops on Fan System Optimisation (FSO) and Compressed Air System Optimisation (CASO). Similarly as with EnMS, training with ESO is not purely theoretical training. All received theoretical knowledge is used on a specific industrial enterprise, which is consolidated by a group of experts. Project has developed the database of the service suppliers (practitioners and vendors) and update it regularly. This database is available for use by industrial companies.
Component 3 – Technology diffusion and deployment to promote implementation of energy management systems in selected industrial sectors				
Outcome 3: The sector wide penetration of energy management system standard is accelerated and System Optimisation and EE technologies promoted				
Output 3.1: Industry awareness of the environmental and economic benefits of energy management system standard is improved.	Project website Number of ESO/EnMS based EE materials available Number of workshops and awareness events on EnMS.		Project website operational. Numerous project and methodology publication releases and case studies (at least 10 different materials). 10 events/workshops and awareness events on EnMS and ESO organized.	The level of industry's awareness of the environmental and economic benefits of the EnMS Standard introduction has been continuously improved through engagement in various events, (conferences, workshops, roundtables etc.) with professional community, donors, NGOs and expert platforms Project website (http://www.ukriee.org.ua is regularly being updated) Produced case Studies are being promoted via project website and partner platforms. In order to ensure quality delivery of EnMS-ESO services the project made all UNIDO training materials and tools available to the project trained experts. Information about list of experts trained and qualified by the project, progress achieved by companies is available on the project website http://www.ukriee.org.ua/en/pilotni-pidpriiemstva/ This information is crucial for awareness raising of and “neighbouring effect” for other industries. The information on the UKR IEE Project and the applied methodology of the EnMS / ESO also has been disseminated through the participation of project team experts in numerous events (conferences, workshops, roundtables etc.) many of which also in FY2022 held online. The project has developed and placed a database of national experts, leading experts and trainers. this database is available on the project website and is useful for industries and consulting companies. The project is an active member of IEE Accelerator community to enhance knowledge sharing. The project experience regarding financial instrument implementation has been recognized, shared and suggested as an example to be followed.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
				(Industrial Energy Accelerator - global action towards energy www.industrialenergyaccelerator.org). The project, on request from the Ministry of Infrastructure of Ukraine, has assisted to the Ukraine Sea Port Authority in obtaining the COMFAR license and integration of this software in its valuation and risk assessment practices. Specific angle of such application was focused on energy savings and optimization of use of resources through optimization of logistics and operational processes.
Output 3.2: At least 18 companies in selected industrial sectors implement EnMS and are certified to ISO50001. At least 12 of these companies invest in EE technologies or System Optimization projects.	Number of companies that establish an EnMS within their plants. Number of companies that implement ESO within their plants.		18 projects on EnMS implemented in selected enterprises. 6 projects on ESO implemented in selected enterprises.	22 industrial companies have been trained and supported to implement EnMS in line with ISO 50001. The project tracks their progress and provides advisory support for duly process. Seven companies got their EnMS third-party certified to ISO 50001. The project continued in FY2022 engagement and discussion with potential partner companies on devising and piloting a new cost-shared modality to support and ensure quality implementation of EnMS-ISO 50001. Novoorzhytsky Sugar Plant from ASTARTA-Kyiv, a project company was recognized at international level by the Clean Energy Ministerial with an Insight Energy Management Leadership Award. The project integrates to the greatest possible extent (requirement in case of project's financial support is provided) data collection on energy savings and resources (cash and in-kind) invested by new partner companies in EnMS, ESO and other EE projects implementation. 12 CASO projects have been implemented by project partner companies. The project continued to work with Ukrainian enterprises to promote capacity building and implementation of EnMS-ISO 50001 and energy efficiency. In November 2021 the project partnered with IKEA in conducting a workshop for IKEA supply chain in Ukraine on Energy Efficiency policy requirements and financing in EE. In July 2022 UKR IEE project started to collaborate with the UNIDO "Global Eco-Industrial Parks Programme – Ukraine: country-level intervention" (GEIPP-Ukraine) funded by the Swiss State Secretariat for Economic Affairs towards the implementation of ISO 50001 EnMS and energy efficiency projects with a group of 3 industrial park management entities and 6 resident companies. During 4th Quarter of 2022 two additional companies joined the ISO 50001 EnMS – EE implementation programme. As of 30 June 2023 6 companies are still in the programme working on the implementation of EnMS and no-cost/low-cost energy efficiency/savings measures.
Output 3.3: Network group set up to support peer-to-peer sharing for companies involved with the project.	Peer-to-peer network operationalized		An operational peer-to-peer network	The following peer-to-peer network has been established and used for communication: Basecamp platform, e-mail communication, webinars (among a relevant international expert, a pilot project 'coaching' expert, representatives from a pilot company, and PMU experts) as well as project maintained direct contacts between consultants and industries.
Output 3.4: Revolving fund supporting technical assistance for	Revolving fund supporting the development of		A robust and effective revolving fund is established and launched.	The project has launched its financial mechanism by concluding partnership with Public Joint-Stock Company Joint Stock Bank (UkrGasBank). The parties have signed a contract that will enable the launch and operation of a

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
enterprises to engage in EE projects.	bankable projects setup. Number of EE projects prepared for financing.		10 EE Projects are prepared for financing.	US$1.5m Loan Guarantee Fund as special financial mechanism within the framework of the UNIDO-GEF project, Introduction of Energy Management System Standard in Ukrainian Industry. Supported by national stakeholders, and facilitated by Citibank Europe PLC, the Loan Guarantee Fund aims to help industrial companies access capital for the implementation of energy management systems in line with ISO 50001 and other energy efficiency measures. The Loan Guarantee Fund is the first guarantee-based financial mechanism launched by a UN agency with a selected financial partner in Ukraine. The LGF received first applicants in the end of 2021 and remains operational. Besides the substantial work carried out for the LGF, the project has continued to work on promotion and information/knowledge dissemination activities (conferences, training, case studies, opinion editorials and others) aimed to further stimulate demand for EnMS-ESO services and in turn investments for project implementation. In order, to mitigate/minimize the negative impact of the COVID-19 pandemic on performance of the Loan Guarantee Fund, a financial instrument that all PSC members recognized of critical importance to scale up Ukrainian industry investments in energy efficiency, resource efficiency and decarbonisation technologies, the Project Steering Committee endorsed in Dec 2020 an extension of the project completion date by 31 December 2023. However, due to the Russian Federation invasion of Ukraine and the beginning of the war, the ability of companies to invest in capital projects was negatively affected, especially in 2022, leading to only one loan being issued under the LGF. In the 1st and 2nd quarter of 2023 few companies approached UkrGasBank for the LGF but the limited remaining duration of the LGF and made the use of the LGF guarantees not viable. Considering that and the strong relevance and need for guarantees, the Project Steering Committee endorsed in June 2023 and final extension of the project completion date till 31 December 2025.
Component 4 – **Monitoring and Evaluation**				
Outcome 4: Monitoring and Evaluation				
Output 4.1: Regular monitoring exercises conducted, PIRs prepared, tracking tools according to GEF requirement prepared.	n/a	n/a		The Project prepares project tracking and monitoring reports and regular submits to HQ. The formal progress reports are prepared on semi-annual basis and duly distributed amongst the Project Stakeholders (SAEE, Ministry of Economic Development, Trade and Agriculture of Ukraine (MEDTA) and others). This PIR is prepared and submitted compliant to the GEF requirements.
Output 4.2: Mid-term and final project evaluation conducted.	n/a	n/a		Mid-Term review completed and reported. Project steering committee meetings conducted and documented. The request for project extension was endorsed by national beneficiaries (including GEF Focal Point) and

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
				supported by UNIDO and formally extended until December 2023. The final procedure requirement for extension a new project registration card was initiated.

III. Project Risk Management

1. Please indicate the overall project-level risks and the related risk management measures: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

Describe in tabular form the risks observed and priority mitigation activities undertaken during the reporting period in line with the project document. Note that risks, risk level and mitigations measures should be consistent with the ones identified in the CEO Endorsement/Approval document. Please also consider the project's ability to adopt the adaptive management approach in remediating any of the risks that had been sub-optimally rated (H, S) in the previous reporting cycle.

	(i) Risks at CEO stage	(i) Risk level FY 22	(i) Risk level FY 23	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
1	Lack of finance available for IEE	Modest risk (M)	Modest risk (M)	Substantial finance for EE projects is available – however interest rates are high and the number of good project proposals is limited. The project will set up a revolving fund to provide technical assistance to enterprises in preparing bankable projects and establish links with the financial institutions offering credit lines for EE	In order to reduce financial risk, the Project's designed/launched appropriate financial mechanism – a Loan Guarantee Fund.	☐
2	Lack of interest of enterprises in implementing EnMS	Modest risk (M)	Modest risk (M)	A comprehensive awareness plan is prepared aimed at business owners and senior managers to explain the benefits of implementing an EnMS and convince enterprises to avail of the training and technica	In order to encourage enterprise participation in the EnMS/ESO pilot/demonstration programme, EnMS Advance trainings were performed for the target industrial regions and sectors in Kyiv, Zaporizhzhya, Kharkiv, Odesa and Lviv (162 participants) in order to generate interest and demand. 22 pilot projects were selected for EnMS implementation, including PJSC "Arcelor Mittal Kryvyi Rih"; "Globino Sugar Plant", "Globino Soybean Processing Plant", "Zhdanov Sugar Factory" and "Yareskovsky Sugar Plant" by ASTARTA Holding; Zhytomir Cilica Plant; PJSC "Rud'"; Coca-Cola Beverages Ukraine Limited; PrJSC "Enzym"; "Lviv Isolator" - Ensulation Materials; JSC "Novoorzhic'kiy Tsukroviy Zavod"; JV "Vitmark-Ukraine" LLC; "Tetra Pak Ukraine" Ltd.; Heidelberg Cement; "Druzhkousky Machine Building Plant" and "Kharkiv Machine Building Plant "SVET SHAKHTYORA" by CORUM Group; PJSC "Kyiv Cardboard and Paper Mill"; SE "Udacha"; USEP "Ukrposhta"); UkrOrgSyntez Ltd. The war and associated negative impact on power and energy supply has triggered stronger interest of enterprises in energy	☐

[5] New risk added in reporting period. Check only if applicable.

	(i) Risks at CEO stage	(i) Risk level FY 22	(i) Risk level FY 23	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
					efficiency and consumption reduction; however due to the was major challenges remain in translating interest in actual actions and implementation.	
3	No immediate demand for trained practitioners in EnMS and ESO	Modest risk (M)	Low risk (L)	The awareness plan will help to generate demand for expertise, as well as the extensive dissemination of best practices from the project	EnMS awareness trainings were performed and sector events (conferences/seminars etc) have been participated in within the target industrial regions and sectors in Kyiv, Rivne, Kharkiv, Lviv, Dnipro, Kherson, Zaporizhzhya, and Odesa in order to generate interest and demand for EnMS/ESO. Trained practitioners are now in high demand and involved not only in UKR IEE Project activities, but also in other EU/US supported programmes: EUREM- European energy manager programme; CEM -certified energy manager programme) supported. UKR IEE Project trained practitioners are also involved in Industrial Energy Audit Programme by GiZ (as experts to evaluate potential energy savings also with consideration of EnMS establishment). Due to the ongoing war a significant share of industry personnel has been redeployed to the battle field leaving gaps within industry that have generated demand for new personnel and new trainings. The introduction of new Government programmes and regulations for energy efficiency are also triggering increased demand for professional profiles such as energy management and energy efficiency specialists.	☐
4	Lack of Government commitment to EM issues	Low risk (L)	Low risk (L)	The project will work closely with state agencies to ensure that they remain committed to the projects aims	The project has established good working relationship with both National Stakeholders: MinEnergy, MoEDT and SAEE. In addition to successful cooperation on nationalization of the ISO 50000 series standards, the Project participates in promotion of the development of the EE Law, compliant to the EED 2012/27, specifically in relation to the Article 8 (on Energy Audit and Energy Management). Good communication practice was established with main state bodies through the development process of EE Law of Ukraine and promoting EnMS concept. The Project team also actively participates in promoting the importance of IEE (first of all through establishment of EnMS for large industries) for sustainable economic development. A specific accent is made in context of decarbonization and decoupling for the sustainable economic growth. Within the reported fiscal year, such fruitfull collaboration was done with MEDTA and partner GiZ project and UDEC (Ukraine-Denmark Energy Center).	☐
5	Lack of access to energy use information from energy intensive sectors due to business confidentiality	Moderate risk (M)	Moderate risk (M)	The project will work with individual enterprises to allay concerns regarding confidentiality where possible	Development of a number of case studies for experience demonstration and knowledge sharing. Business sensitive information was aggregated to maintain clients confidentiality, however with key data available to serve as a sufficient incentive for other enterprises for other companies to invest in IEE.	☐

	(i) Risks at CEO stage	(i) Risk level FY 22	(i) Risk level FY 23	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
6	Lack of personnel for training as practitioners in EnMS and SO	Low risk (L)	Low risk (L)	The project will work with all stakeholders – in particular the Institute for Energy Saving and Energy Management at the Kyiv Polytechnic Institute - to identify suitable trainees	Targeting of, and the use of, industry and commercial sector bodies (i.e. Chamber of Commerce). The Project has already trained 25 EnMS trainers and 2 ESO trainers. The project is also testing a new non-grant/direct engagement modality with energy intensive enterprises to support dully EnMS implementation.	☐
7	Climate Change Risk	None	None	The project will help mitigate climate change and supports the Industries in adapting to its impacts	No such risk identified as to date	☐
8	Furthered political and security risks	Moderate risk (M)	Moderate risk (M)		This beyond the power of the project to address	☐
9	Constant changing Government personnel and mandate under Gov. reform functions	Low risk (L)	Low risk (L)		This beyond the power of the project to address	☐
10	Financial Mechanism risk - placing this fund will be a major effort to ensure all funds are protected and appropriately used.	Low risk (L)	Low risk (L)		In order to fully address this risk, the Project's designed/launched appropriate financial mechanism – a Loan Guarantee Fund.	☐
11	Project Intuitional/Executing Agency Risk with NTUU "KPI" unexpected actions and motivations.	Low risk (L)	Low risk (L)		Independent evaluation process combines with support from UNIDO and Project line ministry (MEDTA) conducted. NTUU "KPI" has terminated its participation in the Project in 2017 Close monitoring by Project Team with the support of national stakeholders following GEF process.	☐
13	Implications of the war in Ukraine	High risk (H)	High risk (H)		Adaptive management approach to project activities	☐

2. If the project received a sub-optimal risk rating (H, S) in the previous reporting period, please state the actions taken since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

The project had to adapt to the new context of the war, which has had major negative implications on the safety and ease of movement across the country, operations of industrial enterprises, deployment of some industry personnel and workforce to the battle field, increased investment risks and capability of government institutions to discharge their functions and pursue policy implementation in a war emergency context.

The project has tried as much as possible to adapt to the new context through the continued use of online meeting and learning activities, minimizing on-the-ground field visits, placing some activities on hold and starting new ones to respond to new needs like the support to the design of the newly established State Fund for Decarbonization and Energy Efficiency Transformation and the associated National Decarbonization Platform.

3. Please indicate any implication of the **COVID-19** pandemic on the progress of the project.

In FY2023 the COVID-19 pandemic did not negatively affect the project activities.

4. Please clarify if the project is facing delays and is expected to request an **extension**.

The project has experienced inevitable delays as result of the war initiated with the invasion of Ukraine by the Russia Federation's army on 24 Feb 2022. Activities and outputs that were particularly affected were those related policies and to the Loan Guarantee Fund, which was largely not used due to the crisis-survival modus operandi of most industries and businesses in 2022. However, government counterparts, industrial enterprises and commercial banks all highlighted the importance, now more than ever, of having such type of financial instruments for Ukrainian industrial enterprises. Considering that, the Project Steering Committee in its meeting on 26 June 2023 agreed to a further extension of the project completion date until 31 December 2025.

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

If the project has undergone a Mid-Term Review, please summarize the outcome and elaborate on specific actions taken towards implementing the recommendations included in the report. *NB: The information provided in this section will be used by the GEF Secretariat to measure the project's ability to adopt an **adaptive management approach**. This will be measured through the assignment of a **project-level proactivity index**.* *N/A*

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

☐ Category A project

☐ Category B project

☐ Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

Notes on new risks:

- *If new risks have been identified during implementation due to changes in, i.e. project design or context, these should also be listed in (ii) below.*
- *If these new/additional risks are related to Operational Safeguards # 2, 3, 5, 6, or 8, please consult with UNIDO GEF Coordination to discuss next steps.*
- *Please refer to the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP) on how to report on E&S issues.*

Please expand the table as needed.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement			
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)			

V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

Despite the unique political environment caused by the ongoing war, the project has shown its ability in navigating through various requests to stay focused on and delivering its key tasks, as well as building a robust professional network and reputation.
The project established and maintained an excellent working relationship with the main stakeholders – State Governing Institutions: MEDTA (Ministry of Economic Development, Trade and Agriculture of Ukraine) and SAEE (State agency on Energy efficiency and Energy Saving of Ukraine), and in addition with the Ministry of Energy of Ukraine, who has been a supervising state authority over SAEE since Q3, 2019.
Due to structural reorganization of the State Governing Institutions, the Ministry of Energy and Coal Industry of Ukraine was reorganized into the Ministry of Energy and Environment (MoEE) in September 2019 and then to the Ministry of Energy (in May 2020). This has led that MoEE became the main State Governing Institution responsible for EE reform, received SAEE under its management, and took a lead in coordinating all TA (and specifically GEF funded) projects; also the MoEE Deputy Minister was assigned as the GEF Focal point in Ukraine. Thus, coordination with MoEE became an important and integral part of the project stakeholder engagement. A follow up re-organization of the MoEE and its split into the Ministry of Energy (MoE) and the Ministry of Environmental Protection and Natural Resources (MEPNR) has led that the project continued its collaboration separately with MoE and MEPNR.
The Project has managed to conduct consultations with most project partners and to report project's progress, plans and to receive the stakeholders' inputs.
The Project Steering Committee was planned and confirmed by the participants in Q1 2022, however postponed due to the war.
The project team member continued to play an active role in National Recovery Council by providing advice to the Government and technical contributions to discussions in Energy Security group.

Efforts for stakeholder engagement were dedicated to:

1. Support to the establishment of the multisector working group on energy efficiency within the framework of WGs under leadership of Prime-Minister of Ukraine and Deputy Prime Minister on EU-EA integration.
2. Collaboration with stakeholders to gain their attention and assistance in promotion of the LGF.
3. Professional input provision to SAEE on major policy-making documents related to EE (articles of the EE Law, National EE Action Plan).
4. All-Ukrainian Award: Pacesetters for Energy Management

Additionally stakeholders engagement in FY2023 included:

1. Participation in numerous roundtables and professional meetings organized by government authorities, business associations, international donors and partners.
2. With full endorsement and support by PSC and via engagement with the financial partner (UKRGASBANK) and international financial institution - cross-guarantor (CitiBank) the LGF governing contracts were extended till 31/12/2023.

3. Via engagement with local NGO – European-Ukrainian Energy Agency (EUEA): support and main participation in the EUEA Energy Day in September 2022 focused on EE and RES as the future areas of the development for the energy sector.

Additional acknowledgement and co-operation opportunities that were elaborated within the reported FY:

1. SAEE: acknowledgement of project support and request of assistance in designing and developing the newly approved State Fund for Decarbonization and Energy Efficiency Transformation and the associated National Decarbonization Platform

In FY23 project has participated in more than 20 events, mostly online events, where project team has provided substantive inputs to advocate for the integration of energy efficiency in Ukraine's ongoing energy security efforts and plans for a green recovery and reconstruction, by working within Ukraine's private sector, government structures, and with other key energy market stakeholders.

2. Please provide any feedback submitted by national counterparts, GEF OFP, co-financiers, and other partners/stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

Also in FY2023 the project team received numerous requests for collaboration and participation in high-level energy efficiency, energy security and economy recovery/reconstruction events, a clear recognition of its expertise and valued inputs and work.

3. Please provide any **relevant stakeholder consultation** documents.

Please list here the documents which will be submitted in addition to the report, e.g.:

- *Project Steering Committee minutes*
- *Aide Memoire*
- *Meeting Agenda, etc.*

*All attachments are to be named as per the GEF required format, i.e.: "**GEFID_Document Title**", e.g. 9714_PSC minutes.*

Minutes of the Project Steering Committee meeting are attached.

VI. Gender Mainstreaming

1. Using the previous reporting period as a basis, please report on the **progress** achieved **on implementing gender-responsive measures** and **using gender-sensitive indicators,** as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent),.

Gender mainstreaming was not a requirement in place for GEF at the time of approval, however, UNIDO made a gender assessment of partner companies implementing and auditing EnMS (industrial plants; certification bodies and consulting companies)and as a result of the interviews, it has been decided to focus on gender sensitization activities with business associations or with the private sector as the nature of the project with its targeted industrial sector has lower female labour force than other sectors which affected the indicator results.
For certification bodies and consulting companies, financial institutions and responsible government agencies the gender mix is reasonable and appropriate. SAEE, NAAU, Certification Bodies, UNIDO, all exhibit prominent roles for women managers and employees.
During the project, efforts were made to make the training programs available to equally qualified female candidates. Events such as trainings, awareness sessions and study tours were encouraging female presence where their participation ratio has ranged between 10% and 17% to male participation.

Ratio of a female to male presence/participation in the workshops during project implementation years has increased from 7 to 29% in industries and from 27% to 63% in certification bodies, consulting companies, financial institutions and responsible government agencies.

The project has also undertaken a number of initiatives to raise awareness and promote gender equality and gender mainstreaming in industrial energy efficiency.

VII. Knowledge Management

1. Using the previous reporting period as a basis, please elaborate on any **knowledge management activities / products**, as documented at CEO Endorsement / Approval.

Project activities and key technical knowledge has been shared and promoted via knowledge platforms and partner coalitions. In addition, to support a wider dissemination of the project experience, the project team in Ukraine participated to various events (workshops, conferences, etc).

The project website has remained the main repository of information and knowledge products developed by the project. The UNIDO Industrial Decarbonization Accelerator (former Industrial Energy efficiency Accelerator) has also continued to provide an additional platform to disseminate and share project experience and learning regarding financial instrument implementation h.
(Industrial Decarbozaition Accelerator - global action towards energy www.industrialenergyaccelerator.org)

2. Please list any **relevant knowledge management mechanisms / tools** that the project has generated.

Please list the relevant knowledge management mechanisms/tools and any documents that will be submitted in addition to the report, e.g.:

- *online information exchange/sharing platforms*
- *relevant technical reports*
- *Link to project websites, videos, publications*
- *flyers, etc.*

*All attachments are to be named as per the GEF required format, i.e.: "**GEFID_Document Title**", e.g. 9714_Flyer.*

The website of UKR IEE project serves as a knowledge management tool where a lot of information about the programme is available - http://www.ukriee.org.ua/en/

VIII. Implementation progress

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes achieved/observed** with regards to project implementation.

Please note that the UNIDO GEF Coordination team will copy-paste the answer to this question into the GEF Portal.

Component 1: Policy and institutional support for the introduction of a national energy management system standard corresponding to ISO 50001

Activities under Component 1 focused on supporting the State Agency for Energy Efficiency and Energy Savings (SAEE) with the design and development of the State Fund for Decarbonization and Energy Efficiency Transformation and the associated

National Decarbonization Platform and contributing experts' inputs to the different working groups providing advice to the Government, the National Recovery Council.

The project resumed discussion and work with SAEE and other counterparts for the re-launch of the All-Ukrainian Award: Pacesetters for Energy Management, which is aimed to recognize leading Ukrainian organizations for their energy management achievements. The All-Ukrainian Award was adapted from the international Clean Energy Ministerial (CEM) Energy Management Leadership Awards. This award symbolizes the high recognition and distinction of enterprises in the field of energy management, energy efficiency and progressive low-carbon industrial development in Ukraine. Organizations are invited to submit energy management case studies for recognition. Each entry will describe how energy management implementation occurred within the organization and resulting business benefits. Entries will undergo a juried selection process by a committee of esteemed ISO 50001 experts. The All-Ukrainian Award will be re-launched in Se/Oct 2023.

Component 2: Building the national capacity on the planning, implementation & certification of energy management systems and system optimization

Project work within Component 2 have mostly continued to focus in promoting and facilitating provision of EnMS and ESO services, be it training or direct implementation support, by project qualified experts; and provide outreach, information and advice to enterprises interested in EnMS-ESO implementation.

Component 3: Technology diffusion and deployment to promote implementation of energy management systems in selected industrial sectors.

The project continued to work raising awareness of industry and other stakeholders on the economic and environmental benefits of energy efficiency, EnMS and ESO through participation in a number of national events, updates of the Project website (http://www.ukriee.org.ua), and social media.

The project team has continued to monitor and work closely with UkrGasBank in the promoting the Loan Guarantee Fund but due to the war only one additional loan was issued in FY2023. In the 1st and 2nd quarter of 2023 few companies approached UkrGasBank for the LGF but the limited remaining duration of the LGF and made the use of the LGF guarantees not viable.
The project has also discussed with industrial enterprises, ESCOs, SAEE and UkrGasBank possible adjustments to the LGF terms and conditions that could better fit the demand for loans received by UkrGasBank. opportunities to possibly further support Ukrainian industrial enterprises, in particular SMEs.

In July 2022 UKR IEE project started to collaborate with the UNIDO "Global Eco-Industrial Parks Programme – Ukraine: country-level intervention" (GEIPP-Ukraine) funded by the Swiss State Secretariat for Economic Affairs towards the implementation of ISO 50001 EnMS and energy efficiency projects with a group of 3 industrial park management entities and 6 resident companies. During 4th Quarter of 2022 two additional companies joined the ISO 50001 EnMS – EE implementation programme. As of 30 June 2023 6 companies are still in the programme working on the implementation of EnMS and no-cost/low-cost energy efficiency/savings measures.

2. Please briefly elaborate on any **minor amendments**[6] to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

☐	Results Framework	

[6] As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **minor amendments** are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5%.

☐	Components and Cost	
☐	Institutional and Implementation Arrangements	
☐	Financial Management	
☒	Implementation Schedule	Project to be extended due to the negative impact of the war that has affected selected activities and performance of the LGF
☐	Executing Entity	
☐	Executing Entity Category	
☐	Minor Project Objective Change	
☐	Safeguards	
☒	Risk Analysis	New risks for the project represented by the war and its implications/consequences
☐	Increase of GEF Project Financing Up to 5%	
☐	Co-Financing	
☐	Location of Project Activities	
☐	Others	

3. Please provide progress related to the **financial implementation** of the project.

Please provide a description of the main expenditures during the reporting period. Describe the current status of funds mobilization activities and the related implications for project implementation. Provide information on status of obtained / mobilized co-financing, etc. as per CEO Endorsement/Approval document.

IX. Work Plan and Budget

1. Please provide **an updated project work plan and budget** for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

Please fill in the below table or make a reference to a file, in case it is submitted as an annex to the report.

Outputs by Project Component	Year 2022		Year 2023				GEF Grant Budget Available (US$)
	Q3	Q4	Q1	Q2	Q3	Q4	
Component 1 – Policy and institutional support for the introduction of a national energy management system standard corresponding to ISO 50001							
Outcome 1: The policy and institutional framework supporting the national implementation of energy management system standard in industry is created							
Output 1.1: ISO50001 'Energy Management Systems Standard' is adopted as a national standard.							**60,000 USD**
Output 1.2: Policy establishing a voluntary scheme to accelerate the introduction of EnMS is developed.							
Output 1.3 Accreditation scheme for EnMS service providers and Certification scheme for industries is established.							

Outputs by Project Component	Year 2022		Year 2023				GEF Grant Budget Available (US$)
	Q3	Q4	Q1	Q2	Q3	Q4	
Output 1.4 National monitoring, reporting & verification methodology and structure to track energy performance at enterprise/sectoral / national level is set up.							
Output 1.5 National award scheme for outstanding energy management performance is created.							
Component 2 – Building the national capacity on the planning, implementation & certification of energy management systems and system optimization							
Outcome 2: National capacity for implementation of EnMS and SO in industry is developed							
Output 2.1: National training program on energy management systems is implemented.							**8,000 USD**
Output 2.2: National training program on System Optimization is implemented.							
Component 3 – Technology diffusion and deployment to promote implementation of energy management systems in selected industrial sectors							
Outcome 3: The sector wide penetration of energy management systems is accelerated and System Optimisation & EE technologies promoted							
Output 3.1: Extensive awareness programme to improve the awareness of enterprise management and personnel on EnMS, EE and SO programmes, funding opportunities and best practices developed and implemented							**520,000[1] USD**
Output 3.2: Network group to support peer to peer sharing set-up.							
Output 3.3 At least 18 companies in selected industrial sectors implement EnMS and are certified to ISO50001.							
Output 3.4 Revolving fund supporting technical assistance for the development of EnMS, EE and SO projects established.							
Component 4 – Monitoring and Evaluation							
Outcome 4: Adequate monitoring and evaluation mechanisms are in place, facilitating smooth and successful project implementation and sound impact							
Output 4.1: Regular monitoring exercises conducted, PIRs prepared, tracking tools according to GEF requirement prepared.							**70,000 USD**
Output 4.2 Mid-term and final project evaluation conducted.							

X. Synergies

1. **Synergies** achieved:

From the very start the Project has established good cooperation with Resource Efficient and Cleaner Production Centre (RECPC) – the pilot UNIDO project 'National Cleaner Production Program in Ukraine-Launching and Operation' started in 2007. The RECPC currently is an NGO having considerable experience and expertise in assisting Ukrainian industry in optimizing resource usage – including raw materials, water, waste and energy. Same as UKR IEE project it also has established contacts in the energy intensive sectors. The RECPC cooperates with the UKR IEE project to maximize the synergies between these 2 UNIDO supported projects.
UKR IEE Project has trained and certified professionals of RECPC as EnMS Experts as well as RECPS engaged UKR IEE experts in its projects.

UKR IEE Project is an active participant of the Donors Coordination Group, established and supported by the Embassy of Germany in Ukraine, dedicated to the policy and reforms support in the sector of Energy Efficiency. The participants of the meetings of this group include European and international organizations, TA projects, donor community which implement various energy efficiency projects in Ukraine. The Energy Community (international organization of the European Union working on a creation an integrated pan-European energy market), other UN Agencies such as WB and IFC, UNDP, Technical Aid agencies such as USAID, GIZ, international finance organizations: EBRD, EIB, KfW, NEFCO participate in the meetings and share experience/practices/lessons learnt with others. This is the good and successful network that has a potential to grow in a top scale co-ordination influencing the reform progress at the highest governmental level.

Trained practitioners are now in high demand and involved not only in UKR IEE Project activities, but also in other EU/US supported programmes: EUREM- European energy manager programme; CEM -certified energy manager programme), Industrial Energy Audit Programme by GiZ.

The Project has been actively engaged in building partner relationship with other TA Projects in the area of Industrial Energy Efficiency. Thus, GiZ Project "Advisory Services for Energy Efficiency in Companies in Ukraine" created the Energy Audit Programme in 4 industrial sectors (Bakery industry, Dairy industry, Mechanical industry, and Non-metal construction industry) with the support of UKR IEE Project through advisory and provision of the UNIDO trained Experts (8 Certified EnMS Experts, trained and certified by the UKR IEE Project, were involved in the GiZ Programme). Additional expert support was provided to the launching of the LEAD (Learning Energy Audit Database) and to formulating of tasks and tools for the Industrial Development Strategy for the MoEDT.

The Project has a collaboration with UDEC (Ukraine-Denmark Energy Center) – a TA project created at the Ministry of Energy and Coal Industry of Ukraine with support of the Ministry of International Affairs of the Kingdom of Denmark and Danish Energy Agency – in the component of the development of Energy Efficiency Indicators and Benchmarking in industry sub-sectors. Sugar industry has been selected as the pilot sector. The Project assisted UDEC in establishment of communication and shared results of its successful cooperation with ASTARTA Holdings – the largest producer of sugar and side products in Ukraine with over 25% of market share. Eigth (8) enterprises part of ASTARTA holdings were trained under EnMS and ESO (Compressed Air) Training Programme by the UNIDO/GEF UKR IEE Project.

European-Ukrainian Energy Agency (https://euea-energyagency.org/en /) is a professional NGO and a project's partner for the visibility the policy, technology, and best technologies to promote the most effective transition towards a modern, consistent, and profitable energy efficiency practices in Ukraine. The Project supports organization and actively participates in the EUEA Energy Day. This participation has a positive effect in terms of delivering of the specific input and sharing achievements by UNIDO/GEF UKR IEE project to the top players in the EE and Energy sectors.

3. Stories to be shared (Optional)

Please provide a brief summary of any especially interesting and impactful project results that are worth sharing with a larger audience, and/or investing communications time in. Please include links to any stories/videos available online.

GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many

locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as: https://coordinates-converter.com Please see the Geocoding User Guide by clicking here

Location Name	Latitude	Longitude	Geo Name ID	Location and Activity Description
Ukraine - Kyiv	N 50°27′17″	E 30°31′26″	703448	
Ukraine - Bila Tserkva	49°47′56″N	30°06′55″E	712165	

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate.

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2022 – 30 June 2023.

2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.

3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.

4. **Results-based management**: The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings	
Highly Satisfactory (HS)	Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice".
Satisfactory (S)	Project is expected to achieve most of its major global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.
Moderately Satisfactory (MS)	Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits.
Moderately Unsatisfactory (MU)	Project is expected to achieve some of its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.

Unsatisfactory (U)	Project is expected not to achieve most of its major global environmental objectives or to yield any satisfactory global environmental benefits.
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, any of its major global environmental objectives with no worthwhile benefits.

Implementation Progress (IP)	
Highly Satisfactory (HS)	Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as "good practice".
Satisfactory (S)	Implementation of most components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.
Moderately Satisfactory (MS)	Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
Moderately Unsatisfactory (MU)	Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.
Unsatisfactory (U)	Implementation of most components in not in substantial compliance with the original/formally revised plan.
Highly Unsatisfactory (HU)	Implementation of none of the components is in substantial compliance with the original/formally revised plan.

Risk ratings	
Risk ratings will access the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
High Risk (H)	There is a probability of greater than **75%** that assumptions may fail to hold or materialize, and/or the project may face high risks.
Substantial Risk (S)	There is a probability of between **51%** and **75%** that assumptions may fail to hold or materialize, and/or the project may face substantial risks.
Moderate Risk (M)	There is a probability of between **26%** and **50%** that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.
Low Risk (L)	There is a probability of up to **25%** that assumptions may fail to hold or materialize, and/or the project may face only low risks.