UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

SUSTAINABLE DEVELOPMENT GOALS

Project Implementation Report

(1 July 2021 – 30 June 2022)

Project Title:	Industrial Energy Efficiency Improvement in South Africa through Mainstreaming the Introduction of Energy Management Systems and Energy Systems Optimization
GEF ID:	5379
UNIDO SAP ID:	120487
GEF Replenishment Cycle:	GEF-5
Country(ies):	South Africa
Region:	AFR
GEF Focal Area:	CCM
Integrated Approach Pilot (IAP) Programs[1]:	NA
Stand-alone / Child Project:	Stand-alone
Implementing Department/Division:	ENE/ESI
Co-Implementing Agency:	NA
Executing Agency(ies):	Department of Trade and Industry (dti), now [dtic] Department of Energy (DoE), [now DMRE] National Cleaner Production Centre of South Africa (NCPC-SA) The South African National Energy Development Institute (SANEDI)
Other Project Partners:	Department of Forestry and Fisheries of Environment (DFFE)
Project Type:	FSP
Project Duration (months):	48
Extension(s):	3
GEF Project Financing:	5,776,484
Agency Fee:	548,766
Co-financing Amount:	38,860,000.00
Date of CEO Endorsement/Approval:	10/14/2015
UNIDO Approval Date:	11/20/2015
Actual Implementation Start:	12/01/2015
Cumulative disbursement as of 30 June 2022:	5,702,920
Actual Mid-term Review Date (MTR):	02/26/2020
Original Project Completion Date:	12/01/2019

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

Current SAP Completion Date:	09/30/2022
Expected Project Completion Date:	09/30/2022
Expected Terminal Evaluation Date (TE):	08/30/2022
Expected Financial Closure Date:	09/30/2022
UNIDO Project Manager[2]:	Rana Ghoneim

I. Brief description of project and status overview

Project Objective

To accelerate and expand the introduction of Energy Management Systems (EnMS), Industrial Energy Systems Optimization (ESO), and the Energy Management Standard ISO 50001 Series within the South African industrial (and selected commercial) context in order to realize increased investment in industrial energy efficiency (IEE) through the wide- scale adoption of the two methodologies and ISO 50001 under

(i) enhanced institutional frameworks and regulatory environments,
(ii) technical and implementation assistance to industry and
(iii) multi-level engineer, technician and operator capacity building programmes.

South Africa can be classified as a relatively energy intensive economy ranking 7th in the world in 2013 in terms of economic energy intensity. The economy is still heavily structured around, and dominated by energy intensive and inefficient large-scale operations, such as mining and minerals processing industries. At the end of 2014, a number of factors converged to push South Africa into a period of power shortages. These factors included delays to bringing new generating capacity online, a falling level of thermal efficiency within the aging power station fleet and the instigation of much needed maintenance of these power stations. These factors, combined with the fact that consumers still use electricity as if it is not a scarce resource, are resulting in the electrical system becoming extremely constrained. Major load shedding started again in late 2014 and continues to be implemented on a rotating basis throughout the country and between districts as the reserve margin drops below zero. This situation has threatened industrial production, GDP levels, and social cohesion through potential job losses. Industrial energy performance has improved over the past years to some degree, especially in larger enterprises, as a result of the 2008/09 national power constraint and ensuing increases in energy and electricity prices, new legislative measures, financial incentive schemes and project initiatives. However, Government and industry technical capacity for IEE policymaking and implementation, and industry's ability to take on new EE methodologies remains significantly constrained, with this being particularly pressing within the SME sector. The Project builds on the 2010-2016 UNIDO 'South Africa Industrial Energy Efficiency Improvement Project (SA IEE Project)' to further assist the Government of South Africa to capacitate the industrial and engineering sectors in the methodologies of EnMS and ESO and ensure long-term and sustainable improvements in energy performance within the industrial sector. The project is structured in five technical components, plus a monitoring and evaluation component.

Project Core Indicators		Expected at Endorsement/Approval stage
6	Incremental direct GHG emission reduction (tons of CO_2eq)	Cumulative direct emission reduction of 3,280,000 tCO_2e
11	Incremental indirect GHG emission reductions (tons of CO_2eq)	Indirect emission reduction of 25,233,800 tCO_2eq from 2020 to 2029
x	Reduction of energy consumption (GJ or MWh) in targeted industrial and commercial sector	Implementation of EnMS and ESO improvements in 150 enterprises lead to lifetime fuel and energy savings of 32,422,400 GJ Primary Energy.

[2] Person responsible for report content

Baseline
Industrial energy performance has improved over the past years to some degree, especially in larger enterprises, as a result of the 2008/09 national power constraint and ensuing increases in energy and electricity prices, new legislative measures, financial incentive schemes and project initiatives. However, Government technical capacity for IEE policy-making and implementation, and industry's ability to take on new EE methodologies remains significantly constrained, with this being particularly pressing within the SME sector. **Legal Framework for Industrial Energy Efficiency** The South African 'National Energy Act' No. 34 of 2008, signed by the President of South Africa on 17 November 2008, is the legal instrument by which the supply and consumption of energy is governed in South Africa. The Act aims to ensure that diverse energy resources are available, in sustainable quantities and affordable prices, to the South African economy in support of economic growth and poverty alleviation, taking into account environmental management requirements. The Act provides the DoE with the legal mandate and obligation, among other conditions, to: collect, collate and analyze energy data and information, and develop a gazetted 'Integrated Energy Plan'. This plan is reviewed on an annual basis and takes into account security of supply, universal access to energy, international commitments, the environment and the contribution of energy supply to economic development. The Act also has the objective of facilitating the effective management of energy demand and its conservation including EE where industry is concerned. While the Act grants considerable powers to the DoE (and hence the Government) to develop EE regulations and enforce them, the Act itself does not contain the necessary follow-up polices, secondary legislation or regulations to force, promote or incentivize changes in behaviour within industry or the wider economy. Many of these follow-up measures have yet to be developed or effectively enforced, and therefore, considerable scope exists for initiatives to assist the Government in developing the tools that will foster greater achievement of policy and regulatory objectives. The South African Carbon Tax has been set in place by the government to fulfil the Paris Agreement. Essentially, every industrial company has to pay carbon tax in South Africa. Officially, the carbon tax is set to R120 / ton of CO2-equivalent. However, there is a transitional period until the tax is set to full force in 2022. During that transitional period, there is a tax-free allowance of 70%. During phase 1 of the South African Carbon Tax, there are a lot of ways for businesses to pay less. However, this will change very soon. The purpose of the National Greenhouse Gas Emissions Reporting Regulations is to introduce a single national reporting system for the transparent reporting of greenhouse gas emissions, which will be used to maintain a National Greenhouse Gas Inventory, allow South Africa to meet its UNFCCC reporting obligations and to inform the formulation and implementation of legislation and policy. The emission sources and data providers who are covered by the Regulations are set out in Annexure 1 and Regulation 4. The sectors covered include energy, transport, industry, agriculture and forestry. The Regulations also set out the reporting requirements, calculation methodology, verification procedure (to be carried out by the National Inventory Unit) and penalties (which include fines and imprisonment). IRP 2019 provides for uncapped procurement of Distributed Generation up to and including 2022, and thereafter, procurement would be capped at 500MW a year up to 2030. Distributed Generation is defined in IRP 2019 to mean “small-scale technologies to produce electricity close to the end users of power”. **South Africa Industrial Energy Efficiency Improvement Project (SA IEE Project)** The GEF Project will build on the work of the SA IEE Project, which was implemented by UNIDO and funded by the South African Government (UK Department for International Development (DFID) and Swiss State Secretariat for Economic Affairs (SECO). The South African National Cleaner Production Centre (NCPC-

SA) is the national host of the project with the dti and the DoE being the national implementation partners. The project began implementation in April 2010 and was scheduled for completion at the end of December 2015. The overall objective/development goal of SA IEE Project was to increase IEE in South Africa in order to contribute to national efforts to improve energy security and electricity supply continuity while seeking that GDP growth is not constrained by energy shortages and rising prices. The strategy for achieving this goal was the introduction, piloting and promotion of EnMS and ESO as well as the ISO50001 Energy Management Standard. Thus, the SA IEE Project aimed to contribute to the sustainable transformation of energy usage practices in South African industry.

The SA IEE Project had four main components where Component One focused on IEE policy development; Component Two focused on energy management standards (including supporting the Government and relevant standards bodies/institutions with the introduction of the main Energy Management Standard ISO 50001); Component Three focused on training and developing a series of EnMS and ESO training packages offered to industry and the industrial consulting sector. Under the project's fourth component a programme of EnMS and ESO industrial piloting (was established with this being combined with an awareness raising and project communications programme, involving a process of initial sector awareness creation and a company outreach and recruitment initiative. Originally, the SA IEE Project focused on five highly energy intensive industry sectors that had significant energy consumption reduction potentials: agro-processing; chemicals and liquid fuels; metals processing and engineering; automobile manufacturing; and mining and minerals. However, the SA IEE Project broadened its reach in Phase II to include other industrial sub-sectors (clothing and textiles, non-metallic minerals, food processing, glass, paper and pulp, construction materials and printing sub-sector), as well as commercial and even public buildings/institutions sub-sectors where they presented significant energy consumption.

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e. FY22. Please also provide a short justification for the selected ratings for FY22.

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. FY21, in the last column.

Overall Ratings[4]	**FY22**	**FY21**
Global Environmental Objectives **(GEOs)** / Development Objectives **(DOs)** Rating	*Satisfactory (S)*	*Satisfactory (S)*
Implementation Progress **(IP)** Rating	*Satisfactory (S)*	*Satisfactory (S)*
Overall **Risk** Rating	*Low Risk (L)*	*Low Risk (L)*

[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

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.

Component No.	Log Frame Description	Target	Performance	Comments
Component 1 – Data Quality Improvement to Facilitate Data Rich Industrial Energy Efficiency and Energy Management Policy Implementation				
Component 1.1 Energy consumption/performance mapped with the savings potential determination, against potential penetration and implementation challenges of EnMS and ESO in line with ISO 50006 methodologies within selected industrial and commercial sectors				
Output 1.1:	Gap analysis and assessment of necessary capacity assistance to strengthen data collection, quality processing and interpretation analysis by the DMRE and SANEDI.	Gap Analysis and assessment of DMRE/SANEDI	Workshops between parties to understanding data collection gaps. Concluded this activity.	A Request for Quotation (RFQ) combining Activities 1.1.1. + 1.1.2. +1.1.3. was released in February 2021. ELSIMATE was appointed in 22nd of April 2021 to conduct a Gap Analysis, Technical capacity Enhancement and Alignment on Data Collection Processes, Tools and Methodologies. **These activities will be completed by 30 July 2021.**
Output 1.2:	Technical capacity enhancement programme to strengthen data mechanisms and data processing practices within the DMRE and SANEDI	Reviewing of existing tools, instruments, methodologies and data collection and processing practices within DMRE and SANEDI.	Concluded this activity.	A Request for Quotation (RFQ) combining Activities 1.1.1. + 1.1.2. +1.1.3. was released in February 2021. ELSIMATE was appointed in 22nd of April 2021 to conduct a Gap Analysis, Technical capacity Enhancement and Alignment on Data Collection Processes, Tools and Methodologies. **These activities will be completed by 30 July 2021.**
Output 1.3:	Assistance to inter-governmental initiatives to align data	Inter-governmental initiatives to align data requirements.	Report under review and workshop was conducted by 31st of July 2021.	This activity is the last task required as an output from ELSIMATE (Pty) Ltd.

Component No.	Log Frame Description	Target	Performance	Comments
	requirements, surveying methods and industrial enterprise outreach methods, as well as supporting tools to assist in the setting of targets & performance indicator establishment, in line with ISO 50006.		Concluded this activity.	A Request for Quotation (RFQ) combining Activities 1.1.1. + 1.1.2. +1.1.3. was released in February 2021. ELSIMATE was appointed in 22nd of April 2021 to conduct a Gap Analysis, Technical capacity Enhancement and Alignment on Data Collection Processes, Tools and Methodologies. **These activities will be completed by 30 July 2021.**
Output 1.4:	Baseline assessment in selected industrial sectors of energy use dynamics, energy consumption and energy savings potential (& associated GHG emissions reductions), EnMS & ESO against potential penetration rate scenarios & implementation challenges for implementation in non-mapped industrial sectors.	Data collection to develop energy footprint, energy savings potential and determine energy use dynamics, implementation challenges for Pulp & Paper and Automotive. (Baseline Assessment) Pulp & Paper Baseline Assessment Automotive Baseline Assessment including workshop and publication	Activity 1.1.4. was broken down into three (3) sub-activities, namely, (i) " A Study to Determine the Energy Footprint and Savings Potential for the South African Pulp & Paper and Automotive Subsectors", (ii) " Database Design Expert to Conduct Data Cleaning and Functionality Upgrade of the 12L Tax Incentive Web-Database System and (iii) " Technical Expert for the Development of a Standard Operating Procedure Manual".	An RFQ for each of these sub-activities was released to the panel and Catalyst and Promethium were appointed for the respective aub-activities. The sub activity conducted by Catalyst commenced on the 17th December 2021 and concluded on the 29th of April 2022, the sub activities conducted by Promethium commenced on the 1st of November and 1st of December 2021 and both sub-activities **concluded on the 31st of March 2022**.
		Review and development of a practical guideline for the application of a simplified Measurement and Verification (M&V) of energy savings for small and medium size 12L Energy Efficiency Tax Incentives Projects in line with the SANS50010:2011 M&V Standard with related stakeholder engagement sessions	An accelerated programme to drive the uptake of 12L Energy Efficiency Tax Incentive. A guideline to support the implementation of energy efficiency projects by small and medium size enterprises. Capacity building initiatives for unemployed youth and women in collaboration with accredited SANAS M&V Bodies, National Business Initiative (NBI) and other relevant entities	This is one of the activities being executed within the 3 months extension, and is scheduled for completion **by 30 September 2022.**

Component No.	Log Frame Description	Target	Performance	Comments
Output 1.5:	Technical assistance (in the form of expert review & focus/ stakeholder consultation groups), provided for planned periodic reviews & updates of energy intensity reduction & energy management targets.	Data reference group created between DMRE/SANEDI and DFFE. The data reference group is utilized as peer review group and facilitates review of the energy intensity targets study.	Hold two more joint sessions between September and December 2021.	Data Reference Group has already been established with key project stakeholders such as SANEDI, DMRE and DFFE, from Terms of Reference. SANEDI to act as secretariat however, there may be a need to review the Terms of Reference. This activity is now part of the operational requirements at SANEDI and will be carried out annually.
Output 1.6:	Technical assistance (in the form of expert review and focus/stakeholder consultation groups) to periodically and independently review and update GHG calculations and targets of the NCCRS, (DEFF).	Support DMRE/SANEDI with the GHG Calculation and targets	There are other active activities within the DMRE that complement this activity. .	This could not be implemented due to time constraints and the nature of the activity as it is only logical to form a data reference group towards the end of the project implementation to ensure sustainability and longevity of facilitating a data-rich industrial energy efficiency and energy management policy implementation.
1.2	**Country Specific EnMS and ESO best practice technology and process benchmarks established in line with the NEES and NEEAP**			
Output 1.2.1:	EnMS and ESO technology and process best practice benchmarks, using country specific examples (also considering international best practice where appropriate), under the Industry and Mining Action Plan	Study on the technology and best practice benchmarks using country specific examples. Interactive sessions, workshop and pulications on EnMS and ESO technology and process best practice benchmarks using country-specific examples and in alignment to the NEES	Work in progress as this activity requires input from other ongoing activities on the project.	This one of the activities being executed within the 3 months extension, and is scheduled for completion **by 30 August 2022.**

Component No.	Log Frame Description	Target	Performance	Comments
	contained within the NEES.			
Component 2 – Strengthening Policy Implementation and Support Frameworks for EnMS, ESO and Energy Management Standards				
Component 2.1: **Targeted technical assistance and capacity building to enhance and implement IEE policies, incentives and regulatory frameworks supporting EnMS and ESO uptake and strengthening the coordination of associated activities across government agencies**				
Output 2.1.1:	Analysis of existing South African national governance structures and legislative instruments to determine relevance to IEE implementation for enhanced implementation effectiveness.	Technical expert already appointed to undertake the activities. Activity 2.1.1 is merged with activity 2.1.2 and 2.1.3	An RFQ addressing Activities 2.1.1. + 2.1.2. + 2.1.4. was released to the open market, Accruetech was appointed in August 2021 to conduct an Analysis on the Legislative Instruments and Governance Structures which are relevant to South African Industrial Energy Efficiency	. **These activities were completed on the 31st of December 2021**
Output 2.1.2:	Institutional needs assessment to determine the capacity gaps within the Government (DMRE, DEFF, DSI, dtic, National Treasury, SABS, SANEDI, NCPC-SA), in regard to modifying and strengthening the implementation policy and regulation related to IEE. The needs assessment will also include a review of industry related gender issues and how to actively promote increased participation of women in IEE.	Technical appointed to undertake the activity (merged activity).	An RFQ addressing Activities 2.1.1. + 2.1.2. + 2.1.4. was released to the open market, Accruetech was appointed in August 2021 to conduct an Analysis on the Legislative Instruments and Governance Structures which are relevant to South African Industrial Energy Efficiency.	**These activities were completed on the 31st of December 2021**
Output 2.1.4:	IEE Government policy consultative dialogue workshop series (two per year and eight in total), with the corresponding	Workshop to be facilitated following the activities regarding institutional needs	Use the data reference group to facilitate the execution of this activity.	An RFQ addressing Activities 2.1.1. + 2.1.2. + 2.1.4. was released to the open market, Accruetech was appointed in August 2021 to conduct an Analysis on the Legislative

Component No.	Log Frame Description	Target	Performance	Comments
	establishment of a network group between Government departments/bodies (DMRE, DEFF, DSI, dtic, SANEDI, NCPC-SA), as well as other relevant stakeholders, to improve IEE policy and regulatory implementation and to link EnMS and ESO implementation measures employed by enterprises under incentive programmes and within offsetting under the possible national Desired Emission Reduction Outcomes (DEROs) & Carbon Tax scenarios.			Instruments and Governance Structures which are relevant to South African Industrial Energy Efficiency. **These activities were completed activities on the 31st of December 2021**
Output 2.1.5.	Technical assistance provided to Government departments to prepare five additional industrial enterprise guidelines and technical support packages (one per selected sector) proposed and to be promulgated industry policy/regulation in line with Government IEE regulatory schemes, e.g., Energy Management Planning and their contained energy intensity reduction targets. This will include the development of enhanced policy tools that will promote female roles in IEE.	Prepared guideline documents for the following sub-sectors, to inform future EE policy development: 1. Commercial Buildings sub-sector 2. Clothing and Textile sub-sector. (Previously Automotive sub-sector) 3. Mineral Beneficiation sub-sector 4. Cement Sub-sector. (Previously Agro-Processing sub-sector) 5. Best Practice Guideline on Energy Use in the Metal Casting Foundries and Non-Ferrous Metals sub-sector	Nominated sectors reviewed and reprioritized after discussions with SANEDI and dtic, to prevent duplication of efforts. TORs developed and finalized for first four sector guides listed in the adjacent column. Procurement concluded and work commenced. Completion scheduled for completion by end July 2022. CSIR Energy Centre awarded contract to develop Best Practice Energy Use Guideline for the Metal Casting Foundries and non-ferrous metals sub-sector. Technical proposal approved and work commenced.	Work delayed due to procurement moratorium imposed by National Treasury between February and end of March 2022. The four listed guides (Comm Blds, Clothing & Textile, Metals and Cement anticipated **completion is 30 August 2022.** Regarding the metals guide there were delays due to data gaps and availability. The anticipated **completion is 30 September 2022.** .

Component No.	Log Frame Description	Target	Performance	Comments
Component 2.2: Assistance to operationalize SANS/ISO 50001 with additional advisory support, and recommended actions for Government and Standards Bodies to promote and mainstream Energy Audit (ISO 50002); Conformity Assessment (ISO 50003); and Energy Baselines and Performance Indicators (ISO 50006)				
Output 2.2.4.	Technical assistance provided in the form of three training seminars to potential SANS 50010 auditing and certification bodies, including SANAS accreditation support and preparation.	Deliver Online EnPMI Training workshop targeting GP. Deliver Online Training Seminar targeting the WC/GP.	Sent invitation to SANAS and 12L accreditation practitioners to attend the training seminars on SANS 50010.	Two training workshops hosted for EnPMI and EnMS End User courses. Attendees included, DMRE, DFFE, dtic, SANAS and SANEDI representatives. Attendance of first two training workshops did not warrant a dedicated third workshop. NCPC-SA extended regular invitations to certification body representatives to consult the NCPC-SA training calendar for future course offerings. **Target achieved.**
Component 3.0: Mainstreaming EnMS and ESO Training and Skills Development Programmes				
Component 3.1. Expanded Engineer-Level EnMS and ESO Industry Capacity Building courses developed and delivered including new professionally recognized ESO topics, graduate mentorship and SME EnMS Implementation Guide resource packages and learning materials				
Output 3.1.3	New ESO courses prepared, presented and taken through the SAIMechE CPD accreditation process.	CPD Accreditation for the PQ, Biogas and M&V training courses will be applied once new material has been completed. CPD Accreditation for the Chillers and Refrigeration training courses will be applied once new material has been completed.	27 Courses awarded CPD Accreditation by SAIMECHE, including new courses: CRSO expert, Biogas End User and Expert, Power Quality End User and EnPMI	**Target Achieved**
Component 3.2	**EnMS and ESO Technician-Level Courses developed and delivered with supporting bridging courses for enterprise staff as well as development of Vocational EnMS and ESO Training Course Modules and supporting materials**			
3.2.1.	Development and delivery of EnMS training programmes for South African industry personnel at the technician/plant	This training is a requirement in all EnMS implementations and ESO assessments.	Beneficiary plant operators are trained after energy/ESO assessments and after successful EnMS implementations. Course material adapted by the NCPC-SA and consultants.	**Target Achieved**

Component No.	Log Frame Description	Target	Performance	Comments
	operator staff level. Including consideration of gender dimensions and forming network groups with women's groups to actively promote the participation of women.			
3.2.2.	Development and delivery of ESO training programmes for **314 (balance)** South African industry personnel at the technician / plant operator staff level – including bridging assistance for plant-based training courses. Including consideration of gender dimensions and forming network groups with women's groups to actively promote the participation of women	This training is now a requirement in all ESO assessments and will be pursued aggressively, and assessment awareness training.	UNIDO developed gender focussed training module aimed at promoting gender equity. The content for this training is incorporated in every single NCPC-SA training delivery. The team had a strong focus on this activity in quarter 2. Over 314 plant operator level staff have been trained.	**Target achieved.**
3.2.3	Development and embedding of different Technician / Operator level EnMS and ESO course modules within vocational programmes offered by selected TVET institutions including the EnMS and ESO methodology capacity building of their lecturing staff.	Vaal University of Technology - Share EnMS and ESO 2-Day End User training materials and lecturers to deliver our EnMS and ESO post graduate courses. Cape Peninsula University of Technology - Share EnMS and ESO 2-Day End User training materials and lecturers to deliver our EnMS and ESO post graduate courses. Tshwane University of Technology Share EnMS and ESO 2-Day End User training materials and lecturers to deliver our EnMS and ESO post graduate courses	Delivered in Q2 Delivered in Q3 Delivered in Q4	The University of Johannesburg was accredited for the Energy Audit Technician qualification. All NCPC-SA qualified expert trainers are deemed qualified to be contracted as trainers in the delivery of this qualification. 5 Modules from this qualification were used to register a new qualification titled Energy Performance Certification Practitioner certificate at NQF level 5. The NCPC-SA extended invitations to train lecturing staff of Ekurhuleni East College and the College of Cape Town to become qualified as trainers for the

Component No.	Log Frame Description	Target	Performance	Comments
				EPC qualification. Three hundred TVET college graduates are currently being trained by UJ as Energy Performance Certification practitioners. The Energy Audit Technician qualification, registered on the National Qualification Framework (NQF) at level 6 includes the EnMS and ESO methodology reflected by UNIDO/NCPC-SA training courses. The NCPC-SA is currently supporting Mafiri Trading in their accreditation application to the QCTO to offer this qualification. They will also be supported by providing training opportunities to their lecturing staff. All subsequent applications by TVET colleges and Universities of Technologies, to be accredited for this qualification, will be supported in a similar fashion. **Target achieved.**
Component 3.3	**Institutionalized and NQF Compliant EnMS and ESO training course materials developed and provided to commercial Training Providers combined with targeted capacity building and market development initiatives as well as assistance to establish a Green Industry Professional Association**			
Output 3.3.7	Support gender inclusive marketing and communication activities, aimed at growing the membership interest and demand for the professional body through the activities of Component 5.0.	Ongoing support through communications work. The responsibility and budget for this resides with the UNIDO Pretoria Office.	The final steps to register the Professional body now needs to be taken by duly authorized external industry representatives. The NCPC-SA remains committed to continue providing expertise and other support.	**Target achieved**

Component No.	Log Frame Description	Target	Performance	Comments
Component 4.0:	**Investment Promotion in IEE through demonstration of EnMS and ESO and support to access financial mechanisms and incentives for industry and selected commercial sectors**			
Component 4.1	**EnMS and ESO demonstration program of 150 individual enterprises (50 large, 100 SMEs) across multiple industrial and selected commercial sectors**			
Output 4.1.4	Post EnMS and ESO implementation technical support through twice-yearly on-site oversight / check-up sessions for EnMS implementation (with additional support sessions for SMEs as required) and ESO implementation follow-up advisory measures.	Conduct 12 (@R25k) detailed follow-up evaluations of all sites previously assessed and where implementation projects were supported, using the follow-up template developed. Consumption data monitoring and baseline modelling studies (5 @ R60k)	Concluded 4 energy consumption baseline modelling studies (Tronox, Coega Development Corp., Meze Foods, First National Battery - 3 sites. EnMS Implementation facilitated at 6 sites (Tiger Brands Tastic Rice, First Nat. Battery, Tronox, Meze Foods, Bridgestone & Coega Dev Corp). Technical support provided to 3 sites Hulamin, Mpact & CSIR Rosebank). Energy audits undertaken at 13 BudChem Group sites.	**Target Achieved**
Output 4.1.6	Development of enterprise EnMS and ESO demonstration project case studies and associated research/position papers.	Identification of 2 relevant studies (@ $5k each) to showcase and provide lesson on EnMS and ESO challenges and successes.	EnMS Case study developed for Bridgestone and Mintek.	Achieved Target
		Two Waste Heat Recovery (WHR) studies at Tronox Mining and Hulamin - $13k	Completed Waste Heat Recovery Studies for Hulamin and Tronox.	Achieved Target
		Identification of 2 relevant studies (@ $5k each) to showcase and provide lesson on EnMS and ESO challenges and successes.	ISO 50001 Gap Analysis study completed for Festive Chicken and Meze Foods.	Achieved Target
		Demand Response study - $20k. Flownex License - $20k	SA Energy Demand response study completed. Flownex Licence jointly procured with CSIR Energy Centre	
		Development of CWSAT Tool - $20k	Redeveloped Chilled Water System Analysis Tool for chiller and refrigeration systems optimization training in SA. Additional Chilled Water System Excel based Assessment scoping tool developed to supplement assessment technical tools.	Exceeded Target

Component No.	Log Frame Description	Target	Performance	Comments
		Development of Study of secondary savings of 12L Projects and global benchmarking analysis - $60k CASO Algorithm Software Control Tool - $23k Development of Financial Analysis Tool - $20k.	Insufficient data available to develop meaningful benchmarking from current 12L applications. SANEDI unable to provide requested data. Resources were reallocated to provide input and support to World Bank "Development of Sustainable Financing Mechanisms for Demand-Side Energy Efficiency Market Transformation in South Africa" study and concept note development to establish a Project Preparation facility in collaboration with SANEDI. CASO control guide in progress. Completion expected September 2022 Financial Analysis tool not able to be completed within project timeframe due to poor response to call for proposals and unable to agree on budget.	Work refocussed to support inputs and commentary on 4.3.1. Completion expected September 2022
Component 4.2	**Support to industrial enterprises through a financial proposal advice/match-making support mechanism/service and other assistance programmes to assist access to, and understanding of, IEE private sector financing and Government financial incentive programmes**			
Output 4.2.1	Establishment of IEE financial proposal advice and match making support mechanism within NBi with associated technical assistance and human capacity support	3 Financial advices / Matchmaking proposals in any of the following formats: 1. RECP Finance Workshop facilitated 2. Investment grade assessment report 3. Financial analysis of assessment recommendations, as specified.	Two RECP Sustainable Finance Workshops have taken place within the GP and WC regions, which were very successful and well attended. 14 requests for linkage to financing mechanisms were unearthed which the IEEP PM Team have been following-up on. One Access to RECP Finance workshop took place in KZN.	**Target achieved.**
Output 4.2.4	Development of initial EnMS and/or ESO proposals drawn for the demonstration programmes under Outputs 4.1.2 and 4.1.3. With up to 15 proposals for the large companies and up to 50 for the SMEs being developed and presented for consideration.	Contract the service of a banking / financing specialist (Uzenzela, SunRep,) for 30 financial match making proposals (business plans / applications for finance) to SMEs over the remaining term of the project. (15 x R30k)	All the roll-over assessments from Work package P2 and future IEE assessments will capture financial metrics as outlined in the IEE Technical Assistance Financial Matchmaking Template.	All financial linkages realized in the Finance workshops have been documented. This included generation of 16 Business case investment proposals

Component No.	Log Frame Description	Target	Performance	Comments
Component 4.3	**Targeted technical support to FIs/IFIs and Government providers of IEE finance to develop, enhance access and evolve funding mechanisms, incentives and financial packages/credit streams for industrial enterprises implementing EnMS and ESO measures**			
Output 4.3.1	Analysis of national and international best practice of funding mechanisms, incentives and financial packages/credit streams IEE projects.	Contract service provider.	IEE PMs served on the PSC of the project: "Development of Sustainable Financing Mechanisms for Demand-Side Energy Efficiency Market Transformation in South Africa". - World Bank Project with SANEDI. Project developed Concept note for Project Preparation Facility earmarking NCPC as possible host institution.	**Target achieved.**
Output 4.3.2	Assistance in the analysis of Government financial incentives for IEE including: MCEP and the 12L (and 12I) tax incentive, making recommendations for improvement and evolution (in line with technical assistance provided under Activity 2.1.6 to strengthen incentives relative to EnMS and ESO).	Contract service provider.		Covered in 4.3.1
Output 4.3.3	Guidelines for financial risk evaluation of EnMS and ESO IEE projects.	Contract an EnMS/ESO Expert to develop a guideline for financial risk evaluation of EnMS/ESO Projects.	Cova Advisory & Associates appointed, and work commenced on development of Guidelines for Financial Risk Evaluation of EnMS and ESO IEE projects. Expected delivery anticipated end July 2022.	Cova Advisory & Associates appointed, and work commenced on development of Guidelines for Financial Risk Evaluation of EnMS and ESO IEE projects. **Expected delivery anticipated 30 July 2022.**
Output 4.3.4	Capacity building seminars for local FIs to better understand benefits and risks of investment in EnMS and ESO IEE projects (using Guidelines for financial evaluation of IEE projects developed in	2x Training workshops for Bank Portfolio Managers.	Developed the training material. But unable to secure training sessions. Despite that, several banking staff and portfolio managers have already attended and gained significant benefit from the Sustainable Finance workshops and information sessions presented to Standard Bank Portfolio Management and the Banking Association of SA (BASA) Teams.	Response from Finance sector on skills needs was poor despite online survey issue to targeted contacts. To mitigate the issue of not achieving the target, this activity will be picked up through the NCPC-SA

Component No.	Log Frame Description	Target	Performance	Comments
	activity 4.2.3) with an emphasis on promoting the training of female banking staff.			RECP finance programme.
Output 4.3.5	Targeted technical support and training to local FIs to develop capacity of staff on assessing eligibility for finance and risk sharing of IEE projects. This activity will include: three introductory workshops for 60 bank staff; two expert training workshops for 30 bank staff; and personal coaching of 15 bank staff, assuming 3-5 persons from participating banks.	Contract Banking/EE Specialist to facilitate 3 mentoring workshops to Portfolio Management teams at Standard Bank, Sasfin Bank and FNB.		This activity is covered in 4.3.4
Output 4.3.6	Assistance to three local FIs to develop financial packages/credit lines suited to IEE investment and in particular EnMS and ESO.			Covered in 4.3.1
Component 5.0: EnMS and ESO Awareness, Promotion, Service Demand Generation and Lessons Sharing				
Component 5.2	**Communication and awareness outreach activities to promote uptake of policy frameworks, standards, learning circles, financing opportunities, training and capacity building activities and the EnMS and ESO**			
5.2.1	Hosting and participating in industrial events and seminars/ workshops	Project end event SA Energy Efficiency Confederation Conference Africa Energy Indaba 2022	Hosted 103 industry events compared to a target of 50, over the life of the project. The IEE Project-end was extensively covered at the NCPC-SA biannual conference in May 2022 and subsequent regional debriefing sessions with project stakeholders and IEEP experts. The project also participated in the Conference of the SA Energy Efficiency Confederation in October 2021 through presentations and exhibition stands, and in the Africa Energy Indaba in March 2022. Participation in the latter was through an exhibition stand and workshop presentation in Cape Town, as well as through a	**Target exceeded**

Component No.	Log Frame Description	Target	Performance	Comments
			presentation as part of the conference programme which was hosted virtually.	
5.2.2	Enterprise ESO/EnMS Quick Self-Help Guides for companies to quickly begin the process of energy saving within the national power constrained environment, including short/lite guidelines for in-house EnMS and ESO awareness to disseminate IEE practices amongst enterprise staff.	Additional self- help guides for companies in biogas, power quality and chiller systems will be developed to complement and round off the end-user and expert training in these energy systems.	Published 17 ESO and EnMS self-help guides/tools were published over the life of the project.	**Target achieved**
5.2.3	Establishment of peer-to- peer exchange platforms/networks / learning circles (including websites) within/for target industrial (and commercial) sectors as well as the hosting of Information exchange events/working groups.	Peer-to-peer exchange platform.	A Peer-to-Peer event was hosted in this period in the form of the relaunch of the IEE Linked-In group. A total of 3 Peer-to-Peer events were hosted over the life of the project.	**Target achieved**
5.2.4	An extensive set of gender sensitive / inclusive awareness raising, and communications materials and editorial pieces associated with promotion of the GEF Project and its contained outputs/activities under all of its components (including policy frameworks ISO 50001 Series of standards; training and capacity building	Ongoing communication materials and editorial pieces, and digital media. Media monitoring and analysis Final communication materials and editorial pieces, and digital media SA IEE Phase II commemoration publication; media and comms analysis.	Social and traditional media coverage remains steady and concentrates on sharing successes and key messages. The NCPC-SA uses its own budget for advertising, as required. The communication team negotiates editorial coverage for the project - there have been 21 media articles since 1 March 2021. This brings the total number of articles for the project to 203 (articles only – adverts not included) against a target of 150 articles plus adverts Brochures – 12 in total completed over lifetime of project	**Target achieved (and exceeded)**

Component No.	Log Frame Description	Target	Performance	Comments
	programmes; promotion of demonstration projects and IEE finance and incentives available) as well as technical editorials on the EnMS and ESO methodologies.			
5.2.5	EnMS and ESO demonstration case study packaging and dissemination.	Ongoing activity of case study packaging and dissemination (Q2-Q3). Final case study dissemination (Q1 of 2022) Women in the SA Energy Sector study undertaken by service provider	Case studies edited and uploaded onto the NCPC-SA website - total 49. Case studies can be viewed here: https://www.industrialefficiency.co.za/case-studies/case-studies-iee/ Study on gender impact of IEE project completed end May 2022	**Target achieved**

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	(i) Risk level	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
1	Coordination between the dti and the DoE remains weak – with result of mixed messages to industry thereby resulting in enterprises not actively participating in the project.	Moderate	This risk will be substantially mitigated by: (i) Clear definition of roles and responsibilities of the **dtic** and the DoE (and the NCPC-SA and SANEDI respectively) during project preparation and establishment of a Project Coordination Unit (PCU) to coordinate executing partners and major stakeholders during implementation. (ii) Establishing a Project Steering Committee (PSC) that sets out the institutional linkages among all stakeholders under a project	The DMRE and SANEDI concluded an agreement with UNIDO to work together towards the achievement and finalisation of components 1 and 2 activities by end of Project. The relationship between the project with DMRE and SANEDI has had a marked improvement and closeness. There is better communication and collaboration between departments largely driven by key individuals,	Low
2	Ministries do not show interest in facilitating a conducive environment for increased IEE.	Low	Government is widely committed to IEE and while difficulties due to inter and intra-departmental coordination are possible in regard to regulating the energy use of the South African industrial sector, demonstration of the benefits of EnMS and ESO measures in terms of increased national industrial competitiveness, increased job creation/retention, reduce national grid loading and reduced sector and national GHG emissions will continuously be packaged and promoted to the relevant parts of Government.	Targeted technical assistance and capacity building to enhance and implement IEE policies, incentives and regulatory frameworks supporting EnMS and ESO uptake and strengthening the coordination of associated activities across government agencies.	Low
3	Limited interest is solicited within industry to implement EnMS and ESO due to failures to understand the potential technical and financial benefits of	Low	Industry demand for assistance in IEE will grow strongly because of firstly, the renewed national power constraint and the Government calls for increased IEE and secondly, rapidly rising energy costs. Furthermore, the UNIDO and NCPC-SA under the SA IEE Project has built a good reputation within industry on providing high quality	Through UNIDO and NCPC-SA's good reputation within industry on providing high quality training and enterprise technical implementation assistance on EnMS/ESO, industry demand for assistance in IEE has grown strongly because of firstly, the renewed national power constraint and the Government calls for	Low

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

	(i) Risks	(i) Risk level	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
	implementing EnMS and/or ESO. Slow acceptance of the GEF Project's EnMS and ESO enterprise support services results in late demonstration of the benefits of EnMS and ESO as well as SANS/ during the useful lifetime of the Project.		training and enterprise technical implementation assistance on EnMS/ESO. Therefore, the GEF Project will not be starting from scratch within industrial sectors and initial companies for the demonstration programme will have already been identified prior to the outset of the GEF Project implementation. Lastly, the GEF Project will work extensively with institutions like the Energy Efficiency Leadership Network under the NBi under its awareness and communications functions to continue to lobby industry and the commercial sector on the business, social and environmental case for adopting EnMS and implementing ESO.	increased IEE and secondly, rapidly rising energy costs. There has been strong uptake and sustainability of EnMS projects. Reference to the Report, "Adoption of EnMS in SA". The project has remained relevant to industry by extending its range of training topics to meet the needs of different systems. The range of services was also expanded. The project also received strong interest from SA regarding support in similar activities covered in the IEE project.	
4	Following, engineering-level personnel EnMS and ESO exposure, training, EnMS implementation and energy systems optimization assessments and reports, the management of enterprises might not be willing to invest in EE projects and technologies.	Moderate	Providing training/exposure for enterprises' key higher management level personnel to build their capacity to better understand the economic and financial value of investing in energy management and energy systems optimization. Provision of project preparation technical assistance and enhanced promotion and marketing of existing financing facilities through training for both banks and target clients.	A proxy for implementation is the savings that the project has achieved, which is still on the increase.	Low
5	Risk of resistance against, or lack interest in, the project activities, with regard to the active promotion of gender equality. Low participation rates by suitable female candidates and low female population within engineering fields.	Low	South Africa, while having a number of significant gender issues, is a pro-gender equality society. The GEF Project will however, pursue a thorough and gender responsive communication strategy and stakeholder involvement at all levels to ensure gender equality promotion to maximize the potential contribution of the project to improving gender equality in the IEE field.	Gender mainstreaming was not designated as a separate deliverable for the Project but was integrated into all components in alignment with the project strategy to be gender inclusive and mainstream aspects of gender into project delivery. Through its gender mainstreaming approaches, the project supported capacity building and technical support for the involvement of stakeholders in national policy sector design, implementation, research, and advocacy efforts on women's empowerment in the IEE sector. This was actively promoted through thematic government and industry workshops, conferences, and media articles to promote women in the IEE sector and the energy sector more broadly.	Low

	(i) Risks	(i) Risk level	(i) Mitigation measures	(ii) Progress to-date	New defined risk[5]
6	Climate change can significantly reduce industrial output in South Africa and therefore the need to increase IEE.	NA	Based on discussions with the South African Government and relevant experts, climate change does not yet present significant risks to South African industrial production levels within the time period of the project.	The effects of climate change have of recent, been felt by the water supply constraints, especially in the Western Cape. The impact of climate change has been felt across industry and has affected production levels in many industries. Inability of the grid to supply or meet the demand remains a problem. The Section 12L Energy Efficiency tax incentive has continued un-abated and provided much needed relief to industrial and commercial energy users, especially through the COVID-19 lockdown period.	Low
7	The negative impact of Covid-19 on South African Industry and related impact on project delivery. Low /reduced activity levels level and participation in the IEEP, due to industry having reduced staff compliments with reduced output levels.	Low	The risk will be mitigated by: (i). IEE Project staff continuing work activities and maintaining momentum with sites by moving meetings to online platforms, where possible. (ii). Limited numbers of staff to be at office to reduce the chance of transmission. (iii). Movement of training activities to an online platform.	Work was delayed due to procurement moratorium imposed by National Treasury between February and end of March 2022. However, an increasing 'new normal' has been a hybrid form of working, where online meetings are combined with face to face.	Low

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.

If the project has received a sub-optimal risk rating in FY21, please elaborate here on any actions taken towards the mitigation of these risks.

NA

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

Please indicate whether the outbreak of COVID-19 has affected the project implementation. If so, have particular project activities/outputs been significantly impacted by the pandemic? Do you expect COVID-19 to have implications on the project's ability to finish by the expected completion date? In case the project has already been extended because of COVID-19, please mention it here and assure that the arguments presented in the extension request are aligned with the information provided in this section.

The COVID pandemic had an impact on the project delivery, requiring extensions to be requested. The NCPC-SA activities rely largely on direct engagement with industry company representatives for site assessments and follow up activities. The restricted access imposed by many sites as a result of the government imposed National State of Disaster Adjusted alert levels, did make access to many sites, key industry stakeholders and service provider procurement difficult and onerous. This has resulted in a number of direct company engagement interventions lagging including site follow-ups, EnMS implementation facilitation, technical support and financial linkages. Where possible, use was made of virtual platforms to engage. The skills development element of the NCPC-SA's offerings was another area initially severely curtailed by imposition of social distancing requirements and banning of in person training sessions. Despite this, the Centre did anticipate the COVID impact and was able to procure user licences for a suitable online platform and tailor the current training material to enable End-User and non-contact module training to continue. However, there were still a number of Expert level modules that did experience substantial delays due to their reliance on on-site practical application of the learning. However, the waning infections since the December 2021 peak, has seen industry opening up and being more receptive to approaches by the 3Centre. The recent lifting of the State of disaster in April 2022 has also been a positive boost to increased engagement, and it is anticipated industry interactions are likely to pick up rapidly now as companies look to recover to pre-Covid production levels.

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

Please elaborate if the project is facing delays in implementation, explain the related reasons, and indicate whether you are planning to request an extension of the above-reported project completion date. If so, please provide information on the related project-level national consultation and decision-making process that have been/will be observed. Kindly note that this section will be used as a reference for the justification of any upcoming extension request(s), if applicable.

The project "Industrial Energy Efficiency Improvement in South Africa through Mainstreaming the Introduction of Energy Management Systems and Energy Systems Optimization" (GEF ID number 5379) was due to be completed on 30 June 2022. The project recently concluded the project closing event and the team conducting the final evaluation in South Africa was on the ground conducting site visits and interviews (June 2022). The expectation is for the evaluation report to be finalized by August 2022. At the same time, there are a few pending outputs under the sub-contract with SANEDI (the South African National Energy Development Institute), which requires another 3 months. In view of these final steps in finalizing this successful project, there was a request for a project extension for a period of 3 months (July to September 2022).

The main purpose of the extension is to allow the finalization of the outstanding project activities primarily.

- Close the final evaluation and ensure proper follow up on actions identified
- Deliver the pending outputs related to the sub-contract on policy with SANEDI
- Digitize the EnMS training programme to ensure wider dissemination and support the project legacy
- Undertake necessary follow up on the gender impact study delivered under the project

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

Criterion	Summarized Finding
A. Project Design Assessment	
Project Design	The project design is seen as sound, appropriate, and technically feasible based on the extent of strategic alignment, the constellation of involved actors playing pertinent roles, its development through a consultative approach, the key four pillars on which it is based which are highly appropriate to address the problem at hand, together with the resourcing that was put in place.
Project Results Framework / Logframe	The results framework operationalises the project's Theory of Change and provides the basis for the subsequent development of work plans, subcontracting, and M&E; however, the highly detailed KPIs create a burden for reporting and demand a high level of absorption capacity
B. Project Performance and Progress Towards Results	

Criterion	Summarized Finding
Relevance	The project is highly relevant for national development priorities, the intended beneficiaries, and implementing partners (who are seen as highly appropriate). It is fully pertinent to UNIDO's mandate and domains of comparative advantage and fully aligned with the donor's focal area priorities with respect to climate change mitigation and GEF's interest in pursuing arrangements that enable national partners to build capacity and country ownership through execution.
Effectiveness and Progress Towards Expected Results	While two components have not progressed, which is a setback for the overall project, good progress has been achieved across the remaining aspects (apart from outputs related to gaining professional recognition, enhancing the IEE footprint in TVET institutions and facilitating access to financing IEE). More time is needed to allow the responsible institutions to carry out their designated responsibilities, which support national priorities and will provide the opportunity to build up valuable competences, data, confidence, and stature.
Efficiency	The project has gained efficiencies in building on a previous phase, strategic use of co-financing, and a culture of frugality. Having already been granted a 1-year 'no cost' extension, its time efficiency has been lowered and there were missed opportunities to synergize work across the project due to delays in advancing on Components 1-2.
Gender Mainstreaming	While the project design, preparatory work, and recommendations of the 2014 Gender Analysis and Assessment Report (under Phase I) provided an initial platform, implementing partners were slow to bring gender mainstreaming to the fore. Subsequent initiatives (including the 2019-2020 Gender Mainstreaming Activity Plan) will hopefully allow the project team to engage on a stronger footing, leading to more transformational approaches, moving forward.
Sustainability	The project's results and benefits are expected to be buoyed by the degree of business and investor confidence in the country's socio-political stability, together with the level of public concern about and government policy aimed at assuring the nation's energy security. The likelihood of financial resources being available following project closure depends on the capacities of national institutions to assure funding and retain focus on the provision of energy services; pricing policies and security of supply will nonetheless influence the willingness of enterprises to invest in improving energy efficiency. Essential elements for replication have been built into the project's design and implementation. While technical know-how is already in place, not all stakeholders are focussed on the project's closure and building a future roadmap, although some aspects are now being put in place. The project's outputs and higher-level results are generating benefits for South Africa and at a global level, with no adverse environmental impacts likely to affect the sustainability of benefits.
C. Project Implementation Management	
Project Management	The project is guided at the highest level by an appropriately constituted PSC that meets regularly and has demonstrated increasing alignment over time. While there is little visibility, as yet, into DMRE/SANEDI's operational setting, there is high appreciation of NCPC-SA's project leadership, although capacity constraints and a dual reporting structure are generating risks.
Results-Based Work Planning, M & E, Reporting	The project's results framework was used as a management tool to guide the development of work plans and to regularly monitor and report on results. The strategy of 'ring-fencing' and heavy focus on KPIs demonstrate a commitment to maintain focus on results-based work but risks inhibiting investment in learning from those results. Delaying the MTR missed a vital opportunity to independently gather perspectives to generate insight and momentum for an earlier adaptive response to the prolonged delay that has been a setback for the overall project.
Financial Management and Co-Financing	The project is being well-managed from a financial point of view, leveraging its cash and co-financing contributions in a strategic, efficient, transparent, and accountable manner to deliver the planned outputs and support their envisaged outcomes.
Stakeholder Engagement and Communication	Government stakeholders support project objectives and have an active role in decision-making through their engagement as implementing partners. External communications have been well-established, are sufficiently budgeted, and are achieving adequate outreach through an impactful choice of media platforms. While internal project communication has been working well for the most part, breaks in contact with UNIDO headquarters have led to missed opportunities for some challenges to be addressed in a timely manner.
D. Performance of Partners	
UNIDO	UNIDO's involvement is highly valued for its contribution of technical expertise, networks, thought leadership, and ultimate responsibility for the project, as GEF's implementing agency. The successful recruitment of a coordinator for UNIDO's energy projects in South Africa is viewed as a positive step to addressing perceived gaps in UNIDO headquarters' engagement, the Project Manager's overload, and constrained capacities in the Regional Office, which have reduced the ability to solve problems and hampered the speed of decision-making.
National Counterparts	Key government counterparts have been engaged as PSC members, fostering national ownership, assuring their influence on the project's efficient/effective implementation, and facilitating inter-

Criterion	Summarized Finding
	departmental coordination. While the latter has been lagging, following agreement with UNIDO on financial modalities for Components 1-2 and SANEDI's subsequent subcontracting, the affected outputs are expected to be ramped up.
Donor	The GEF readily approved the project design upon its initial submission, disbursed project funds in a timely manner, and performed its supervisory role in approving annual PIRs.

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?

Not applicable- this is a GEF 5 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).

The strong commitment to the Project by key stakeholders has been confirmed at IEE PSC meetings,

attended by the dtic, DMRE, DFFE, CSIR, SANEDI, UNIDO and the NCPC-SA.

The communication strategy specifically addresses the following stakeholders through bilateral meetings, industry platforms and events (own- and 3rd-party hosted), and the media (with targeted messaging):

- Industrial businesses in South Africa
  - Energy intensive user group
- Industry associations and platforms
- Key national Government departments:
  - Trade, Industry and Competition
  - Mineral Resources and Energy
  - Treasury
  - Environmental Affairs, Forestry and Fisheries
  - Science and Innovation
- Municipalities responsible for energy distribution
  - Through the SALGA energy office
  - Association of Municipal Electrical Utilities (AMEU)
- Financial institutions
  - Major banks
  - Banking Association of SA
- Professional Associations for women in energy, with a particular focus on SAFEE (South African Females in Energy, a Chapter of the SA Confederation for Energy Efficiency)
- Higher education institutions
- General public
- International professionals and energy sector organisations.

Refer to item VII – Knowledge Management – for details of events and media exposure illustrating the above.

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.).

N/A

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

- There was a Project Steering Committee (PSC) meeting on 9 December 2021. (See Attachment, GEF 5379_PSC minutes_9 Dec 2021)

- There was a Project Steering Committee (PSC) meeting on 24 June 2022 (See Attachment, GEF 5379_PSC minutes_24 June 2022)

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),.

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

Gender mainstreaming was not designated as a separate deliverable for the Project, but was integrated into all components in alignment with the project strategy to be gender inclusive and mainstream aspects of gender into project delivery. Through its gender mainstreaming approaches, the project supported capacity building and technical support for the involvement of stakeholders in national policy sector design, implementation, research, and advocacy efforts on women's empowerment in the IEE sector. This was actively promoted through thematic government and industry workshops, conferences, and media articles to promote women in the IEE sector and the energy sector more broadly.

A key deliverable during the reporting period has been the study into the impact of the project on gender mainstreaming in the IEE sector by an external service provider. The report broadly looks at the barriers and opportunities faced by women in the sector and how the project has purposefully designed measures to support women to overcome these barriers and take advantage of opportunities for career advancement, growth and sustainability in the sector. The study focused on the following:

- Determining the impact of the IEE Project in SA on gender mainstreaming in the IEE sector in SA
- Providing recommendations based on learnings from this project as a gender-responsive model for other IEE initiatives in the country and UNIDO IEE initiatives globally

The main findings of the study were as follows:

- The Project has made a substantial contribution to promoting gender equality and advancing women's participation and role in South African IEE sector
- Future projects should build on the foundation established by the project, and pursue transformative goals to address the structural gender barriers persisting in the sector

Special mention was made of the positive impact of the IEE training on the career development of both men and women, with stakeholders making particular reference to the impact on qualified women in the labour market. Of the 3 649 attendees of IEE training in the various levels of training on Energy Systems Optimisation (ESO) and Energy Management System (EnMS) presented during Phase II of the project, 37.4% were women. (It should be kept in mind that training statistics reflect an accumulative number. People attending multiple trainings are including multiple times.)

Interviewees indicated that the training contributed to an increase in women in STEM and women's participation and leadership in the sector at all levels. Marketing campaigns for the training were found to have been gender sensitive, specifically targeting women in their awareness building/ outreach. There has been a significant impact on the confidence, an increase of awareness about job opportunities, information and networks in the IEE sector and some evidence to suggest that increases in human capital, networks and opportunities have stimulated women-owned SMME (emerging, nascent). It was found that efforts from the IEE project related to skills development and profiling women in leadership and as role models, are likely to have played a key role in kickstarting increased empowerment of women in the sector.

The findings and recommendations of the study will be followed up as one of the activities during the three-month extension granted until September 2022.

Other activities relating to gender mainstreaming during the period under review include the following:

- Gender equity focus maintained in media and events
- IEE advert in Business Day Women's Month supplement; NCPC-SA advert in Mail & Guardian

- Facilitation of participation in various events, incl. gender side events at VEF, COP26, and UCT-GSB Women in Industry event
- IEE Project nominated and accepted as Board member of SA Females in Energy Efficiency (SAFEE), a chapter of the SA Confederation on Energy Efficiency (SAEE). Note: The Project Manager has unfortunately since left the employ of the NCPC.
- SANEDI initiated various gender mainstreaming-related activities, including a series of females in energy profiles and the inaugural conference on Women in Energy

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.

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

The Project continued the process disseminating results through existing information sharing networks and forums both in South Africa and abroad. These include participation in industry and NCPC-organised, articles and advertisements in trade publications, social media posts and participation in the UNIDO Industrial Energy Efficiency Accelerator platform (now the Industrial Decarbonization Accelerator) - https://www.industrialenergyaccelerator.org/

- Lead IEEP Project managers served as PSC members on the "Development of Sustainable Financing Mechanisms for Demand-Side Energy Efficiency Market Transformation in South Africa" - World Bank Project for SANEDI. A report will be published shortly, which will encapsulate the input of the IEEP and showcase the newly proposed and developed financing mechanism for South Africa.
- Energy mapping study-The main objective of the study was mapping the national energy consumption, focusing on the commercial and industrial sectors. The activity had included analysing the sectoral and process related energy savings potential and forecasted consumption trends. The study had investigated the sources and consumption of energy in the Commercial and Industrial Sectors. In the industrial sectors, the focus was on the textile, iron and steel, cement, paper, agri-processing, automotive, chemicals and pharmaceuticals, food and beverage subsectors. In the Commercial sector, the focus was on shopping centres, and warehouses. A report and recommendations were concluded.
- Two RECP Sustainable Finance Workshops have taken place within the GP and WC regions, which were very successful and well attended. Fourteen requests for linkage to financing mechanisms were unearthed which the IEEP PM Team have been following-up on.
- One Access to RECP Finance workshop took place in KZN.
- Peer to peer networks: This activity was delivered through a virtual event on 25 October, where the UNIDO and NCPC energy tools were shared and the IEE in South Africa LinkedIn page was relaunched as a knowledge-sharing "peer-to-peer" platform
- Case studies continue to be edited and uploaded onto the NCPC-SA website. Case studies can be viewed here: https://www.industrialefficiency.co.za/case-studies/case-studies-iee/

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

- Peer to peer networks: This activity was delivered through a virtual event on 25 October, where the UNIDO and NCPC energy tools were shared and the IEE in South Africa LinkedIn page was

relaunched as a knowledge-sharing "peer-to-peer" platform

- Case studies continue to be edited and uploaded onto the NCPC-SA website. Case studies can be viewed here: https://www.industrialefficiency.co.za/case-studies/case-studies-iee/
- IEE awards book – published to celebrate the acknowledgement of the project as the AEE's International Project of the Year for 2020
- Various tools and guides, which can be accessed here: https://www.industrialefficiency.co.za/guides-and-reports/

Workshops and events

In addition to the events listed below, the following finance seminars were hosted by the NCPC to link industry and financial institutions:

Date	Topic	Attendees	Format
20 September 2021	Finance Workshop Gauteng	37	1.5 day webinar
21 September 2021	Finance Workshop Western Cape	57	1.5 day webinar

IEE Project Event Participation: October 2021 - May 2022

Date	Event	Location	Hosts	Presentations	Other
19 – 20 Oct 2021	Manufacturing Circle - Electricity Forum	Hybrid event, online and Gauteng	Manufacturing Circle	Sashay Ramdharee / Ndivhuho Raphulu	Virtual Exhibition, NCPC-SA
25 October 2021	Relaunch of IEE Project peer network and LinkedIn group	Virtual event	NCPC-SA IEE Project	Julie Wells/ Sashay Ramdharee	
3-5 November 2021	South African Energy Efficiency Conference	Virtual event	SAEE Confederation	Sashay Ramdharee Lindani Ncwane	Exhibition, NCPC-SA and UNIDO
22 – 26 Nov 2021	Manufacturing Indaba	Virtual event	Manufacturing Indaba	Milisha Pillay	Virtual Exhibition, NCPC-SA
1, 2, 3 March 2022	Africa Energy Indaba	Hybrid event, online and Cape Town	Africa Energy Indaba	Lee-Hendor Ruiters Lindelani Mkhize Alf Hartzenburg	Exhibition, IEE Project
24 March 2022	Sustainable Finance Workshop		NCPC-SA		
25 May 2022	IEE Project End Event @ the NCPC-SA industrial Efficiency Conference		NCPC-SA and UNIDO	Various	Exhibition Sanedi, UNIDO, NCPC-SA, IEE
30 May 2022	IEE Project End Event: Eastern Cape		NCPC-SA and UNIDO	Various	
1 June 2022	IEE Project End Event: KZN		NCPC-SA and UNIDO	Various	
3 June 2022	IEE Project End Event: Western Cape		NCPC-SA and UNIDO	Various	

A highlight of the reporting period was the NCPC-SA's 5th biennial Industrial Efficiency Conference, hosted at the CSIR ICC and online on 25 and 26 May 2022. Day 1 (25 May) focused on celebrating the end of the IEE Project. The day was attended by 234 delegates and speakers in the room, with 182 delegates attending online.

The IEE Project hosted a breakaway programme with two sessions, before and after lunch. Presentations included Impact of the IEE Project in South Africa (Kevin Cilliers, NCPC-SA); Industry Case Studies and testimonials; EnMS implementation; energy resilience; power quality and biogas. Attendance of these sessions was as follows:

- IEE Session 1: 81 in the room; 96 online.
- IEE Session 2: 55 in the room; 32 online.

Day 2, 26 May, included a breakaway session on the gender mainstreaming work of the IEE Project. The session was attended by a small but engaging group of 21 people in the room and 18 people online, and hosted by Petro de Wet of UNIDO.

The three roadshow events in Gqeberha (Eastern Cape), Durban (KwaZulu-Natal) and Cape Town (Western Cape) the following week were attended by 80 delegates in total. These events were focused on thanking and engaging with the companies and experts that made the IEE project possible. The events were very positively received, and valuable feedback was gathered from delegates.

IEE news articles and advertisement published from July 2021 to May 2022:

Media engagement activities were focused on sharing impact and case studies, as well as promoting the conference and IEE Project-end event.

Date	Publication	Headline	Source
1 October 2021	Business Day Earth	Positive charge - Growing demand necessitates a revised approach to power use	Print
8 October 2021	Engineering News	Pump systems optimised through energy-saving assessments	online
8 October 2021	Engineering News	Pump systems optimised through energy saving assessments	Print
18 October 2021	Crown Publications	Editorial: COP26 and concrete action	online
18 October 2021	Crown Publications	New NCPC-SA training initiatives extend IEE project success	online
17 February 2022	Crown Publication	NCPC-SA's Industrial Efficiency Conference	online
1 November 2021	Mech Chem Africa	New NCPC-SA training initiatives extend IEE project success	Mech Chem Africa
1 November 2021	Mech Chem Africa	COPS and concrete action	Mech Chem Africa
8 December 2021	Mail & Guardian	When we know better, we do better – Narrowtex's sustainability journey	online
25 February 2022	Engineering News	Power Quality the focus at AEI (engineeringnews.co.za)	online
25 February 2022	Transfic Transformers	Power Quality the focus at AEI	online
25 February 2022	Engineering News	Power Quality the focus at AEI	print

04 March 2022	HVACR online	Joint project to accelerate South Africa's transition to a green economy announced	Online
6 April 2022	Engineering News	Partnership launched to overcome climate resiliency barriers in energy, water	online
1 May 2022	Resource	Best practices for transitioning to a green economy	Print
1 May 2022	Harvest SA	Growing resilience, expanding business	Print
26 May 2022	Engineering News	NCPC-SA energy efficiency objectives 'big opportunity' to reduce South Africa's carbon	Online
26 May 2022	Transfix transformers SA	NCPC-SA energy efficiency objectives 'big opportunity' to reduce South Africa's carbon	Online
26 May 2022	Research Channel	NCPC-SA energy efficiency objectives 'big opportunity' to reduce South Africa's carbon	Online

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.

A PSC meeting was held on 24 June 2022, where a project extension was requested. The PSC subsequently endorsed a no cost extension, for the duration of July-September 2022.

The subcontract with SANEDI, around 80% of activities were implemented, which were reflected in the 2021/22 workplan. The project was a success but due to factors beyond human control such as supply chain management delays, it was impossible to execute all activities within the given project timeline. Challenges such as COVID-19 lockdown regulations and the stringent public supply chain management procedure caused delays that have affected the timely delivery of the project.

Some background to the progress, challenges and outcomes with the SANEDI subcontract. In 2019, UNIDO and SANEDI signed a contract for the implementation of the SA IEEP II project, valued at $460,000. (R 6,440,000). The first $90,000 (R1,260,000) of the contract was then handed to SANEDI in February 2020, with the project set to finish in December 2020. Due to challenges such as the COVID-19 pandemic outbreak, and the appointment of a new manager in September 2020, the project was delayed. An extension was requested by SANEDI in the PSC meeting held on the 3rd of December 2020 with key project stakeholders. The contract was amended to grant an extension for the project to close on the 30th November 2021. Due to additional restrictions within the project such as procurement delays and COVID-19-related lockdowns, it was anticipated that some project tasks would not be completed by the project's scheduled deadline. Furthermore, it is possible that the entire project budget ($460,000) would not be used before the project deadline. At the PSC meeting held on the 25th of May 2021, a further extension was requested to extend the deadline to March 2022. The project implementation team within DMRE and SANEDI critically reviewed the project work plan and realised that some project activities may be pro-longed to periods beyond the deadline of March 2022, as a result the project implementation team concluded that it is best to reduce the scope and costs of the project.

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	
☐	Components and Cost	On the 15th October 2021, a decision was made to reduce the scope for the work originally contracted between UNIDO and SANEDI. The two reasons are as following. **1.** Tight timelines with 5 months remaining to close contract execution - The project was formally granted an extension by the Project Steering Committee (PSC) on the 25th of May 2021. Since then, SANEDI had worked to fast-track project delivery. A meeting between UNIDO and SANEDI on 22 September 2021 discussed a reduced scope of work **2**. Focus efforts of contract delivery on critical activities – SANEDI and the DMRE would like to focus their effort on the successful delivery of the SA IEEP II Project. It is important to use the remaining few months of the project to address critical activities that guarantee the most significant impact to both the project and industrial energy efficiency improvements in South Africa. For this reason, a reduced scope and costs to address the remaining activities was agreed on.
☐	Institutional and Implementation Arrangements	None
☐	Financial Management	None
☐	Implementation Schedule	Request for extension was to include the following: • The project was intended to finish on 30 June 2022, but an extension of 3 months was requested. Completion of the final evaluation and ensuring proper follow up on actions identified (July-August 2022) • Delivering the pending outputs related to the sub-contract on policy with SANEDI (July-September 2022) • Digitize the EnMS training programme to ensure wider dissemination and support the project legacy (July-December 2022) – part of new UNIDO project to establish an e-learning platform • Undertake necessary follow up on the gender impact study delivered under the project (July-September 2022)
☐	Executing Entity	None
☐	Executing Entity Category	None
☐	Minor Project Objective Change	None
☐	Safeguards	None
☐	Risk Analysis	None
☐	Increase of GEF Project Financing Up to 5%	None
☐	Co-Financing	None

[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%.

☐	Location of Project Activities	
☐	Others	

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

The project terminal evaluation took place and is currently still underway, it should be finalized by the end of September 2022. The no cost extension was done to provide SANEDI to finalize action items on the workplan under components 1 and 2.

Grant Delivery Report

Sponsor	400150 - GEF - Global Environment Facility	Fund	GF	Reporting Period	#ERROR
Grant	2000003232	Grant Status	Authority to implement	Grant Validity	01.12.2015 - 30.09.2022
Other Reference	5379-U3-PJ-FS-GR-03	Currency	USD	Prepared on	25.07.2022
Project	120487	INDUSTRIAL ENERGY EFFICIENCY IMPROVEMENT IN SOUTH AFRICA THROUGH MAINSTREAMING THE INTRODUCTION OF ENERGY MANAGEMENT SYSTEMS AND ENERGY SYSTEMS OPTIMIZATION			

			Total Budget (a)	Released Budget (b)	Obligations (c)	Disbursements (d)	Expenditures (e=c+d)	Funds Available* (f=b-e)	Support Cost (g)	Total Expenditures (h=e+g)
Project	120487	INDUSTRIAL ENERGY EFFICIENCY IMPROVEMENT IN SOUTH AFRICA THROUGH MAINSTREAMING THE INTRODUCTION OF ENERGY MANAGEMENT SYSTEMS AND ENERGY SYSTEMS OPTIMIZATION								
Output	120487-1-01-01	1.0: Data Quality Improvement								
1100	Staff & Intern Consultants		7,084.54	7,084.54	0.00	7,084.54	7,084.54	0.00	0.00	7,084.54
1500	Local travel		8,250.78	8,250.78	0.00	8,250.78	8,250.78	0.00	0.00	8,250.78
1700	Nat.Consult./Staff		39,969.25	39,969.25	0.00	39,969.25	39,969.25	0.00	0.00	39,969.25
2100	Contractual Services		354,243.54	354,243.54	122,500.00	226,389.16	348,889.16	5,354.38	0.00	348,889.16
3500	International Meetings		9,272.50	9,272.50	0.00	9,272.50	9,272.50	0.00	0.00	9,272.50
4300	Premises		55.96	55.96	0.00	55.96	55.96	0.00	0.00	55.96
5100	Other Direct Costs		(809.81)	(809.81)	0.00	(809.81)	(809.81)	0.00	0.00	(809.81)
9300	Support Cost IDC		0.00	0.00	0.00	0.00	0.00	0.00	39,207.70	39,207.70
Subtotal Output	120487-1-01-01		418,066.76	418,066.76	122,500.00	290,212.38	412,712.38	5,354.38	39,207.70	451,920.08
Output	120487-1-01-02	2.0: IEE Policy Implementation								
1100	Staff & Intern Consultants		28,149.55	28,149.55	0.02	28,149.53	28,149.55	0.00	0.00	28,149.55
1500	Local travel		26,136.15	26,136.15	0.00	26,136.15	26,136.15	0.00	0.00	26,136.15
1700	Nat.Consult./Staff		101,080.04	101,080.04	(0.01)	98,890.07	98,890.06	2,189.98	0.00	98,890.06
2100	Contractual Services		543,822.77	543,822.77	68,628.33	466,756.83	535,385.16	8,437.61	0.00	535,385.16
4500	Equipment		2,126.13	2,126.13	0.00	2,106.03	2,106.03	20.10	0.00	2,106.03
5100	Other Direct Costs		68,587.27	68,587.27	0.00	68,454.37	68,454.37	132.90	0.00	68,454.37
9300	Support Cost IDC		0.00	0.00	0.00	0.00	0.00	0.00	72,116.44	72,116.44
Subtotal Output	120487-1-01-02		769,901.91	769,901.91	68,628.34	690,492.98	759,121.32	10,780.59	72,116.44	831,237.76

* Does not include Unapproved Obligations

Grant Delivery Report

Sponsor	400150 - GEF - Global Environment Facility	Fund	GF	Reporting Period	#ERROR
Grant	2000003232	Grant Status	Authority to implement	Grant Validity	01.12.2015 - 30.09.2022
Other Reference	5379-U3-PJ-FS-GR-03	Currency	USD	Prepared on	25.07.2022
Project	120487	INDUSTRIAL ENERGY EFFICIENCY IMPROVEMENT IN SOUTH AFRICA THROUGH MAINSTREAMING THE INTRODUCTION OF ENERGY MANAGEMENT SYSTEMS AND ENERGY SYSTEMS OPTIMIZATION			

		Total Budget (a)	Released Budget (b)	Obligations (c)	Disbursements (d)	Expenditures (e=c+d)	Funds Available* (f=b-e)	Support Cost (g)	Total Expenditures (h=e+g)
Output	120487-1-01-03 3.0: EnMS and ESO Training Programme								
1100	Staff & Intern Consultants	56,290.15	56,290.15	0.00	56,290.15	56,290.15	0.00	0.00	56,290.15
1500	Local travel	7,098.23	7,098.23	0.00	7,098.23	7,098.23	0.00	0.00	7,098.23
1700	Nat.Consult./Staff	87,781.37	87,781.37	1,524.62	88,137.48	89,662.10	(1,880.73)	0.00	89,662.10
2100	Contractual Services	1,591,266.98	1,591,266.98	215,858.33	1,331,361.47	1,547,219.80	44,047.18	0.00	1,547,219.80
4300	Premises	435.82	435.82	0.00	435.82	435.82	0.00	0.00	435.82
5100	Other Direct Costs	7,199.29	7,199.29	0.00	6,327.95	6,327.95	871.34	0.00	6,327.95
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	161,989.58	161,989.58
Subtotal Output	120487-1-01-03	1,750,071.84	1,750,071.84	217,382.95	1,489,651.10	1,707,034.05	43,037.79	161,989.58	1,869,023.63
Output	120487-1-01-04 4.0: Investment Promotion in IEE								
1100	Staff & Intern Consultants	66,000.00	66,000.00	26,884.62	38,090.52	64,975.14	1,024.86	0.00	64,975.14
1500	Local travel	40,301.52	40,301.52	13,264.57	20,788.22	34,052.79	6,248.73	0.00	34,052.79
1700	Nat.Consult./Staff	127,382.21	127,382.21	14,036.71	118,088.09	132,124.80	(4,742.59)	0.00	132,124.80
2100	Contractual Services	1,476,592.23	1,476,592.23	14,732.06	1,460,166.60	1,474,898.66	1,693.57	0.00	1,474,898.66
4300	Premises	1,373.46	1,373.46	0.00	1,373.46	1,373.46	0.00	0.00	1,373.46
5100	Other Direct Costs	15,834.58	15,834.58	0.00	15,715.43	15,715.43	119.15	0.00	15,715.43
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	159,459.69	159,459.69
Subtotal Output	120487-1-01-04	1,727,484.00	1,727,484.00	68,917.96	1,654,222.32	1,723,140.28	4,343.72	159,459.69	1,882,599.97

* Does not include Unapproved Obligations

Grant Delivery Report

Sponsor	400150 - GEF - Global Environment Facility	Fund	GF	Reporting Period	#ERROR
Grant	2000003232	Grant Status	Authority to implement	Grant Validity	01.12.2015 - 30.09.2022
Other Reference	5379-U3-PJ-FS-GR-03	Currency	USD	Prepared on	25.07.2022
Project	120487	INDUSTRIAL ENERGY EFFICIENCY IMPROVEMENT IN SOUTH AFRICA THROUGH MAINSTREAMING THE INTRODUCTION OF ENERGY MANAGEMENT SYSTEMS AND ENERGY SYSTEMS OPTIMIZATION			

		Total Budget (a)	Released Budget (b)	Obligations (c)	Disbursements (d)	Expenditures (e=c+d)	Funds Available* (f=b-e)	Support Cost (g)	Total Expenditures (h=e+g)
Output	120487-1-01-05 5.0: EnMS and ESO Awareness Raising								
1100	Staff & Intern Consultants	13,715.69	13,715.69	0.00	13,715.68	13,715.68	0.01	0.00	13,715.68
1500	Local travel	41,163.48	41,163.48	(0.01)	38,609.19	38,609.18	2,554.30	0.00	38,609.18
1600	Staff Travel	21.31	21.31	0.00	0.00	0.00	21.31	0.00	0.00
1700	Nat.Consult./Staff	129,024.53	129,024.53	1,570.82	127,453.71	129,024.53	0.00	0.00	129,024.53
2100	Contractual Services	523,758.06	523,758.06	25,286.38	498,182.52	523,468.90	289.16	0.00	523,468.90
3500	International Meetings	10,382.78	10,382.78	0.00	10,382.78	10,382.78	0.00	0.00	10,382.78
4300	Premises	1,608.57	1,608.57	0.00	1,608.57	1,608.57	0.00	0.00	1,608.57
5100	Other Direct Costs	10,431.83	10,431.83	1,617.01	8,776.21	10,393.22	38.61	0.00	10,393.22
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	69,030.50	69,030.50
Subtotal Output	120487-1-01-05	730,106.25	730,106.25	28,474.20	698,728.66	727,202.86	2,903.39	69,030.50	796,233.36
Output	120487-1-51-01 6.0: Project Monitoring & Evaluation								
1100	Staff & Intern Consultants	23,082.70	23,082.70	0.00	23,082.70	23,082.70	0.00	0.00	23,082.70
1500	Local travel	26,563.16	26,563.16	0.03	26,563.13	26,563.16	0.00	0.00	26,563.16
1600	Staff Travel	21.31	21.31	0.00	0.00	0.00	21.31	0.00	0.00
1700	Nat.Consult./Staff	8,245.25	8,245.25	0.00	8,245.25	8,245.25	0.00	0.00	8,245.25
2100	Contractual Services	18,045.33	18,045.33	0.00	18,045.33	18,045.33	0.00	0.00	18,045.33
4300	Premises	610.96	610.96	0.00	610.96	610.96	0.00	0.00	610.96
5100	Other Direct Costs	3,431.29	3,431.29	0.00	761.16	761.16	2,670.13	0.00	761.16
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	7,344.29	7,344.29
Subtotal Output	120487-1-51-01	80,000.00	80,000.00	0.03	77,308.53	77,308.56	2,691.44	7,344.29	84,652.85

* Does not include Unapproved Obligations

Grant Delivery Report	Sponsor	400150 - GEF - Global Environment Facility	Fund	GF	Reporting Period	#ERROR
	Grant	2000003232	Grant Status	Authority to implement	Grant Validity	01.12.2015 - 30.09.2022
	Other Reference	5379-U3-PJ-FS-GR-03	Currency	USD	Prepared on	25.07.2022
	Project	120487	INDUSTRIAL ENERGY EFFICIENCY IMPROVEMENT IN SOUTH AFRICA THROUGH MAINSTREAMING THE INTRODUCTION OF ENERGY MANAGEMENT SYSTEMS AND ENERGY SYSTEMS OPTIMIZATION			

			Total Budget (a)	Released Budget (b)	Obligations (c)	Disbursements (d)	Expenditures (e=c+d)	Funds Available* (f=b-e)	Support Cost (g)	Total Expenditures (h=e+g)
Output	120487-1-52-01	Project Management								
1100	Staff & Intern Consultants		190.47	190.47	0.00	190.47	190.47	0.00	0.00	190.47
1500	Local travel		43,805.02	43,805.02	0.00	43,805.02	43,805.02	0.00	0.00	43,805.02
1700	Nat.Consult./Staff		227,953.45	227,953.45	232.78	224,685.15	224,917.93	3,035.52	0.00	224,917.93
2100	Contractual Services		1,533.14	1,533.14	0.00	1,533.14	1,533.14	0.00	0.00	1,533.14
4500	Equipment		7,455.58	7,455.58	0.00	7,405.31	7,405.31	50.27	0.00	7,405.31
5100	Other Direct Costs		19,915.58	19,915.58	0.00	18,548.88	18,548.88	1,366.70	0.00	18,548.88
9300	Support Cost IDC		0.00	0.00	0.00	0.00	0.00	0.00	28,045.95	28,045.95
Subtotal Output	120487-1-52-01		300,853.24	300,853.24	232.78	296,167.97	296,400.75	4,452.49	28,045.95	324,446.70
Subtotal Project	120487		5,776,484.00	5,776,484.00	506,136.26	5,196,783.94	5,702,920.20	73,563.80	537,194.15	6,240,114.35
Grant Total			5,776,484.00	5,776,484.00	506,136.26	5,196,783.94	5,702,920.20	73,563.80	537,194.15	6,240,114.35

* Does not include Unapproved Obligations

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 5 (2020)				Year 6 (2021)				Year 7 (2022)				GEF Grant Budget Available (US$)
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1.1.1: Gap analysis and assessment of necessary capacity assistance to strengthen data collection, quality processing and interpretation analysis by DoE and SANEDI.													**$ 5,354.38**
1.1.2: Technical capacity enhancement programme to strengthen data collection mechanisms and data processing practices within the DoE and SANEDI		☐		☐		☐							
1.1.3: Assistance to inter-governmental initiatives to align data, requirements, surveying methods, and industrial enterprise outreach methods as well as supporting tools to assist in the setting of targets, and performance indicator establishment, in line with ISO 50006.		☐		☐		☐							
1.1.4: Baseline assessment in selected industrial sectors of energy use dynamics, energy consumption and savings potential (and associated GHG	☐	☐	☐		☐								

emissions reductions), EnMS and ESO against potential penetration rate scenarios and implementation challenges for implementation in non-mapped industrial sub-sectors.													
1.1.5: Technical assistance (in the form of expert review and focus/stakeholder consultation groups) provided for planned periodic reviews and updates of energy intensity reduction and energy management targets.	☐	☐											
1.1.6: Technical assistance (in the form of expert review and focus/stakeholder consultation groups) to periodically and independently review and update GHG calculations and targets of the NCCRS (DEA).	☐	☐											
1.2.1: EnMS and ESO technology and process best practice benchmarks using country-specific examples (also considering international best practice where appropriate) under the Industry and Mining Action Plan contained within the NEES.	☐	☐											
1.2.2: Periodic review (x2) and update of EnMS and ESO benchmarks (following project midterm review and prior to project closure).													
Component 2 – Strengthening Policy Implementation and Support Frameworks for EnMS, ESO and Energy Management Standards													
2.1.1: Analysis of existing South African national governance structures and legislative instruments to determine relevance to IEE implementation for enhanced implementation effectiveness			☐										**$ 10,770.99**
2.1.2: Institutional needs assessment to determine the capacity gaps within the Government (DoE, DEA, DST, dti, National Treasury, SABS, SANEDI, NCPC-SA) in regard to modifying and strengthening the implementation policy and regulation related to IEE. The needs assessment will also include a review of industry related gender issues and how to actively promote increased participation of women in IEE.	☐	☐	☐	☐									
2.1.3: Capacity development (four workshops and training) for Government officers and (DoE, DEA, DST, dti, SABS, SANEDI, NCPC-SA) with	☐	☐	☐	☐									

embedded experts for DoE, and, SANEDI in order to ensure long-term skills retention and capacity enhancement of these two institutions to implement and enhance IEE policies and regulations, particularly those that can actively support EnMS and ESO uptake, including Energy Management Planning.												
2.1.4: IEE Government policy consultative dialogue workshop series (two per year and eight in total) with the corresponding establishment of a network group between Government departments/bodies (DoE, DEA, DST, dti, SANEDI, NCPC-SA) as well as other relevant stakeholders, to improve IEE policy and regulatory implementation and to link EnMS and ESO implementation measures employed by enterprises under incentive programmes and within offsetting under the possible national *Desired Emission Reduction Outcomes* (DEROs) and carbon tax scenarios.	☐	☐		☐								
2.1.5: Technical assistance provided to Government departments to prepare five additional industrial enterprise guidelines and technical support packages (one per selected sector) for proposed and to be promulgated industry policy/regulation in line with Government IEE regulatory schemes, e.g. Energy Management Planning and their contained energy intensity reduction targets. This will include the development of enhanced policy tools that will promote female roles in IEE.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
2.1.6: Technical assistance in the form of embedded expert support to SANEDI to conduct targeted macroeconomic analysis in regard to the impact of IEE and EnMS and ESO in order to incorporate EnMS and ESO into the wider analysis functions of the Integrated Energy Plan and other appropriate policy tools (with at least three position papers being produced).		☐	☐	☐								

2.2.1: Advisory support for Government and relevant national standards bodies (SABS, SANAS and SAATCA) to scale-up the application of the ISO 50001 Series standards through the analysis of international implementation best practice of ISO 50002, ISO 50003 and ISO 50006.		☐										
2.2.2: Support to Government, SANAS, SAATCA and SABS to promote and mainstream the application of ISO 50002, ISO 50003 and ISO 50006 as national standards within industry through a series of five promotional events/seminars/workshops.		☐	☐									
2.2.3: Technical assistance/capacity development in form of two SANS 50010 requirement training seminars provided to potential 'Centres of Training' for M&V Auditors under SANS 50010 criteria and assistance to SANEDI for the establishment of a National Measurement and Verification Centre at the Energy Efficiency and Demand Side Management (EEDSM) Hub at the University of Pretoria, with additional guidance on how to promote enhanced female participation rates in M&V auditing.		☐	☐									
2.2.4: Technical assistance provided to in the form of three training seminars to potential SANS 50010 auditing and certification bodies, including SANAS accreditation support and preparation.					☐	☐	☐					
2.2.5: Identification and securing of lead enterprises for M&V SANS 50010 certification and 12L Tax Incentive application, drawn from the pool of SA IEE Project and GEF Project EnMS and ESO pilot and demonstration enterprises.												
2.3.1: Updating of existing Lead Auditor and Training Centre Provider training course and associated materials and support tools for SANS/ISO 50001 standard. Supporting ancillary summary and industry promotion materials will highlight the positive role of women to boost interest.	☐											
2.3.2: Development of training courses and associated materials and industry resource tools for Energy Audit (SANS 50002), Conformity Assessment (ISO 50003) and Energy Baselines and Performance Indicators (ISO50006). Supporting ancillary summary												

and industry promotion materials will highlight the positive role of women to boost interest in IEE.													
2.3.3: Provision of training courses on SANS/ISO 50001 Lead Auditors, Energy Audit (SANS 50002), Conformity Assessment (ISO 50003) and Energy Baselines and Performance Indicators (ISO 50006). Promotional and partnering measures will be deployed along with developed support tools that support and encourage women's increased participation.	☐												
2.3.4: Technical assistance provided to SANEDI to develop additional Energy Audit and Energy Baselines and Performance Indicator tools (e.g. software tools) in line with ISO 50002 and ISO 50006 respectively.													
2.3.5:M&V training provided to industry, with the provision of 'M&V Lite' training and resource materials.													
Component 3 – Mainstreaming EnMS and ESO Training and Skills Development Programmes													
3.1.1: Delivery of existing Advance-Level and Expert-Level EnMS and ESO training courses with 70 Experts being trained and 400 Advanced-Level participants being trained. Courses will be delivered under gender sensitive planning and facility provision.													**$ 42,717.01**
3.1.2:Development and delivery additional Advance-Level and Expert-Level ESO Disciplines (i.e. HVAC, process heating, refrigeration, smelting and foundry systems and renewable energy) with associated training packages - including the purchase of training system measurement equipment. 50 Experts and 300 Advanced-Level participants to be trained. Courses will be delivered under gender sensitive planning and facility provision.	☐	☐	☐	☐									
3.1.3: New ESO courses prepared, presented and taken through the SAIMechE CPD recognition process.		☐	☐	☐	☐	☐							
3.1.4: Development and dissemination of a SME EnMS Implementation Guide.													
3.1.5: Development and delivery of ESO Expert-Level Graduate mentoring with a programme for onsite industrial ESO assessment and implementation experience under the guidance of senior	☐	☐	☐	☐									

experts as well as ESO course co-facilitation opportunities. Where possible female mentoring will be provided by female previous ESO experts.												
3.2.1: Development and delivery of EnMS training programmes for South African industry personnel at the technician/plant operator staff level. Including consideration of gender dimensions and forming network groups with women's groups to actively promote the participation of women.	☐				☐	☐	☐	☐				
3.2.2: Development and delivery of ESO training programmes for 500 South African industry personnel at the technician/plant operator staff level – including bridging assistance for plant-based training courses. Including consideration of gender dimensions and forming network groups with women's groups to actively promote the participation of women.					☐	☐	☐	☐				
3.2.3: Development and embedding of different Technician/Operator level EnMS and ESO course modules within vocational programmes offered by selected TVET institutions including the EnMS and ESO methodology capacity building of their lecturing staff.	☐	☐	☐	☐	☐	☐	☐	☐				
3.2.4: Development of gender responsive TVET vocational-level EnMS and ESO teaching materials and teacher support packages to assist in the conducting of teaching. To be incl in the ToR for Developer												
3.3.1: Development of gender sensitive learner guides for Energy Efficiency Advisor and Energy Efficiency Technician, which will include a complete set of learning materials (fully aligned to the two Occupational Qualifications, consisting of redesigned and adapted UNIDO EnMS and ESO (existing and new topic) engineer level and operator level materials.												
3.3.2: Development of gender sensitive Trainer Facilitator guides that are fully aligned to the two Occupational Qualifications.												
3.3.3: Industry and training sector promotion packages consisting of three national seminars and media materials to promote the uptake of the "Energy Management Advisor", and "Energy Efficiency Technician" occupational qualifications and their		☐	☐	☐	☐	☐	☐	☐				

contained 'Part Qualifications'[1]. Specific promotion packages will be developed to promote women's participation under the two different occupational qualification training courses.													
3.3.4: Support Training Providers with pre-accreditation technical and capacity building assistance as well as recommendations to ensure their competency requirement compliance under the EWSETA accreditation process for the two NQF qualifications. This will include active promotion of the inclusion of female Training Provider staff.			☐	☐	☐	☐	☐	☐	☐	☐	☐		
3.3.5: Delivery of NQF directed EnMS and ESO Train-the-Trainer courses with active promotion of increased levels of women trainers.			☐	☐			☐						
3.3.6:Scope and convene a Working Group tasked with leading the initial process of establishing the professional body with capacity building for key stakeholders.			☐	☐									
3.3.7: Support gender inclusive marketing and communication activities, aimed at growing the membership interest and demand for the professional body through the activities of Component 5.0.				☐	☐	☐	☐	☐	☐	☐	☐		
Component 4 - Investment Promotion in IEE through demonstration of EnMS and ESO and support to access financial mechanisms and incentives for industry and selected commercial sectors													
4.1.1:Formulation of concepts for EnMS and ESO demonstration projects with consideration for different enterprise size classifications across different industrial and commercial sectors (including dissemination and replication potential factors such as clustering and contained value chains) and contained strategy for promoting female participation in, and leadership of, EnMS Energy Management Teams.													**$ 2,469.00**
4.1.2:Large enterprise EnMS and/or ESO implementation demonstration programme focused on heavily industrialized areas – with a target of 50 demonstration enterprises – linking to financial incentive mechanisms/credit lines where required and appropriate.													
4.1.3:SME EnMS and/or ESO demonstration implementation programme focused on, but not limited to, heavily industrialized areas – with a target of 100 demonstration enterprises –													

linking to financial incentive mechanisms/credit lines where required and appropriate.												
4.1.4:Post EnMS and ESO implementation technical support through twice-yearly on-site oversight/check-up sessions for EnMS implementation (with additional support sessions for SMEs as required) and ESO implementation follow-up advisory measures.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
4.1.5:Technical assistance to all EnMS and ESO demonstration enterprises on M&V of energy savings data.												
4.1.6:Development of enterprise EnMS and ESO demonstration project case studies and associated research/position papers.	☐			☐	☐	☐	☐	☐	☐	☐		
4.1.7: Development of an EnMS and ESO demonstration replication action plan.												
4.2.1: Establishment of IEE financial proposal advice and match making support mechanism within NBi with associated technical assistance and human capacity support.					☐							
4.2.2: Guidelines for the development of bankable EnMS/ESO (and wider IEE projects).	☐											
4.2.3: Capacity building seminars for experts and industry personnel on the following topics: COMFAR and other analysis tools for the evaluation of IEE opportunities; Government financial incentive criteria and the financing criteria of banks; development of bankable projects under EnMS and ESO;												
4.2.4: Development of initial EnMS and/or ESO proposals drawn for the demonstration programmes under Outputs 4.1.2 and 4.1.3. With up to 15 proposals for the large companies and up to 50 for the SMEs being developed and presented for consideration.	☐	☐	☐	☐	☐	☐	☐	☐				
4.3.1:Analysis of national and international best practice of funding mechanisms, incentives and financial packages/credit streams IEE projects.	☐											
4.3.2: Assistance in the analysis of Government financial incentives for IEE including: MCEP and the 12L (and 12I) tax incentive, making recommendations for improvement and evolution (in line with technical assistance provided under Activity 2.1.6 to								☐				

strengthen incentives relative to EnMS and ESO).													
4.3.3: Guidelines for financial risk evaluation of EnMS and ESO IEE projects.	☐												
4.3.4: Capacity building seminars for local FIs to better understand benefits and risks of investment in EnMS and ESO IEE projects (using Guidelines for financial evaluation of IEE projects developed in activity 4.2.3) with an emphasis on promoting the training of female banking staff.	☐	☐			☐	☐	☐	☐					
4.3.5: Targeted technical support and training to local FIs to develop capacity of staff on assessing eligibility for finance and risk sharing of IEE projects. This activity will include: three introductory workshops for 60 bank staff; two expert training workshops for 30 bank staff; and personal coaching of 15 bank staff, assuming 3-5 persons from participating banks.		☐		☐		☐	☐	☐					
4.3.6: Assistance to three local FIs to develop financial packages/credit lines suited to IEE investment and in particular EnMS and ESO.				☐									
Component 5 - EnMS and ESO Awareness, Promotion, Service Demand Generation and Lessons Sharing													
5.1.1: Formation of a Communication Strategy Group (DoE, dti, SA-NCPC, SANEDI, UNIDO).	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		**$ 2,389.41**
5.1.2: Development (and annual review) of an inclusive Awareness and Communications Strategy. The strategy will be designed to effectively publicize the GEF Project and target industry managers as well as other stakeholder decision-makers on the benefits of adopting the EnMS and ESO methodologies and wider IEE in terms of the costs-benefits, efficiency and competitiveness improvements, as well as positive image created through potential beneficial environmental impacts. The strategy will be developed under consultation with an appropriate sector women's body such as SAWIEN in order to formulate strategies to positively communicate on gender equality and women's role in the IEE, consulting and engineering space.	☐												
5.2.1: Host and participate in a series of EnMS and ESO awareness and promotion workshop and seminar segments as part of wider	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

Government IEE outreach and awareness initiatives for managers from industry (including sectors such as: iron and steel; non-ferrous metals; non-metallic minerals; chemicals; paper and pulp; textile; cement; automotive; manufacturing; mining and non-manufacturing industry; agriculture and agro-processing) as well as selected commercial sectors. Workshop and seminar messages will include built-in elements on promoting women's enhanced participation in EnMS and ESO.													
5.2.2: Enterprise ESO/EnMS Quick Self-Help Guides for companies to quickly begin the process of energy saving within the national power constrained environment, including short/lite guidelines for in-house EnMS and ESO awareness to disseminate IEE practices amongst enterprise staff.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
5.2.3: Establishment of peer-to-peer exchange platforms/networks/learning circles (including websites) within/for target industrial (and commercial) sectors as well as the hosting of information exchange events/working groups.	☐	☐	☐	☐	☐	☐							
5.2.4: An extensive set of gender sensitive/inclusive awareness raising and communications materials and editorial pieces associated with promotion of the GEF Project and its contained outputs/activities under all of its components (including: policy frameworks; ISO 50001 Series of standards; training and capacity building programmes; promotion of demonstration projects and IEE finance and incentives available) as well as technical editorials on the EnMS and ESO methodologies	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
5.2.5: EnMS and ESO demonstration case study packaging and dissemination.	☐	☐	☐	☐	☐	☐	☐	☐	☐				
Component 6 – Project Monitoring and Evaluation													
6.1.1: Project inception workshop within two months of project starting date.													**$ 2,691.44**
6.1.2: Validation and expansion of the GEF Projects 'Theory of Change' with regular updating in line with annual project review, complete with gender aspects and revised/validated approaches and their KPIs.													
6.1.3: Validation and expansion of the GEF Projects 'Theory of													

Change' with regular updating in line with annual project review, complete with gender aspects and revised/validated approaches and their KPIs.													
6.1.4: Twice yearly (six-month) Project Progress reporting to the Project Steering Committee.	☐		☐		☐		☐		☐		☐		
6.1.5: Annual PSC Project Reviews. - Refer to 6.1.4				☐				☐					
6.1.6: Special analysis/position/research papers/editorials on selected project aspects, such as gender impacts of EnMS for example.			☐	☐	☐	☐	☐	☐	☐	☐			
6.1.7: Results dissemination within and beyond the project intervention zone through existing information sharing networks and forums. 5.2.3, 4.2.4, 5.2.5	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
6.2.1: Mid-term review and updating of GEF Project's Theory of Change	☐												
6.2.2: Independent Mid-Term Review at the mid-point of project implementation.	☐												
6.2.3: Independent Final Project Evaluation will take place three months prior to the final PSC meeting										☐	☐		

X. Synergies

1. **Synergies** achieved:

Describe potential synergies arising out of UNIDO internal cooperation and/or cooperation with (external) bilateral and multilateral projects/programmes, if applicable.

N/A

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.

N/A

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2021 – 30 June 2022.

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.