

Naoko Ishii CEO and Chairperson

March 27, 2017

Mr. Juergen Hierold GEF Coordinator United Nations Industrial Development Organization Vienna International Centre P O Box 300 Vienna A-1400 Austria

Dear Mr. Hierold:

I am pleased to inform you that I have approved the medium-sized project detailed below:

Decision Sought:	Medium-sized Project (MSP) Approval
GEFSEC ID:	9807
Agency(ies):	UNIDO
Focal Area:	Climate Change
Project Type:	Medium-Sized Project
Country(ies):	Global
Name of Project: Global Deployment of the Industrial Energy Efficiency Accelerator	
Indicative GEF Project Grant:	\$2,000,000
Indicative Agency Fee:	\$190,000
Funding Source:	GEF Trust Fund

This approval is subject to the comments made by the GEF Secretariat in the attached document. It is also based on the understanding that the project is in conformity with GEF focal areas strategies and in line with GEF policies and procedures.

Sincerely,

Chief Executive Officer and Chairperson

Attachment:

GEFSEC Project Review Document

Copy to:

Country Operational Focal Point, GEF Agencies, STAP, Trustee



GEF-6 REQUEST FOR ONE-STEP MEDIUM-SIZED PROJECT APPROVAL

TYPE OF TRUST FUND: GEF Trust Fund

For more information about GEF, visit **TheGEF.org**

PART I: PROJECT IDENTIFICATION

Project Title:	Global deployment of the Industrial Energy Efficiency Accelerator			
Country(ies):	Global	GEF Project ID: ¹	9807	
GEF Agency(ies):	UNIDO	GEF Agency Project ID:	170041	
Other Executing	Carbon Trust UK	Submission Date:	03-16-2017	
Partner(s):			03-21-2017	
GEF Focal Area(s):	Climate Change	Project Duration (Months)	24	
Integrated Approach Pilot	IAP-Cities IAP-Commodities IAP-Fo	od Security		
Name of Parent Program:		Agency Fee (\$)	190,000	

A. FOCAL AREA STRATEGY FRAMEWORK AND PROGRAM²:

		Trust	(in	\$)
Focal Area	Focal Area Outcomes	Fund	GEF	Co-
Objectives/programs	Focal Area Outcomes		Project	financing
			Financing	
CCM 1 – Programme 1	Outcome A. Accelerated adoption of innovative	GEFTF	2,000,000	6,810,000
	technologies and management practices for GHG emission			
	reduction and carbon sequestration			
	Outcome B. Policy, planning and regulatory frameworks			
	foster accelerated low GHG development and emissions			
	mitigation			
	Total project costs		2,000,000	6,810,000

B. PROJECT FRAMEWORK

Project Objective: To	Project Objective: To accelerate the rate of energy efficiency in the industrial sector globally					
	Financ			,	n \$)	
Project Components/	ing	Project Outcomes	Project Outputs	Trust	GEF	Confirmed
Programs	Type ³	1 Toject Outcomes	110jeet Outputs	Fund	Project	Co-
					Financing	financing
 Maximizing the impact 	TA	1.1. Global	1.1.1. Partnership	GEFTF	325,909	1,025,000
of the Accelerator through		engagement on	coalitions with			
multi-country private		industrial energy	Governments, Private			
sector engagement,		efficiency improved	sector, Development			
political commitment and		and in-country	finance Institutions			
creating a roadmap of		assessments in 5	(DFIs) and local finance			
interventions across the		countries completed	institutions formed			
first 5 high impact		_	across several high			
countries			impact countries			
			1.1.2.Deeper			
			engagement in 5			
			countries initiated			
			1.1.3. High-level			
			diagnostic of energy			
			efficiency opportunities			
			in the industrial sectors			
			conducted and linked			
			with countries' Intended			

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on <u>GEF 6 Results Frameworks for GETF, LDCF and SCCF</u> and <u>CBIT programming directions</u>.

³ Financing type can be either investment or technical assistance.

			Nationally Determined Contributions (INDCs) in five countries			
2. Unlocking industrial energy efficiency opportunities in 5 countries by leveraging 4 pillars (policy, skills and capacity building, pipeline development and financing)	TA	2.1. Design of interventions to help unlock industrial energy efficiency opportunities in five countries	2.1.1. National-level policies recommendations generated 2.1.2 Energy management skills programmes designed	GEFTF	556,819	1,500,000
	INV		2.1.3 Programmes that generate a pipeline of investible projects created 2.1.4. Suitable financing instruments in consultation with financial sector and key partners designed		551,909	1,825,000
3. Leveraging learnings from first five countries to scale-up to an additional 10 countries, producing high level plans for these 10 additional countries	TA	3. 1. Engagement scaled up in 10 additional countries	3.1.1. A global best practices synthesis report is drafted 3.1.2. Package of tools, material compiled and disseminated 3.1.3. Basic assessments of interventions in 10 new countries completed	GEFTF	293,545	2,060,000
4. Monitoring and evaluation.	TA	4. 1. Socio- economic and environmental outcomes monitored and evaluated	4.1.1. Evaluation techniques developed for energy productivity outcomes in emerging economies. 4.1.2 Project impact monitoring, project progress reports and project evaluation conducted in timely manner	GEFTF	90,000	100,000
		Project I	Subtotal Management Cost (PMC) ⁴	GEFTF	1,818,182 181,818	6,510,000 300,000
			l GEF Project Financing	GLITT	2,000,000	6,810,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include confirmed co-financing letters for the project with this form.

Sources of Co- financing	Name of Co-financier	Type of Co- financing	Amount (\$)
GEF Agency	UNIDO	Grant	110,000
GEF Agency	UNIDO	In-kind	300,000
Recipient Government	Recipient Government from selected countries	In-kind	3,000,0005
Private Sector	Private sector partners	In-kind	$3,150,000^6$
Others	Carbon Trust	Grants	50,000
Others	Carbon Trust	In-kind	150,000
Others	Copenhagen Center for Energy Efficiency	50,000	
Total Co-financing			6,810,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND PROGRAMMING OF FUNDS

						(in \$)	
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	GEF Project Financing (a)	Agency Fee ^{a)} (b)	Total (c)=a+b
UNIDO	GEF TF	Global	Climate Change	(select as applicable)	2,000,000	190,000	2,190,000
Total Gra	Total Grant Resources					190,000	2,190,000

a) Refer to the <u>Fee Policy for GEF Partner Agencies</u>.

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷ Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity	Improved management of landscapes and	hectares
and the ecosystem goods and services	seascapes covering 300 million hectares	
that it provides to society		
2. Sustainable land management in	120 million hectares under sustainable land	hectares
production systems (agriculture,	management	
rangelands, and forest landscapes)		
3. Promotion of collective management of	Water-food-ecosystems security and	Number of
transboundary water systems and	conjunctive management of surface and	freshwater basins
implementation of the full range of	groundwater in at least 10 freshwater basins;	
policy, legal, and institutional reforms	20% of globally over-exploited fisheries (by	Percent of
and investments contributing to	volume) moved to more sustainable levels	fisheries, by volume
sustainable use and maintenance of		
ecosystem services		

⁵ In line with GEF co-financing policy:FI/PL/01 - Co-financing is expected to be secured or mobilized from private sector entities or project beneficiaries during project implementation, but after CEO endorsement, may be counted as confirmed co-financing if the Agency's project document includes clear requirements that such co-financing be mobilized during implementation at a clearly expressed minimum level. Such contributions will often be mobilized during project implementation through match requirements in the project or similar project design features.

table for climate adaptation projects financed solely through LDCF, SCCF and/or CBIT.

3

⁶ Same as 5

Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the <u>GEF-6 Programming Directions</u>, will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this

4. Support to transformational shifts	750 million tons of CO _{2e} mitigated (include	4,312,000 t CO ₂
towards a low-emission and resilient	both direct and indirect)	
development path		
5. Increase in phase-out, disposal and	Disposal of 80,000 tons of POPs (PCB,	metric tons
reduction of releases of POPs, ODS,	obsolete pesticides)	
mercury and other chemicals of global	Reduction of 1000 tons of Mercury	metric tons
concern	Phase-out of 303.44 tons of ODP (HCFC)	ODP tons
6. Enhance capacity of countries to	Development and sectoral planning frameworks	Number of Countries:
implement MEAs (multilateral	integrate measurable targets drawn from the	
environmental agreements) and	MEAs in at least 10 countries	
mainstream into national and sub-national policy, planning financial and legal	Functional environmental information systems	Number of Countries:
frameworks	are established to support decision-making in at	
Hame works	least 10 countries	

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If <u>non-grant instruments</u> are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex B.

G. PROJECT PREPARATION GRANT (PPG)⁸

Is Project Preparation Grant requested? Yes \(\sigma\) No \(\sigma\) If no, skip item G.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS*

GEF	Trust	Country/	Programming -			(in \$)	
Agency	Fund	Regional/Global	Focal Area	of Funds	PPG (a)	Agency Fee ⁹ (b)	
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total PP	Total PPG Amount					0	0

PART II: PROJECT JUSTIFICATION

- 1. Project Description. Briefly describe: a) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; b) the baseline scenario or any associated baseline projects, c) the proposed alternative scenario, GEF focal area¹⁰ strategies, with a brief description of expected outcomes and components of the project, d) incremental/ additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF, CBIT and co-financing; e) global environmental benefits (GEFTF), and adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.
 - a) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

Background to the energy efficiency accelerator platform

The Global energy efficiency accelerator platform was launched at the Climate Summit in September 2014, as a flagship programme to drive action towards SEforALL's goal of doubling the rate of improvement in global energy efficiency by 2030. Through the platform, partners pledged to contribute

⁹ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

⁸ PPG of up to \$50,000 is reimbursable to the country upon approval of the MSP.

¹⁰ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which <u>Aichi Target(s)</u> the project will directly contribute to achieving.

to expand action to accelerate energy efficiency in five areas: fuel economy, lighting, appliances, buildings and district energy systems. Since the inception of the platform, the GEF played a key role in supporting the individual accelerators and a number of in-country follow up programmes that were formulated by the various accelerators especially in lighting and appliances.

Industry accounts for 37% of global total final energy consumption and around one third of global GHG emissions, with 60% of the energy efficiency potential identified by the IEA still to be realized (see Fig. 1)

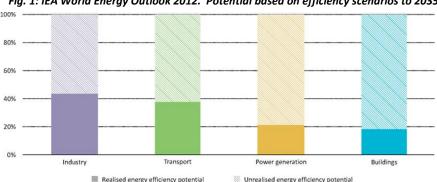


Fig. 1: IEA World Energy Outlook 2012. Potential based on efficiency scenarios to 2035

The IEA identifies industry as offering a better return on investment in terms of fuel cost savings (3:1) than either transport or buildings (both less than 2:1) across both OECD and Non-OECD countries (see Figure 2). Action to stimulate the uptake of energy efficiency in industry makes sense both economically and environmentally and should be prioritized given the need to front-load action on carbon targets.

		OECD		Non-OECD		
Sector	Additional investment (\$ trillion)	Energy savings (Mtoe)	Fuel cost savings (\$ trillion)	Additional investment (\$ trillion)	Energy savings (Mtoe)	Fuel cost savings (\$ trillion)
Industry	0.4	668	1.2	0.7	3 482	2.2
Transport	1.6	1 121	3.0	3.2	2 731	2.7
Buildings	3.2	3 478	5.9	1.4	3 704	1.7
Total	5.3	5 267	10.0	5.2	9 917	6.6

Fig. 2: Global Energy Efficiency Investment Requirements, IEA WEO 2012

Therefore, an accelerator targeting energy efficiency in Industry was launched in April 2015 in collaboration with the Institute for Industrial Productivity (IIP), The Energy and Resource Institute (TERI) and a number of other partners. The accelerator is presently co-lead by UNIDO and the Carbon Trust. The Industrial Energy Efficiency Accelerator (IEEA) aims to secure public commitments by governments, industrial corporations, trade associations, utilities, and financial institutions to drive the adoption of Energy Management Systems (EnMS), best practices and innovation in industry. It will engage these actors across the 4 pillars of policy, skills and capacity building, project pipeline development and financing.

The full programme seeks to work with 15 countries over 8 years to rapidly drive higher energy productivity in industry, a major segment with the potential to reduce energy use by 25% or 3.9 Gt CO2. This would make a real impact in reaching the SEforAll's goals before 2030.

Energy efficiency in industry: Potential, High-impact Sectors and Countries

During the Conference of the Parties 21 (COP 21) under the United Nations Framework Convention on Climate Change, the international community agreed to halt the increase in global average temperature to "well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels." Energy efficiency is the most cost-effective, high impact opportunity to reduce greenhouse gas (GHG) emissions globally; it has been estimated that energy efficiency has the potential to reduce 50% of the GHG emissions necessary to achieve the 2°C target.

Between 1990 and 2012, global industrial energy consumption increased by 41%. In 2012, the industrial sectors final energy demand reached 140 EJ. According to the Intergovernmental Panel on Climate Change's (IPCC) Fifth Report, it is estimated that industry produced 29% of global GHG emissions in 2014, making it a target sector for global mitigation efforts. In the future, demand for energy use in the industrial sector is anticipated to rise at a higher and faster rate than other sectors like transport and buildings, signaling that its share of global energy consumption is set to increase

The bulk of industrial energy use in developed countries, but even more so in developing countries, comes from a small number of energy intensive sectors, such as iron and steel, chemicals and refining, often accounting for 50% of total final energy demand. These heavy industries are likely to be key sectors of focus for the Accelerator to maximize impact. However, in some countries, other sectors may dominate, such as mining, and these will also to be considered.

Currently, the top 20 industrial energy-consuming countries represent over 80% of total energy consumption in industry. In 2013, 12 of the top 20 countries were non-OECD countries such as China, India, Brazil, Saudi Arabia, Indonesia, Mexico, Thailand, United Arab Emirates, South Africa and Turkey. In 1990, these 12 countries consumed only 38% of global industry energy consumption; by 2013, their share increased to 59%. From 1990 to 2013, the average annual growth rate for major non-OECD energy consumers was 3.6%, while for OECD countries it was -0.2%. Therefore, it can be established that these 12 countries have been major drivers of rising industrial energy consumption and the related energy emissions worldwide over the last 25 years.

In addition to their environmental contribution, energy efficiency measures in the industrial sector can advance the Sustainable Development Goals (SDGs): increased disposable income and economic growth; improved industrial productivity; improved local air quality with the associated health benefits; and poverty alleviation. Such gains could add another 50% in economic benefits on top of direct energy cost reductions.

Barriers to energy efficiency in industry

Several barriers are preventing **governments** from creating an effective backdrop to drive investments in energy efficiency. The root causes of such gaps vary from country to country but include:

- inadequate information, skills, and methods to assess the costs and benefits of industrial energy efficiency policies and measures;
- limited institutional capacity for policy design, development and implementation;
- inappropriate tariff structures;
- distorted market incentives; and
- inadequate regulatory or legal frameworks to support energy service companies.

For **industrial companies**, there is a disconnection between industry shareholders' drive for profit and the ability of energy efficiency to contribute to it. Unfortunately, industry tends to favor short-term (1-3 year) risk-adverse tactics in the name of productivity, including extending energy technology operational life beyond economic replacement cycles or persisting with sub-optimal processes and practices. This behavior produces a range of negative externalities including global and local pollution, waste generation,

poor safety and quality and productivity losses. So, despite significant economic opportunity to save energy costs and emissions, industry hits a number of barriers, including:

- Awareness. In both developed and developing countries, companies are still not fully aware of the all the energy efficiency best practice options available to them, many with zero or low cost.
- Technical Understanding. Companies struggle to know exactly how to deploy solutions
- Risk. The belief that a change in the process or deployment of new equipment may impact production, prevents action.
- Finance. Many companies continue to struggle to access capital to finance energy efficiency measures, and financial institutions often lack understanding of energy efficiency to provide loans.
- b) The baseline scenario or any associated baseline projects

Industry experience around the world has shown that companies can save around 10-20% of their annual energy consumption and reduce costs through better energy management. On broader terms, energy efficiency in industry generates a number of economic benefits including; increased productivity, lower costs, and job creation. It further improves the well-being of employees and helps companies achieve their climate and sustainability goals. The economic benefits have been well documented and proven within various initiatives implemented by UNIDO and a number of partners in various parts of the world. While these programmes have been successful, there are shortcoming and gaps, which require a global and long-lasting approach.

The proposed programme builds up on the work undertaken by various organizations to accelerate the adoption of new and efficient technologies and practices in the industrial sector. The accelerator will work closely with the local governments, industry associations, private sector companies, energy efficiency experts, technology providers and financial institutions at the national, regional and global level to develop blueprints of industrial energy efficiency programmes. The interventions planned by the accelerator, will take into account the country-specific context and will be tailored to address the key issues identified during the country level assessments. The blueprints will be developed in a way that they can serve as a guide for other countries interested in pursuing and improving industrial energy efficiency.

There are numerous projects and programmes targeting industrial energy efficiency across the globe. Below is a list of the most relevant programmes designed and implemented by key players and partners of the Accelerator in various regions, which will be built upon;

1) The Carbon Trust was set up by the UK Government in 2001 as an independent organization with the objective to help catalyze action on climate change in the public and private sector. The Carbon Trust is a not for dividend organization that reinvests any surplus into its mission to accelerate the transition to a low carbon economy.

Its activities range from advising governments, public sector and companies on policies, programmatic design and footprinting. More specifically, these include advising the UK and international governments on their renewable energy and energy efficiency technology needs, running advice and finance schemes and supporting SME energy efficiency, among others.

The Carbon Trust has a track record of delivering financing solutions to unlock energy efficiency deployment, broadening private sector engagement, creating investable opportunity pipelines and building in-country energy efficiency capacity. For instance, in South Africa the Carbon Trust carried out the Private Sector Energy Efficiency Programme on behalf of the UK's Department for International Development. The programme successfully engaged with over 5000 companies in the South African market place, having completed on site audits at over 1100 sites. Over 6,300 energy efficiency and renewable energy opportunities were identified, which cumulatively represent around

25,000 GWh of lifetime energy savings, or over 19 MtCO2e. The Carbon Trust's monitoring and verification function estimates that more than 2,850 GWh have gone on to be implemented, representing nearly 2.2MtCO2e of savings.

The Carbon Trust has worked in over 20 developing countries to encourage resource efficiency savings. In India, the Carbon Trust designed the Industrial Energy Efficiency Fund, which is based on a \$750 million public capital investment disbursed over five years, with a projected \$585 million of private sector funding to be leveraged. Awareness-raising and advice services worth \$119 million will be used to build a pipeline of projects to invest in. Overall, the Fund anticipates lifetime energy savings of over \$11 billion.

- 2) The Institute for Industrial Productivity (IIP) was an independent non-for profit organization whose role was to accelerate the uptake of industrial energy efficiency practices by partnering with industry and Government. IIP has implemented a host of global interventions to reduce energy intensity in industry. Key among these are a series of EnMS pilot programs in targeted provinces in China and a Knowledge Exchange Platform housed at the Bureau of Energy Efficiency in India. The organization has also produced numerous key resources and roadmaps to facilitate EnMS, including the IIP/IEA Policy Pathway series on energy management programmes and its five online Industrial Energy Efficiency Databases. Following the closing down of IIP in 2016, the Copenhagen Center on Energy Efficiency and UNIDO committed to the operation, maintenance and where possible updating of the databases, which are a very valuable resource on industrial energy efficiency.
- 3) Energy Management Working Group (EMWG), previously the Global Superior Energy Performance (GSEP) Initiative, was formed to make the private sector aware of the business case for energy management and its value in maintaining competitiveness; provide guidance and resources to support implementation of energy management; and to establish energy management as a key energy efficiency strategy for the industrial and commercial buildings sectors. In 2015, EMWG was elevated to a standalone CEM initiative and has produced several valuable outputs including:
 - Workforce Development promotes the development of a consensus-based international certification scheme to support greater consistency of ISO 50001 certification outcomes.
 - ii. Energy Management Practitioners Toolbox collects the best available proven resources to cost-effectively assist companies in setting up EnMS and achieving energy savings. These tools, best practices, training materials, and key measures will be packaged into a free, online "toolbox" for ease of access at the international level. IIP was the knowledge partner for this project.
 - iii. Energy Performance Database compiles and organizes energy performance data submitted by member countries and companies into a secure database. Analyses of the collected data will establish specific impacts, paybacks, and other findings to demonstrate the value of energy management and identify effective programs and policies for governments to encourage implementation.
 - iv. ISO 50001 campaign; energy management systems and ISO 50001 gained further momentum with the launch of the Energy Management Campaign at the seventh meeting of the Clean Energy Ministerial (CEM) held in June 2016. The campaign aims at driving action to achieve 50001 global certifications by 2020. The CEM estimates that the worldwide implementation of ISO 50001 by large energy-using organizations could achieve cumulative energy savings of 62 EJ by 2030, cost savings of US\$ 600 billion, and 6,500 Mt of avoided CO2 emissions.

The campaign requires Governments, companies, and development organizations joining the Campaign to commit to take action that promotes and accelerates ISO 50001 implementation: (a) endorse key principles for quality implementation of ISO 50001, (b) pledge concrete actions to promote uptake of the standard and principles, (c) commit to international technical exchange through the CEM, (d) recognize leadership through the CEM Energy Management Leadership Awards and (e) track and share progress on uptake of the standard.

- 4) International Partnership for Energy Efficiency Cooperation (IPEEC) is an autonomous intergovernmental entity dedicated to facilitating rapid deployment of clean energy technologies worldwide and promoting information exchange on best practices to facilitate initiatives that improve energy efficiency. IPEEC assists its member countries to identify and share proven, innovative practices and data on energy efficiency to better inform decision makers serving also to foster bilateral and multilateral initiatives between countries. IPEEC has one energy efficiency-related Task Groups:
 - a) Energy Management Action Network (EMAK) was created as a robust forum for discussion of policy issues related to energy management and sharing of best practices of each country, region and industry. It has established two interconnected networks:
 - i) Network of policymakers responsible for promoting energy management to clarify best practices on policy frameworks for energy management, development of human resources, and sharing of knowledge on energy management.
 - ii) Network of specialists responsible for energy management in industry (both businesses and associations), creating a cross-border network that can make an important contribution to promoting site-specific energy efficiency.
- 5) The Marrakesh Declaration: At the side of the COP22, the General Confederation of Moroccan Enterprises (CGEM), gathered 46 employer associations from all around the world at the second edition of the High Level Business Summit. At the event the associations signed a second joint statement, the Marrakech Declaration, where they commit to mainstreaming climate considerations into business planning and activity in line with the Paris Agreement. It further stipulates that the private sector is determined to:
 - a) Anticipate the effects and consequences of climate change on the structure and operation of companies and to provide solutions.
 - b) Identify the various business opportunities related to the emergence of new green markets
 - c) The private sector is committed to anticipating and adapting itself to climate change risks and impacts, and to working with governments and other partners to do likewise. This commitment should in no way create trade barriers to countries.

Energy efficiency is one of the key areas proposed to be tackled and the implementation of energy management systems can serve as a great tool for integrating energy and climate considerations into the business decisions.

- 6) The Climateworks Foundation mobilizes philanthropy to address climate change through support research and analysis, educating stakeholders and policymakers, building greater public awareness, mobilizing critical constituencies for action and providing selective grant funding. Energy efficiency is one of the areas of focus of the foundation's work. In that connection, Climate Works supports and provide technical expertise to policy makers, businesses and other change makers to advance efforts and establish targets and policies for improving energy efficiency and supports developing roadmaps and adopting technologies. Climateworks believes in the systematic way for improving and managing energy and promotes integrated approaches such as energy management systems in industry
- 7) Carbon Disclosure Project (CDP) runs a global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts. The data reported provides

useful insights to investors, businesses and policy makers to make better informed decisions manage environmental risks, capitalize on opportunities and maximize impacts. CDP provides the central platform for businesses to follow the lead towards a sustainable future. Over 5600 companies, 533 cities and 71 states and regions disclose their environmental data to CDP and can therefore measure their environmental impact. Through their supply chain initiative, CDP also encourages organizations to demonstrate transparency in the value chain and ensure business continuity.

c) The proposed alternative scenario, GEF focal area strategies, with a brief description of expected outcomes and components

The Industrial Accelerator Objective, short-term and long-term impacts

Objective: The Accelerator aims to secure public commitment from governments, industrial corporations and associations, and utilities to drive the adoption of Energy Management Systems (EnMS), best practices and innovation in industry. The Accelerator delivers across a number of SDGs by creating a multi-stakeholder partnership that promotes larger and more significant impacts in a range of different countries and industrial sectors. It also delivers multiple benefits from increased productivity as well as reductions in energy demand and related GHG and local pollutants.

Short term impacts: The funding requested from the GEF within this project will be instrumental in kick-starting this programme: Through this project, the accelerator will:

- Set up the Accelerator Secretariat to fulfill the central programme management functions, including global coordination, development of tools for industry, knowledge sharing, tracking against key metrics and recruitment of private sector partners.
- Identify and sign-up 5 countries, design relevant policies and programmes and commence incountry project delivery.
- Develop blueprints for future work.
- Identify and sign-up a further 10 countries for engagement until 2025.
- Secure follow-on funding for years 3 to 8 to complete in-country work in all 15 countries.

Long-term impacts: The full programme will unlock significant public and private sector investment in energy efficiency, drive tangible near and long-term emissions reductions, improve competitiveness benefits, and will align with the Sustainable Development Goals.

To achieve the accelerator objective and short-term and long-term impacts and be in line with the focal area objectives of CCM1-1 to accelerate adoption of innovative technologies and management practices for GHG emission reduction as well as accelerate fostering policy, planning and regulatory frameworks of low GHG development and emissions mitigation, the project will develop and implement the following interrelated components:

Roll-out Plan

Secretariat (Years 0-2)

The funding request in this paper of \$2m relates to the first 2 years of Fig. 3 and will be essential to: (i) Establish a Secretariat; and (ii) Commence in-country activity. This funding will also help to connect the potential of industrial energy efficiency with country INDCs and in the preparation of quality funding proposals. These early activities are instrumental in catalyzing activity on the ground and so realize the Accelerator's longer term roll-out plan and impact.

Years 0-8

The accelerator commits to support activities in up to 15 countries. To create a broader enabling framework requires a Secretariat that oversees the Accelerator's work and the in-country activities as follows:

> Year 1 (GEF 6 funded)

- o Establish the Secretariat in April 2017
- Select countries
- Create high level diagnostic of industrial energy efficiency opportunities linked with country INDCs for 5 countries

0

Year 2 (GEF 6 funded)

- Design more detailed programmatic work on the ground with each of the 5 countries in the required 4 pillars
- O Leverage learnings from the first 5 countries to an additional 10 countries, producing high level plans
- o Secure funding for full 8 years of the programme to commence in April 2019

> Year 3 to Year 8 (GEF 7 and other donor funded)

- o Run programmes on the ground with the initial 5 countries
- O Design more detailed programmatic work on the ground with the additional 10 countries in the required 4 pillars
- o Run programmes on the ground with the additional 10 countries
- Develop and run child projects in-country

Global Industrial Energy Efficiency Accelerator Year 1 Year 2 Year 3 Year 5 Year 6 Year 7 Year 8 Secretariat Country 1 Country 2 Country 3 Country 4 Country 5 Country 6 Country 7 Country 8 Country 9 Country 10 Country 11 Country 12 Country 13 Country 14 Country 15 Funder GEF 6 GEF 6 GEF 7 GEF 7 GEF 7 Other Other Other

Fig. 3: Indicative Platform 8 Year Roll-Out Plan

Funding: The full 8 year programme is anticipated at \$45m (approximately \$3m/country), with significant additional private sector leverage.

The breakdown of components of this first two year programme is:

Component 1: Maximizing the impact of the Accelerator through multi-country private sector engagement, political commitment and creating a more detailed roadmap of interventions across the first 5 high impact countries

Outcome 1.1. Global engagement on industrial energy efficiency improved and in-country assessments in 5 countries completed

1.1.1. Partnership coalitions with Governments, Private sector, Development finance Institutions (DFIs) and local finance institutions formed across several high impact countries

Multiple stakeholder engagement

Today, many industry associations, NGOs, Government bodies, etc. have established working relationships through membership arrangements and cooperative partnerships with industrial sector members. Most of these organizations operate independently from one another and in some ways unintentionally compete with each other in engaging end-users. The IEEA will form a strategic network of alliances through which the energy efficiency message can be channeled, extended and augmented to reach a significantly larger number of industries. Through individual and group meetings, and alignment events, the network will be shaped to become a strong coalition promoting industrial energy efficiency, drawing in also the financial community.

The IEEA will work in each target country with leading Government officials, business leaders, local sector trade associations, research agencies and investors to create a clear and disciplined vision of how to further mobilize energy efficiency in the key industrial sectors and set out actions for how to reach this goal. Through the partners and their existing local networks we will ensure there is strong and committed set of local stakeholders to drive change.

The value proposition, benefits and advantages of joining the coalition will be carefully developed to make the case for a joint and coordinated approach in expanding the energy efficiency improvement effort. Key benefits of this approach include:

- Sharing of tools, resource materials, and best practices
- Leveraging the strengths of each network partner
- Broadened range of end-user engagement channels
- Avoided duplication of work and effort among network partners, etc.

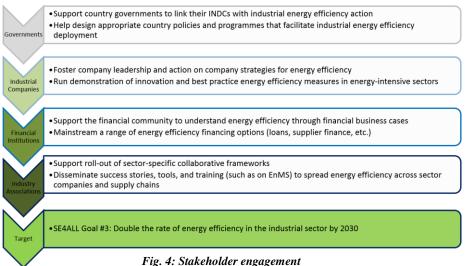
Private sector focus

The IEEA benefits from a number of supporting partners, including the Energy Working Group of the Clean Energy Ministerial, the International Partnership for Energy Efficiency Cooperation (IPEEC), and the Carbon Disclosure Programme (CDP). It will also act with other private sector commitment makers (We Mean Business, We Commit, and Global Alliance on Energy Productivity) and bring on further core partners – particularly from the private sector.

A learning from the other SEforALL Accelerators is the importance of close private sector engagement, which ensures there is a market pull for the programme and projects. The Industrial Accelerator will actively engage with industry in two ways. Firstly by engaging with technology providers of energy efficiency technologies for various sectors of industry at the global level to increase awareness about available technologies and practices and impact of implementing such technologies on industrial productivity. Secondly, the accelerator will also engage with industrial champions such as ArcelorMittal South Africa and other that have already progressed in implementing energy management and energy efficiency at their own enterprises with a view to share this experience globally and recognize their efforts, thus encouraging more companies from around the world to join the accelerator. The Industry

Accelerator will work with private sector players at the global and national level to catalyze actions in industry.

Figure 4 below shows how the Industrial Accelerator will work with each of key stakeholder group to ultimately contribute to SEforALL's goal of doubling energy efficiency by 2030.



1.1.2 Deeper engagement in 5 countries initiated

Five initial countries will be selected to work with the accelerator then scaled-up by a further 10 countries within the first 2 years of the Accelerator. The GEEIA will ensure the selection of the 15 countries aligns with the SEforALL Heat Maps that focuses on countries with high primary energy intensity as well as countries with high final energy intensity improvement growth rates in the recent past.

Other criteria that will be used to select the countries to work with include:

• Energy Impact

- o Energy intensive industries are prevalent in the country
- o Industry represents significant % of national CO2 emissions
- o Industry represents significant % of global industrial emissions

• Political Readiness

- o Countries are ready for change (ministerial support, access to local experts, etc.)
- o Regional interest to support programmes across countries (e.g., Steel in Peru, Columbia, etc)

• Importance of national industrial sector

- o Industry represents significant % of national GDP
- o Industry represents significant % of global industrial GDP

A tentative list of priority countries fulfilling these criteria is available. However, to move into the next stage, a strong commitment from governments is required. The five countries, which will be the focus of the project, will be determined during the inception phase of the project. The Secretariat makes sure that GEF OFP no-objection concurrence is obtained when specific countries are identified through the

selection process. The scope and details of the inception phase are described under section 12 of this document.

The IEEA will engage with local ministries to better gauge interest and support for the Accelerator's work and ensure confirmed and written commitment prior to starting the detailed design work at the country level.

1.1.3 High-level diagnostic of energy efficiency opportunities in the industrial sectors conducted and linked with countries' Intended Nationally Determined Contributions (INDCs) in five countries

The IEEA partners will work together to undertake an objective and informed assessment of the current industrial energy efficiency policies and their effectiveness, while identifying key policy, institutional capacity, resource, implementation, compliance and enforcement gaps that need to be addressed to further increase industrial energy efficiency in five countries. This diagnostic assessment will draw on the expert industrial energy efficiency and policy experience of IEEA partners to structure a more in-depth intervention. Key insights and recommendations from the diagnostic review will be synthesized in a summary report and directly fed back to key stakeholders in each country. It will inform the mix activities the accelerator will undertake in each county in component 2 below.

Component 2: Unlocking industrial energy efficiency opportunities in 5 countries by leveraging 4 pillars (policy, skills and capacity building, project pipeline development and financing)

Outcome 2.1.: Design of interventions to help unlock industrial energy efficiency opportunities in five countries

For countries to be successful in their efforts to promote energy efficiency and have impact requires a comprehensive package of activities. Thus, the GEEIA seeks to support energy efficiency in industrial companies through 4 pillars (Fig 5) below:

- 1. Development of country-specific industrial energy efficiency policy measures;
 - 1. In-country capacity building to develop a cadre of energy efficiency experts and management approaches;
 - 2. Pipeline development of investable industrial energy efficiency projects;
 - 3. Financing solutions to unlock energy efficiency deployment.

The type of support required for each country will be determined during the initial assessment and will depend on how advanced each country is with respect to each pillar. For countries with less developed programmes targeting industrial energy efficiency, all four pillars may be required. For others where policies and programmes have witnessed significant progress already, some of these steps will not be required. For each country, the high level diagnostic completed under output 1.1.3 above would identify the mix of activities to be undertaken, followed by phased practical actions to stimulate large-scale implementation of energy efficiency in the pillars that are assessed to need focused attention.

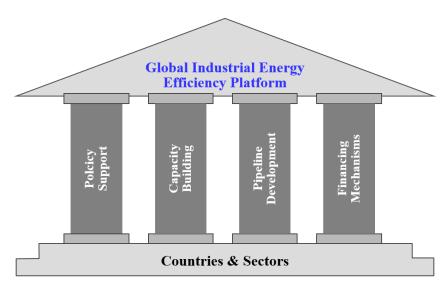


Fig. 5: Platform Focus Areas

2.1.1. National-level policies recommendations generated

Following the completion of Output 1.1.3, for each country where a need for new or modified industrial energy efficiency policies is identified, the project will work with the relevant government agencies to make recommendations on new policy or modification of existing policies that will deliver increased industrial energy efficiency in that country based on the key insights and recommendations identified. Furthermore, the accelerator will carry out an options appraisal and high-level cost-benefit analysis of the policy to justify its adoption. The project will outline a comprehensive stakeholder engagement process to ensure that all key actors are engaged in the policy design process and lay out a high-level implementation plan for the policy. The accelerator will facilitate in each country a dialogue between industry and government decision makers on a robust clear de-carbonization pathway and an associated set of policies, including industrial CO2 reduction targets, incentive mechanism and regulations.

2.1.2. Energy management skills programmes designed

Increasing energy efficiency and technological advancements in industry require significant investment and decision making by a range of industrial companies and stakeholders. It is estimated that by simply adopting best practices, industry could reduce energy use and emissions by 25%. Easy access to industrial analytic tools along with proper training programmes substantially assists industry in making cost-effective decisions to improve energy efficiency. Online information toolkits and databases enable rapid analysis, comparative studies, and learning through diffusion of best practices, which are the critical first step to the widespread adoption of ISO 50001 and implementation of energy efficiency projects. Since there is a wide band of performance and highly variable circumstances, needs and technological opportunities between industrial facilities, several studies suggest that the most effective solution for energy saving and GHG mitigation in industry is through EnMS.

This output will work on designing training on energy management using existing tools, applying a "training of trainers" approach. In addition, it will also look into setting minimum qualifications for the energy managers and energy management service providers as well as recommendations on potential certification schemes for lead auditors.

2.1.3. Programmes that generate a pipeline of investible projects created

There has been a common struggle across many programmes worldwide to create sustainable private sector markets that are effective in reducing energy demand. As described above, energy efficiency

markets continue to face challenges across the supply chain, and effective public programmes can help overcome them – raising awareness, providing advice on opportunities and increasing trust of solutions.

This activity will work with the private sector as well as with government to build on the existing landscape of actors to help create a sustainable market for energy efficiency in industry. Key steps will include:

- 1. *Design solutions* building on existing programmes or creating new ones as appropriate, design awareness raising, advice and accreditation schemes that can unlock a pipeline of energy efficiency projects at scale;
- 2. Create buy-in and high level investment cases for programmes designed engage key private companies, government and funding agencies on programmes designed to refine solutions and attract funding for the programme.
- 3. Share best practice promote and disseminate best practices in-country and globally.

2.1.4. Suitable financing instruments in consultation with financial sector and key partners designed

The project will work with commercial banks/development financial institutions to promote linkages with existing financing schemes of these institutions. It will also look to design new financing schemes (potentially with subsidized interest rates) working with local commercial/national banks, international financial institutes and Government to create and catalyze new finance lines and deliver routes. Specific financing solutions will be designed linked to the pipeline development activity described above in component 2.1.3.

Component 3. Leveraging learnings from first five countries to scale-up to an additional 10 countries, producing very high level plans for these 10 additional countries

Outcome 3.1. Engagement scaled up in 10 additional countries

3.1.1 A global best practices synthesis report is drafted.

The project will develop a global synthesis report, summarizing research already undertaken through the project, highlighting policy best practices and case studies for industrial energy efficiency across the five countries. The report would include a range of policy instruments including target-setting agreements, energy management and technical assistance programmes, carbon pricing schemes (e.g. taxes or emissions trading schemes), incentives schemes and targeted standards and regulations. Furthermore, it will offer a series of regional and global events and exchange trips that promote south-south exchange of best practice in order to increase awareness amongst key decision makers of policy options for promoting industrial energy efficiency. The report will be disseminated at a global scale through workshops and other international events.

3.1.2. Package of tools, material compiled and disseminated

The IEEA will also develop and disseminate an information package that should provide a comprehensive orientation of each stage of the energy efficiency process and the availability of a diverse tools (energy review guidelines, implementation tools, benchmarks, case studies, technology lists, etc.) will greatly enhance the quality of the program.

To ensure that existing efforts and resources are leveraged and not duplicated, this output will develop a roadmap that uses tools, associated trainings and supporting materials that have already been developed and are publicly available such as UNIDO's training material and related tools, the Institute for Industrial Productivity (IIP)'s Industrial Efficiency Technology Database, the Certified Energy Managers (CEM)/IIP Energy Management Practitioners Toolbox, and the US Department of Energy (DOE)'s Advanced Manufacturing Office's suite of software tools, among others. This roadmap will be strategically designed considering end-user needs and evolving industrial trends as well as the complex internal decision-making processes at the enterprise level, which can be difficult for policy and program staff to understand or influence. The IEEA Tools Roadmap will address the elements of a successful Industrial Energy Efficiency program at an enterprise to demonstrate how and why different tools and program elements are needed and used to address current barriers.

3.1.3. Basic assessments of interventions in 10 new countries completed

In this phase the accelerator will attain the interest of an additional 10 countries, which will be selected using the same criteria stipulated above. A basic identification of needs of next 10 countries across the 4 programme components will be conducted to support moving into in-depth country programmes after year 2 of the programme.

d) Incremental/additional cost reasoning and expected contributions from the baseline

Increasing energy efficiency and technological advancements in industry require significant investment, change of practices and decision making by a range of industrial companies and stakeholders. While significant savings in industry are possible through the implementation of currently available and emerging energy efficient technologies, equally, significant savings are achieved through the integration of EnMs and systems optimization. Connecting this with the policy, pipeline support and financing elements provides a comprehensive series of actions that are both effective and additional to existing initiatives, which tend to be single input. This multi-input, multi-stakeholder approach could help make significant impacts in the 15 countries.

In the absence of this GEF project, it is likely that emerging economies will eventually incorporate energy efficiency technologies, practices and policies in their industrial sector. However, the project aims at accelerating this process, including in developing countries, which have been the major drivers of the rising global industrial energy consumption and related energy emissions over the last 25 years. Through this project, the accelerator will foster a strategic dialogue at all levels among policy makers, business owners, service providers and financial institutions. Beyond that, real action on the ground will help countries to accelerate and move from programme design to delivered activities to drive action and scale up the individual efforts to achieve global scale.

- 1. Policy assessment and design to support industrial energy efficiency A diagnostic study will be conducted to review the existing industrial energy efficiency policies and their enforcement in selected countries of different categories. The identified gaps will be addressed through tailor-made business cases, which will include policy design, appraisal of options, high-level cost-benefit analysis, delivery mechanism etc. The best policies and case studies will be compiled into a policy guidebook and disseminated globally.
- 2. Roadmap to deploy an analytical toolkit for industries, utilities and governments to make informed energy efficient decisions The project will develop an overall industrial energy efficient programme that effectively integrates existing industrial energy efficiency programmes, provides orientation on each stage of the EnMS process, and clearly communicates the monetary value of EnMS. Furthermore, the project will also cover the additional investment costs necessary to develop a strategic technical dialogue platform to where peers can share technical knowledge on the implementation of energy management systems and optimization.

- 3. Broadening private sector engagement The project will allow the creation of a global network of likeminded partners with the objective of broadening and accelerating industrial energy efficiency. Partners will include those engaged at the national level allowing them to act globally under the umbrella of the accelerator. The project will cover the costs of conducting targeted campaigns and meetings to showcase its benefits in the industrial sector and the advantages of joining the Industrial Energy Efficiency Accelerator. Moreover, it will support the development of an information platform where end-users and partners will be able to better coordinate the global effort of promoting industrial energy efficiency as well as obtaining valuable information about it. Finally apart from the knowledge networks and communications, the project will seek to design programmes that can then drive demonstration projects in collaboration with private companies from different sectors.
- 4. Channeling finance to energy efficiency projects Working with a range of financial institutions, including multilateral funders, regional development banks and local banks, the aim is to generate more global awareness of the potential for energy efficiency. This will be done through knowledge share of countries that have already developed effective financing mechanisms, presenting the economic benefits that participating in such programmes brings and ensuring there is greater understanding of how to finance industrial energy efficiency.

e) Global environmental benefits

GEF methodology for Demonstration and Diffusion projects.

Many climate change mitigation strategies put energy efficiency measures at their core as its implementation is the most cost effective way to reduce greenhouse gas emissions. The widespread adoption of energy efficiency measures could reduce industrial energy use by over 25%. This potential is significant as 3.92 Gt CO₂ represent a reduction of 8% in the global energy use and 12.4% reduction in global CO2 emissions.

The industrial sector and related energy consumption varies significantly from country to country and also within the regions. The project will target a 5% reduction in energy consumption across the industrial sector in the pilot countries selected. As the country selection will occur during the inception phase, it will be difficult to give a ballpark figure for the emission reductions expected. Therefore, the direct emission reductions of the project will be calculated during the inception phase in view of the actual figures of selected countries. The detailed emission reductions expected will be reported as part of the first PIR.

For the purpose of estimation at the CEO endorsement stage, it is assumed that the initial activities planned within this project will result in an indirect emission reduction equivalent to 0.1% of the full potential of the accelerator, which is equivalent to 3.92 Mt CO_2 . The direct emission reductions are estimated as 10% of the indirect reductions. This is equivalent to 392,000 t CO_2 by the end of the project. The total benefits are estimated at 4,312,000 t CO_2 .

Apart from energy savings and the reduction of CO2 emissions, industrial energy efficiency offers further global and local environmental benefits including improved local air quality and sound management of natural resources. Furthermore, industrial energy efficiency can reduce energy demand relieving some pressure on fossil fuels which are scarce natural resources increasingly extracted from challenging and environmentally uncertain locations (deep off-shore and shale oil extraction).

f) Innovation, sustainability and potential for scaling up.

During the last decades, many local and pilot initiatives on industrial energy efficiency have been carried out with different levels of success in many parts of the world. Nevertheless, no global-level initiative has

been effectively implemented to increase the uptake of energy efficient technologies and practices in the industrial sector. The project is innovative as it builds up on the work undertaken by various organizations to accelerate the adoption of new and efficient technologies and practices in the industrial sector. The project develops a global coalition of partnership through which the message of industrial energy efficiency can reach broader audiences and by which action commitments can be secured. In addition, the expertise of the project partners in working on innovation related issues can be brought to the approaches that these 15 countries take. For example, in the UK, the Carbon Trust have run an Industrial Energy Efficiency Accelerator which encouraged industrial companies to look beyond best practice and test out new technologies, many from start-up companies, through demonstration projects that were co-financed by government programmes. Where countries are ready for these step-change opportunities, such initiatives could bear fruit.

A new area of innovation for industrial energy efficiency is Big Data and the Internet-of-Things. Recent reports from the McKinsey Global Institute provide an interesting insight into the potential for productivity and innovation that Big Data and the Internet-of-Things offer to industry. Most companies are still capturing only a fraction of the potential value of data, analytics and ICT application, and the manufacturing sector is one of the sectors where progress has been particularly slow. Interestingly, the study also highlights the fact that the biggest barriers companies face in extracting value from data and analytics are organizational; many struggle to incorporate data-driven insights into day-to-day business processes. UNIDO is presently working in countries like Macedonia and Moldova on the application of state-of-the-art internet-based solutions for energy efficiency analysis and monitoring in industry, allowing for instant tracking of energy performance and a real-time measurement of energy use and savings. The project will support further applications of such solutions for monitoring of energy consumption at the plant level.

The project demonstrates sustainability by working closely with the local governments, industry associations and financial institutions to provide an enabling environment for the accelerated uptake of EE technologies and practices at the global/regional/national level. Furthermore, the project will address long term barriers—awareness, technical, policy and knowledge- that have hindered the uptake of industrial energy efficiency. Sustainability is also demonstrated through the planned energy efficiency roadmaps, which tie into the countries' INDCs and contribute to their climate change mitigation goal.

Finally, the project has a great potential for scaling up activities as the knowledge acquired by the project (best practices and technologies, case studies, policy recommendations, business cases and strategic partners) will be widely documented and disseminated among stakeholders in different countries.

Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.
 N/A

3. Stakeholders. Will project design include the participation of relevant stakeholders from <u>civil society</u> organizations (yes //no) and indigenous peoples (yes //no)? If yes, elaborate on how the key stakeholders' engagement is incorporated in the preparation and implementation of the project.

To achieve an accelerated uptake of energy efficiency in industry, the accelerator will work with a wide range of partners from the private sector, Governments and global initiatives and programmes that supports its goals and objectives. A brief description of project partners and their related role is described in the table below:

Stakeholder	Mandate and Role
Carbon Trust	Mandate: The Carbon Trust was set up by the UK Government in 2001 as an independent

Stakeholder	Mandate and Role
	organization with the objective to help catalyze action on climate change in the public and private sector. The Carbon Trust is a not for dividend organization that reinvests any surplus into its mission to accelerate the transition to a low carbon economy. It provides strategic advice, target setting and reporting; undertakes carbon footprinting services; designs and implements low carbon projects; and carries out independent energy and carbon certification activities.
	Role: Support the Accelerator through its role as Executing partner
Copenhagen Center on Energy Efficiency	Mandate: The center acts as the SEforALL Energy Efficiency Hub and the coordinator of the Accelerator Platform. It provides the technical underpinning for each of the sectoral 'accelerators', by highlighting the various high-impact opportunities available at both country- and regional-levels, and by analyzing sectoral best practices on policy and programme implementation.
	Role: Coordinate and ensure synergies across the various accelerators
The Energy Management Working Group of the Clean Energy Ministerial	Mandate: The Energy Management Working Group develops the business case for energy management, compile and disseminate case studies globally and develop and deploy tools for quality implementation of energy management in industry and commercial buildings.
	Role: Support the Accelerator in wider dissemination of industrial energy efficiency best practices globally.
Private sector companies such as Heineken, Lafarge and others	Mandate: Private sector can be providers of equipment or champions advocating for increased energy efficiency in their businesses.
	Role: Commit to share experience on improving energy efficiency and act as leaders of change.
Industrial groups/associations/federations under the leadership of the Confédération Générale des Entreprises du Maroc (CGEM).	Mandate: Industrial associations aim at enhancing role of enterprises in achieving economic and social development.
	Role: Support the development of the

Stakeholder	Mandate and Role
	programme by providing industrial information, data and expertise.
NGOs and foundations such as Climateworks & CDP	Mandate: Promote sustainability and address causes of climate change.
	Role: Outreach to members and mobilizing action, disseminate best practices, share data and trends and provide selective grant funding.
International organizations and energy efficiency initiatives such as IEA, IPEEC, Energy Forum China	Mandate: Various roles including the production of data and statistics that support decision making, active engagement with representatives of G20 countries.
	Role: Share expertise on industrial energy efficiency and join forces in order to create a global partnership for industrial energy efficiency.
Academia and knowledge hubs such as Institute for Energy Efficiency in Production hosted by the University of Stuttgart	Mandate: Reducing energy consumption in manufacturing, by using energy-efficient technologies and enabling intelligent control over energy use.
	Role: Create awareness on energy efficiency interventions based on statistics, facts and figures as well as in developing sector specific cross-country analysis.
Policymakers, officials and technical staff within governments	Mandate: Representatives from Ministries of environment, energy and industry, experts influencing the energy efficiency market in industry.
	Role: Provide information that will be used to make country-by-country analysis and developed tailored made policy recommendations accordingly. Strong support is expected from government officials as they will be ultimately responsible for developing and implementing industrial energy efficiency policies and regulatory frameworks in their respective countries.

4. Gender Equality and Women's Empowerment. Are gender equality and women's empowerment taken into account (yes ⊠ /no□)? If yes, elaborate how it will be mainstreamed into project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men.

UNIDO recognizes that both gender equality and the empowerment of women (GEEW) and access to sustainable energy have a significant positive impact on sustained economic growth and inclusive

industrial development, which are key drivers of poverty alleviation and social progress ('UNIDO Policy on Gender Equality and the Empowerment of Women' from 2015). Due to diverging needs and rights regarding energy consumption and production, women and men are expected to be affected differently by clean energy interventions. Therefore, this project aims to demonstrate good practices in mainstreaming gender aspects in its activities wherever possible, and avoid negative impacts on people, due to their gender. Guiding principle of the project will be to ensure that both women and men are provided equal opportunities to access participate in and benefit from the project.

In climate change discussions, women are mostly considered in terms of their vulnerability and contribution to CO2 emissions from cooking fires. Actually when designing energy strategies, few governments, institutions and energy sector entities consider ways in which women can make a particular contribution to this effort as energy policies are considered as technical actions with little or no social content. Nevertheless, women have an important role to play in climate change mitigation and overlooking women's contributions to address climate change results in lost opportunities to achieve multiple benefits as gender equality and women's empowerment has the potential to un-tap enhanced overall development outcomes.

Women are more professionally prepared than ever and make up the majority of those enrolled in university in near 100 countries. In fact, the proportion of women in traditionally male dominated professions has grown. For instance, in the EU Member States in 2000, women made up 41% of undergraduates in science, mathematics and computing and 20% of those studying engineering, manufacturing and construction subjects. Furthermore, they are obtaining nearly 40% of all new PhDs (2000), their share is highest in life sciences (50%) followed by mathematics (30%), physical sciences (27%), engineering (20%) and computing (19%). In 2015, women across all industries made up around 33% of junior level staff, 24% of mid-level staff, 15% of senior level staff and 9% of CEOs. These figures, although still way below desirable levels, demonstrate that the industrial sector is beginning to tap into women's potential through their increased participation in the workforce.

To accelerate this trend, the project will integrate gender mainstreaming in its components and activities in line with the UNIDO Policy on Gender Equality and the Empowerment of Women and the GEF Policy on Gender Mainstreaming. During the implementation of the project's activities, all stakeholders will be gender-sensitized and made aware of the benefits of gender mainstreaming in energy policy, training and networks. It is expected that the project will have a greater impact as women and men equally contribute to and benefit from the implemented activities and outputs. In practical terms,

- Efforts will be made to promote equal participation of women and men in capacity building activities, both at managerial and technical levels, as participants and trainers.
- Gender-sensitive recruitment will be practiced at all levels where possible, especially in selection of project staff.
- All decision-making processes will consider gender dimensions through but not limited to efforts to achieve gender balance/ representation in such processes, including Steering Committee meetings.
- ▶ Effort will be made to collect sex-disaggregated data.
- 5. *Benefits*. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. Do any of these benefits support the achievement of global environment benefits (GEF Trust Fund) and/or adaptation to climate change?

Generally, energy efficiency measures enhance productivity and competitiveness by allowing companies to consume less energy while maintaining or even increasing economic output; and can allow them to improve production and utilization capacity, and reduce operation and maintenance costs. Using input-

output economic models, studies have found that consumers and businesses use energy bill savings from efficiency improvements in areas of the economy that are more labor intensive and productive than energy purchases. Energy saving measures often introduce new technologies, which gives facility staff opportunities for career enhancement and growth.

The case for improving industrial energy efficiency has been espoused throughout this proposal, and the Industrial Energy Efficiency Accelerator intends to contribute to this global effort. One of the integral components of the Accelerator is in-country capacity building to develop a workforce that will extend the projects goals beyond the end of its lifetime. The training programs carried out by the Accelerator will use 'train the trainer' approaches, which will lead to **job creation** as in-country experts go on to help others access the jobs available in this enlarging sector.

Through giving tailored policy support to five countries the Accelerator will enable profitable **business development** by encouraging best practice EnMS and energy efficiency investment. Through the adoption of EnMS, the project will equip companies with certifiable practices and procedures that will help them to continuously improve their resource management and energy efficiency so that energy gains endure and grow over time.

This program will **develop countries' markets** through creating programmes to stimulate project pipelines through awareness raising, advice and solution accreditation. It will also promote existing financing schemes and design new schemes to be implemented, which will catalyze new finance lines and routes for large companies and SMEs. Energy efficiency is known to suffer from financing issues, but through the Carbon Trust's extensive work on unlocking energy efficiency finance, ¹¹ the Accelerator will stimulate the energy efficiency market to the benefit of a countries' whole market economy.

Other stakeholders such as utilities, governments and the economy as a whole benefit from industrial energy efficiency measures. In the case of utilities, improved energy efficiency can help provide better energy services to customers, shrink arrearages and operating costs, improve profit margins and facilitate environmental compliance. It also reduces blackouts and avoids the costs and related problems of increasing generation capacity. The lower frequency of blackouts in developing countries will decrease costs for business as there will be infrequent downtimes and will not need electricity backup supply.

The components of the project will seek to achieve and quantify not only the energy savings of industrial energy efficiency but also the non-energy benefits. The adoption of industrial energy efficiency strategies will have a positive impact on public health by decreasing local air pollution; and will aid securing energy access in developing countries, which will contribute to poverty alleviation. Through decreasing respiratory diseases caused by pollution and lowering rates of excess winter mortality in cold climates, pressure on public health budgets will be alleviated and productivity levels will increase. Finally, as described in Section 4, gender equality and the improvement of women's lives is intrinsic to projects that aim to contribute to the low carbon transition, and gender considerations are weaved into each component of this program.

Case study

To demonstrate socio-economic results of industrial energy efficiency projects implemented in different countries, UNIDO conducted a Socio-economic impact assessment of the first phase of "industrial energy efficiency improvement in South-Africa " project funded by SECO and DFID and implemented by UNIDO in cooperation with Department of Trade and Industry . The project started its on-the-ground

¹¹ The Carbon Trust (2017), Available, attractive, too slow? How to accelerate energy efficiency by getting finance right for it.

implementation in early 2010 in response to the growing need to improve the energy efficiency of the industrial and manufacturing sectors in South Africa.

The SA IEE Project supported industries in using an Energy System Optimization (ESO) approach and Energy Management Systems and Standards (EnMS) as tools to achieve greater energy efficiency. The SA IEE Project has always had the broad objective of improving the productivity and competitiveness of the industrial enterprises that it works with and protecting employment as well as creating more jobs. In this particular study four selected enterprises were studied to identify the socio-economic impact map that has been populated by the actual measureable indicators. A summary of the accumulative results of four companies is presented in the below table:

UNIDO Project	Outputs	Outcomes	Impacts
Activities	o disputes		Impuess
EnMS and ESO Implementation	• 526,631,300 kWh p.a. of energy saved (unknown) • The implementation of energy optimisation interventions resulted in savings of R 562,860,414 (over 2-3 year period) • Plant's CSI programmes to the value of around R 559,916,000 per annum	Socio-economic related indicators: 1,384 direct jobs created within the local community (permanent employees + full time contractors) Disposable earnings of some R 179,595,705 p.a. are being earned by new employees living in the local community (excluding bonuses and overtime and after deductions and tax) R 152,250,348 is available to acquire goods and services for own consumption and private use by household members of new employees in the local community R 30,531,270 is retained in local community to generate further economic activity while the major part of the money reverts back to the broader city or larger commercial centres. 3,472 indirect jobs created within the local community Total of 5,707 local jobs created (direct, indirect and induced) 3,378 livelihoods are supported by salaries earned by the newly recruited employees	☐ Improvement of the socio- economic circumstances of local communities ☐ Increased community economic activity in the local community and workforce bases ☐ Increased livelihoods supported ☐ Greater financial security for community members

6. *Risks*. Indicate risks, including climate change, potential social and environmental future risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks:

Risk Description	Risk	Mitigation Action		
	Level			
Lack of engagement or interest among regional and/or national private sector and related stakeholders to join the global partnership	Medium	 Conduct a comprehensive awareness campaign to highlight the benefits of joint action and collaboration through a global partnership. Demonstration to policy makers of the impact that energy efficiency programmes have had in other markets. 		
New or modified Industrial	Medium	Directly engage with leading policy development		
Energy Efficiency Policies and		bodies/governments at global, regional and national		
Programmes are developed and		levels.		

recommended but not integrated nor enforced		•	Provide technical assistance to overcome other institutional barriers (e.g. a lack of resources and skills to implement and enforce industrial energy efficiency policies). Ensure that the proposed policies and programmes are tailored made for particular countries considering their specific context. Engage early with potential funders of programmes and key stakeholders in the delivery landscape, building off existing activity.
Project counterparts working for industry or utilities lack the sufficient technical capacity to implement EnMSs	Low	•	Provide relevant training and support to project counterparts to guarantee a smooth implementation of EnMSs.
Industrial companies do not show interest to deploy energy efficiency projects (after Year 2)	Medium	•	On the ground work will include a major sector engagement campaign to include the trade associations and member companies (through workshops and meetings) to demonstrate the competitiveness impact of deploying energy efficiency measures. Programmes will be designed to stimulate a pipeline of investment tailored to local barriers, including awareness raising, advice and accreditation to increase trust in solutions.
Equipment suppliers and technology providers do not come forward to offer solutions	Low	•	Suppliers are more than interested to generate sales of their equipment, and so the risk here is light. The initial assessment would also help us understand the technologies that are readily available and would focus on those initially.
Financial institutions do not engage to provide needed capital to fund future investment in energy efficiency	Medium	•	A core component of the programme will engage with a range of potential funders. Furthermore, part of the process includes educating financing institutions of the opportunities for them on energy efficiency financing and designing appropriate finance mechanisms.
Climate Change Risk	Low	•	The project supports the industries in becoming resilient to climate change by enabling the roll out of Energy Management Systems (EnMS), including ISO 50001.
Socio-economic risk Industrial Enterprise owners lose interest in the programme due to lower energy prices and longer payback periods.	Low	•	The project is planning to design or modified the energy efficiency policies with close collaboration with Government of selected countries to have a plan to phase out the subsidies, which still makes the overall cost of energy higher. Further the security of the energy supply for industrial consumers has become a major driver for EE. The project will highlight the benefits both financial and social of energy efficient strategies as a means to mitigate the risk.

7. Cost Effectiveness. Explain how cost-effectiveness is reflected in the project design:

The Global Industrial Energy Efficiency Accelerator (IEEA) requires \$2m funding from the Global Environment Facility for a period of two years: This will help set-up a Secretariat and commence incountry activities, enabling this new platform, which has been unfunded to date, to begin its journey as a catalyst to drive an essential step-change in the implementation of industrial energy efficiency globally. This programme is in line with the new SEforALL strategic plan. With funding, the platform will achieve a tangible uptake of industrial energy efficiency in 15 target countries by 2025, sharing lessons and experience gained globally.

It is projected that the recipient Governments provide over \$3m co-financing to the project in order to implement mostly component 1, 2 and 3. Once the final list of countries identified, required liaison and efforts will be made to ensure the co-financing realization. Also, it is envisaged that through collaboration with various partners such as the General Confederation of Moroccan Enterprises (CGEM), and the signees of the Marrakech Declaration, which are the employers' associations from all over the world, over \$3m co-financing will be materialized. Private sector's engagement will be mostly in dissemination and deployment of BATs and implementation of component 3 and 4. (Please refer to Annex. #The Marrakesh Declaration).

Industrial energy efficiency represents a significant prize that faces significant barriers: Industry represents 33% of global GHG emissions, but despite offering a better return on investment in terms of fuel cost savings (3:1) than either transport or buildings (both less than 2:1) across both OECD and Non-OECD countries, 60% of the energy efficiency potential remains unrealized across industrial sectors. This is due to technical, behavioral and financial barriers.

Widespread adoption of energy efficiency measures could reduce industrial energy use by over 25%. The potential is significant as it represents 3.92 Gt CO2e accounting for 8% reduction in global energy use and a 12.4% reduction in global CO2 emissions. In addition to their environmental contribution, energy efficiency measures in the industrial sector provide several additional advantages such as increases in disposable income and improved industrial productivity with positive effects for economic growth, improved local air quality with associated health benefits, and poverty alleviation. Such benefits have the potential to add another 50% in economic benefits on top of direct energy cost reductions. Therefore, there is a broad scope to advance the Sustainable Development Goals (SDGs) by improving industrial energy efficiency within the SEforALL initiative.

Historically, energy efficiency policies and measures have been focused on energy intensive industrial processes like chemicals, iron and steel, non-metallic minerals (cement, glass, bricks and ceramics), pulp and paper, and refining. In 2010, they accounted for about 50% of the total industrial sector energy consumption. By applying best available technologies, the technical potential to reduce energy use in the cement sector is 18%, 26% in pulp and paper, 24% in chemicals, 21% in iron and steel, and 11% in aluminum. Only recently, Small and Medium Enterprises (SMEs) have become the focus of energy efficiency policies as they are gaining importance in the global economy in terms of employment and economic growth. Therefore, SMEs adoption of energy efficient technologies and practices is critical to reduce global energy consumption and CO2 emissions.

8. *Coordination*. Outline the coordination with other relevant GEF-financed projects and other initiatives [not mentioned in 1]:

UNIDO's EnMS programme supported by the GEF fosters the adoption of EnMS in industry by combining capacity-building and pilot implementation. It comprises three elements: an awareness seminar, user training and expert training. UNIDO's global energy management programmes are active in 17 developing countries and emerging economies. It is the flagship initiative of the UNIDO Industrial Energy Efficiency (IEE) programme, which consists of around 35 technical cooperation projects with a total portfolio budget of USD105 million and committed co-financing from government partners, industry

and financing institutions of more than US\$ 660 million. Initial results from the implementation of the programme in 9 countries reveal;

- 303 UNIDO Qualified EnMS Experts and 5,183 energy efficiency practitioners and enterprise personnel receiving training in EnMS
- 271 Enterprises with EnMS implemented
- Average annual energy savings of 7,149,215.7 MWh, annual CO2 emission reductions of 4,302,530 tCO2 and annual savings of \$132,000,000 without considering non-energy benefits.

Supporting the accelerator will magnify the results of the EnMS programme supported by the GEF and expand the outreach and knowledge sharing at a global level, thus overcoming shortcomings of individual projects by expanding the programme and compiling and disseminating tools and best practices globally.

In addition, the GEF supported other accelerators such as those on appliances and buildings. The industrial accelerator will actively engage with the other accelerators and continue collaboration under the umbrella of the accelerator platform. In 2016, the accelerator supported the development of the policy guide on industrial motors developed by the appliance accelerator. This is an example of synergies in the work of the various accelerators and more opportunities for synergies will be explored and pursued.

9. Institutional Arrangement. Describe the institutional arrangement for project implementation:

9.1. Project implementation

As the GEF Implementing Agency, UNIDO holds the ultimate responsibility for the implementation of the project, the delivery of the planned outputs and the achievement of the expected outcomes. UNIDO will be responsible for the general management and monitoring of the project, and reporting on the project performance to the GEF. It will manage, supervise and monitor the work of the international teams and ensure that deliverables are technically sound and consistent with the requirements of the project.

UNIDO will provide execution support for procuring the international expertise and services needed to deliver the outputs planned predominantly at the regional and global scale in addition to the issues related to capacity development at the national level.

UNIDO will be responsible for governance of the Accelerator, including the governing principles of the project. It will play a dominant role in coordination, oversight and performance tracking, knowledge and best practice share, and capacity building through carrying out tasks such as the final evaluation.

UNIDO will be mainly responsible for capacity building in the five countries. Capacity building involves determining the need for EnMS and constructing a program of engagement to disseminate the tool. National and regional training, certification schemes, industry engagement with EnMs and creating global dialogue on EnMS tools will aim to ensure that the Accelerator creates a self-sufficient energy efficiency policy regime within the sectors and industries targeted in the countries.

9.2. Project execution

The project will be executed by the Carbon Trust, which was established in 2001 by the UK Government to accelerate the transition to a sustainable, low carbon economy. It is an independent organization that works with leading actors around the world to create a more sustainable world. Through stimulating low carbon action, the Carbon Trust is contributing significantly to the key goals of lowering carbon emissions, developing low carbon businesses and formulating national, regional and international low carbon policy and thinking.

The role of the Carbon Trust in this Accelerator will be to provide cutting-edge policy advice and insights on the development and implementation of industrial energy efficiency policies and regulatory frameworks. Furthermore, it will share its expertise and experience in designing and delivering national and international-scale energy efficiency programmes, as well as its understanding of the environmental impact of industry and how to reduce it. The Carbon Trust will be responsible for the day-to-day execution of the project activities in accordance with the agreed annual project work plan. The Carbon Trust will report to UNIDO regularly.

As the Executing Agency of the initiative, the Carbon Trust will also carry out the majority of country engagement and will be primarily responsible for three of the four main pillars of the Accelerator: policy support; pipeline development; financing mechanisms, as well as scoping out countries to work with. For example, a national level assessment will be carried out with each country's government to agree how to improve industrial competitiveness and produce a de-carbonization roadmap and energy efficiency financing mechanisms for each target country.

9.3. Accelerator structure

9.3.1. Secretariat

The Secretariat performs a series of central coordinating functions with staff to manage the overall work of the GEEIA over the first 2 years. It enables in-country activities to commence in 5 countries, with scoping work in an additional 10, and will perform the functions described below:

(i) Secretariat (Central Functions)

- Governance. Set governance principles, establish communications, and run meetings with partners.
- Country Selection. Attain letters of engagement from countries we plan to move forward with.
- Coordination. Create a central coordinating entity with permanent staff to manage the overall work of the Industrial Platform over the first 2 years.
- **Knowledge & Best Practice Sharing.** Collect information of activities on the ground, develop case studies and share best approaches widely to other countries. Create and compile a suite of relevant tools, incorporating policy, programme design, energy management, innovation, capacity building and financing mechanisms. This will be created with target countries in mind and will leverage also those already created by the Accelerator partners in other Industrial projects worldwide.
- **Monitoring/Performance Tracking**. Monitor the progress of the Accelerator, assess performance in countries according to metrics, etc.
- Recruitment of Private Sector Partners. Sign up companies to be part of the core group.
- **Funding**. Secure funding for the full 8 year programme.

(ii) Country Engagement

• **Scoping**. For all 15 countries, scope out in which of the 4 pillars the country requires additional support, building on existing programmes and connecting with the landscape of local actors

- **Recruitment of Private Sector Partners**. Recruit private sector companies in country to set the vision for transforming industrial energy efficiency and act as leaders to drive the change.
- **Programmes of activity to support 4 pillars of activity.** Design policies and programmes, working collaboratively with local decision makers in government and industry, leveraging international and local experts. Produce designed activities in 5 countries.

The Accelerator Secretariat will be hosted by UNIDO and the Carbon Trust where each agency will appoint a global manager from its existing resource. UNIDO will hire one resource person to act as the partnership manager, who will be responsible for mobilizing and managing partners; and the Carbon Trust will appoint an operations manager, who will be responsible for the execution of activities, especially at country-level.

UNIDO: As host of the Secretariat, UNIDO will have responsibility for the governance of the Accelerator, including the guiding principles of the project. UNIDO will provide execution support as well as coordinate activities through scheduling and planning; and will disseminate knowledge and best practice on industrial energy efficiency by carrying out global case studies. Throughout the lifetime of the Accelerator UNIDO will carry out rigorous oversight and performance tracking.

Carbon Trust: The Carbon Trust's role within the Secretariat is primarily assessing, developing and executing country strategies, jointly with UNIDO, recruiting private partners to the initiative and selecting the target countries.

9.3.2. Steering Committee

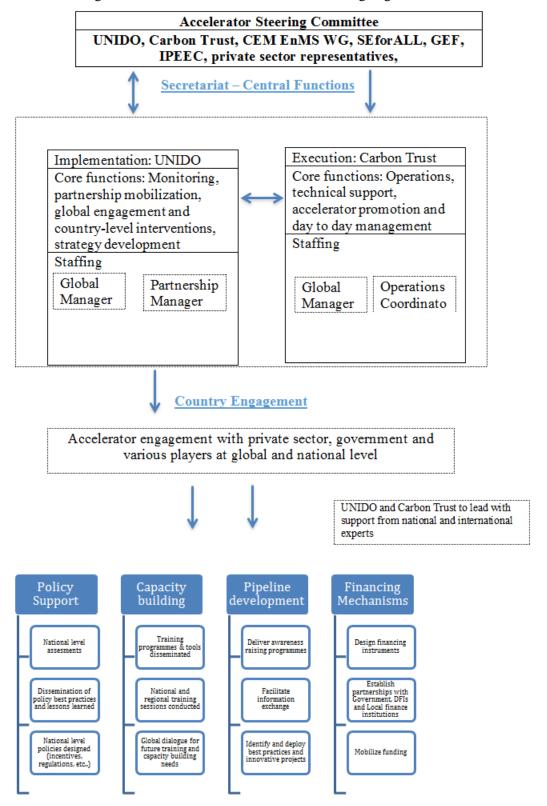
The Secretariat will report to the Accelerator Steering Committee, which will consist of members of the wider number of partners such as the CEM EnMS working group, IPEEC, the GEF, SEforALL, ClimateWorks, private sector partners and country representatives. The steering committee shall be responsible for providing the strategic input for developing the Accelerator, monitor performance of the Accelerator and suggest adjustments and actions required to fully achieve the Accelerator's objectives. The Committee shall convene annually and more frequently if required.

9.4. Country Engagement

The central activity of the Accelerator is direct engagement with the countries chosen to participate in the initiative. UNIDO and Carbon Trust will work together to produce real impact in the countries through a range of different work streams that will galvanize action and create long-term, sustainable energy efficiency measures.

To mobilize five countries and catalyze action within them, Carbon Trust and UNIDO will jointly assess the countries for current energy efficiency activities and key stakeholders to approach, and produce a high level assessment of country support requirements across the four pillars of the Accelerator: policy support, capacity building, pipeline development and financial mechanisms. To ensure input from the target countries, local workshops will be carried out; and private sector actors from different industries and companies will be recruited.

The overall management will be carried out as shown in the organigram below.



9.5. Impact & Measurement

The SDG goals set a comprehensive welfare-economic-environmental framework for outcomes. The Industrial Accelerator delivers across the SDG goals by creating a multi-stakeholder partnership necessary for large impacts in distributed countries and industrial sectors, and delivering both multiple benefits from increased productivity as well as reductions in energy demand and related GHG and local pollutants.

By 2030, the industry accelerator aims to stimulate the uptake of all cost effective (as of 2017) energy efficiency measures in industrial sectors, and emphasize continuous improvement. In order to make sure that the projected impact of the accelerator is achieved, a number of indicators at the country and sectoral level will be tracked in the initial 15 targeted countries, including:

- Policies
 - o Number of country policies developed linked to industrial energy efficiency
 - o % of industrial emissions covered by policies
 - o # country case studies developed and disseminated
- Energy and CO2 Impact
 - o Energy savings identified and achieved during the programme, and over lifetime
 - o Productivity gains achieved and/or level of improvement of competitiveness of sectors
 - o CO2 reduction identified and reduction achieved during the programme, and over lifetime
- Financial Leverage
 - o Public and private sector finance leveraged for financing industrial energy efficiency
- Private Sector Engagement
 - o The number of companies worked with in each country/sector
 - o Number of EnMS experts trained
 - o The number of companies adopting EnMS as a result of the programme
 - The number of companies deploying energy efficiency best practices or innovations

10. Knowledge Management. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The project will build on previous industrial energy efficiency interventions already mentioned in A.1.b) while taking care of not simply adding itself to the crowded number of energy advocates already seeking a variety of commitments from the industrial community. The project learns from past interventions as well from the expertise provided by partners and stakeholders. The project will share the data, information, and knowledge gathered with a wide range of stakeholders to promote innovation and best practice; this will entail the use of coordinated approaches through the network rather than individual uncoordinated efforts.

To guarantee that the acquired knowledge from the project is disseminated within and beyond the project intervention zone, an online technical platform will be developed. The publicly accessible platform will collect and categorize relevant reports, roadmaps, technology packages and project related information. In this respect, the project aims at concentrating the most relevant information on industrial energy efficiency and to make it accessible to anyone that could benefit from its use. Furthermore, the platform will contain an inventory of key partner organizations (industrial associations, financial institutions, NGOs, governmental and environmental bodies, etc.) to facilitate coordination and partnership development. Further linkages with existing platforms such as the Knowledge Management System of the C2E2 will be made to further disseminate information on industrial energy efficiency and ensure a broader outreach.

11. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes ⋈ /no). If yes, which ones and how: NAPAs, NAPs, NBSAPs, ASGM NAPs, MIAs, NCs, TNAs, NCSA, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

More than 130 national, regional and local governments pledged major actions on energy efficiency at the COP 21 in Paris recognizing it as a major component of the energy transition and a critical one to reduce CO2 emissions. Therefore, the project is aligned with the national priorities of numerous countries as stated in their Intended Nationally Determined Contributions (INDCs) under the UNFCCC. Moreover, the project activities will significantly support countries in achieving their industrial efficiency goals. For instance, the project will disseminate best policies and practices on industrial energy efficiency. Furthermore, it will directly support several enterprises, to integrate EnMSs and develop analytical toolkits for further enterprises to adopt EnMSs in the future. Also, the project will support the creation of an enabling political and technical environment that successfully supports capacity building and coordinated efforts through the Global Partnership.

12. M & E Plan. Describe the budgeted monitoring and evaluation plan.

According to the Monitoring and Evaluation policy of the GEF and UNIDO, follow-up studies such as Country Portfolio Evaluations and Thematic Evaluations can be initiated and conducted. All project partners and contractors are obliged to (i) make available studies, reports and other documentation related to the project, and (ii) facilitate interviews with staff involved in the project activities.

All monitoring and evaluation tools and documents, such as the <u>monitoring plan, progress reports, final</u> <u>evaluation report, and thematic evaluations (e.g. training needs assessment)</u>, will include gender dimensions, and report <u>with respect to an established baseline</u> for gender related targets.

12.1. Project Start – Inception phase

The project will go through a project inception phase of 6-months duration. During those 6 months, the selection of the initial five countries will be made for possible announcement at the COP23 or other opportune events. During the inception phase, the following key activities will be carried out:

- Finalizing the key criteria for country selection
- Developing a short list of potential countries
- An assessment of the landscape, current activities and key actors in potential countries
- High level assessment of country support requirements across four pillars
- Carrying out local workshops in potential countries
- Selection of 5 countries

The first PSC meeting should be held as soon as possible after approval of the project and will adopt the country selection criteria and endorse the short list of potential countries.

12.2. Annual Project Review/Project Implementation Reports (APR/PIR)

These key reports are prepared to monitor progress made since project start and in particular for the previous reporting period. The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes each with indicators, baseline data and end of project targets (cumulative)
- Project outputs delivered per project outcome (annual)
- Lesson learned/good practice
- Expenditure reports
- Risk and adaptive management
- Portfolio level indicators (i.e. GEF focal area tracking tools) are also used by most focal areas on an annual basis

12.3. End of Project – final evaluation

An independent Final Evaluation will take place will take place three months prior to the end of the project and will be undertaken in accordance with UNIDO and GEF guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The TOR for this evaluation will be prepared by the UNIDO Project Manager based on guidance from the UNIDO evaluation group. The final evaluation should also provide recommendations for follow up activities and requires a management response.

During the last 3 months the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

Costs of M&E Activities:

M&E Activity Categories	Feeds Into	Time Frame	GEF Grant Budget (\$US)	Co- financing Budget (\$US)	Responsible Parties
Measurement GEF Tracking Tool specific indicators	Mid-term & Terminal Evaluation Reports	At mid- term and completion	20,000	10,000	Project technical experts & M&E consultants provide feedback to Accelerator
Monitoring of project impact indicators (as per LogFrame)	Project management; Semi-annual progress report; Annual GEF PIR	Semi- annually	20,000	20,000	Secretariat; • Accelerator Secretariat submits inputs for consolidation and approval by project steering committee (PSC)
Periodic Progress Reports	Project management; Annual GEF PIR	Semi- annually	20,000	10,000	
Independent terminal evaluation	Terminal Evaluation Review (TER) conducted by UNIDO EVA and/or GEF EO	Project completion	30,000	60,000	Independent evaluator for submission to UNIDO PM
Total			90,000	100,000	
Grand total			190, 000		

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. Record of Endorsement¹² of GEF Operational Focal Point (S) on Behalf of the Government(S): (Please attach the *Operational Focal Point endorsement letter*(s) with this template. For SGP, use this <u>SGP OFP endorsement letter</u>).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies¹³ and procedures and meets the GEF criteria for a medium-sized project approval under GEF-6.

r-J						
Agency		DATE	Project		Email Address	
Coordinator,	Signature	(MM/dd/yyyy)	Contact	Telephone		
Agency name			Person			
Mr. Philippe		03-21-2017	Rana	+ 431	r.ghoneim@unido.org	
R. Scholtès,			Ghoneim,	26026		
Managing			Industrial	4356		
Director,			Development			
Programme			Officer,			
Development			Department			
and Technical			of Energy,			
Cooperation,			UNIDO			
UNIDO-GEF			_			
Focal Point			_ علا '			

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (Applicable only to newly accredited GEF Project Agencies)

For newly accredited GEF Project Agencies, please download and fill up the required <u>GEF Project</u> <u>Agency Certification of Ceiling Information Template</u> to be attached as an annex to this project template.

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¹² For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

¹³ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF, and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Programme structure	Indicators	Baseline	Target	Mean of verification	Assumptions and Risks
Objective: To accelerate the rate	of energy efficiency in the	industrial sector globally			•
Component 1. Maximizing the imcreating a more detailed roadma	•			ical commitment of in	itial pilots and
Outcome 1.1. Global engagement on industrial energy efficiency improved and	o Countries engagement in the programme.	Countries are not actively and/or sufficiently engaged in	# million metric tons of CO2 reduction identified and	Project progress and evaluation reports.	To improve energy efficiency
in-country assessments in 5 countries completed	o CO2 reduction identified and reduction achieved	a global initiative on industrial energy efficiency.	reduction achieved during the programme, and over lifetime.	GEF Tracking Tool.	policy is a priority for the selected
	during the programme, and over lifetime in- country energy		O Energy efficiency assessment in 5 selected countries.	In-country energy efficiency assessment	countries' Governments. Sufficient
	efficiency assessment in 5 selected countries.			reports.	commitment and
	O Energy efficiency assessment in selected countries.				participation by the local authorities.

Outputs:	- Design of strategy,	An effective global	Strategy, high level	Project progress	To improve
1.1.1. Partnership coalitions	high level plans,	strategy with high-level	plans, programme	and evaluation	energy
with Governments, Private	programme vision at	plans and programme	vision at the global	reports.	efficiency
sector, Development finance	the global level.	vision on energy	level.		policy is a
Institutions (DFIs) and local	- Assessments of	efficiency does not	- Assessments of	Countries'	priority for the
finance institutions formed	landscape, current	exist.	landscape, current	assessments.	selected
across several high impact	activities and key actors	Accurate assessments	activities and key actors		countries'
countries	in countries	on landscape, current	in selected 5 countries	Workshop reports.	Governments.
1.1.2. Deeper engagement in 5	- High level	activities and key	- High level		
countries initiated	assessment of country	actors at country level	assessment of country	Designed/modified	Sufficient
1.1.3. High-level diagnostic of	support requirements	do not exist.	support requirements	strategies for 5	commitment
energy efficiency opportunities	across 4 pillars	An effective strategy on	across 4 pillars	selected countries.	and
in the industrial sectors	- Local	energy efficiency at	- # Local workshops in		participation in
conducted and linked with	workshops(sex-	country level does not	each 5 countries(sex-	Private sector's	workshops and
countries' Intended Nationally	disaggregated)	exist or needs serious	disaggregated)	contribution at	other activities
Determined Contributions	- Selection of 5	modification.	- List of 5 Selected	global and country	by the local
(INDCs) in five countries	countries	Private sector is not	countries.	level.	authorities.
	- Design a strategy to	actively and sufficiently	 Strategy to deploy 		
	deploy required	involved in	required activities in 5		Adequate data
	activities	implementing energy	selected countries.		and
	- Private sector	efficiency programme	- # of private sector		information is
	engagement	both at global and	engaged in the		available for
		country level.	programme at the		the
			global and country level		assessment.

Component 2. Unlocking industrial energy efficiency opportunities in 5 countries by leveraging 4 pillars (policy, skills and capacity building, pipeline development and financing)

Outcome 2. 1. Design of interventions to help unlock industrial energy efficiency opportunities in five countries.	Adequate support provided to unlock the industrial energy efficiency opportunities in five selected countries.	Several obstacles exist in unlocking energy efficiency opportunities in countries, which need intervention.	# Activities taken place to support unlocking the industrial energy efficiency opportunities in 5 selected countries.	Project progress and evaluation reports.	Sufficient commitment and participation by the local authorities
Outputs:	1- Policy Support:	Energy efficiency policy	1- Policy Support:	Project progress	To improve
2.1.1. National-level policies	- National Level	in each country either	- Agreement signed	and evaluation	energy
recommendations generated	Engagement: Agree	does not exist or need	with government of 5	reports.	efficiency
2.1.2 Energy management skills	with government	serious modification.	selected countries on		policy is a
programmes designed	Industrial		Industrial	Reports on	priority for the
2.1.3 Programme that generate	competitiveness	Energy efficient experts	competitiveness	training	selected
a pipeline of investible projects	improvement and	in selected countries do	improvement and	programmes.	countries'
created	decarbonisation	not have required or	decarbonisation		Governments.
2.1.4. Suitable financing	roadmap	updated knowledge to	roadmap	List of investable	
instruments in consultation with	- Recommend	enable the	- National Policies	projects in each	Sufficient
financial sector and key partners	National Policies:	environment for the	recommended for 5	country.	commitment
designed	Indicate policies that	roll out of Energy	selected countries:		and
	could facilitate impact,	Management Systems	Range of policies	EnMS tools, case	participation
	including incentives,	(EnMS), including ISO	indicated that could	studies and study	by the local
	CO2 taxes, etc.	50001.	facilitate impact,	materials	authorities
			including incentives,		
	2- Capacity Building:	No database or list of	CO2 taxes, etc and	Assessment	Adequate data
	- Train trainers and	investable energy	presented to country	reports on	and
	run training	efficient projects in	governments.	financial	information is
	programmes	selected countries exist		mechanisms in 5	available for
	- Certification		2- Capacity Building:	selected countries	the
	schemes	No effective financial	- # of trainers		assessment.
	- Engage industry in	mechanism to finance	trained and # of	Financial	

EnMS	energy efficient	training	Mechanism	Training
- Dissemination of	projects in selected	programmes(sex-	reports	programme's
EnMS tools	countries exist	disaggregated)		material and
		- Certification		tools are
		schemes		updated and
		- # of industries		well designed.
		engaged in EnMS in		
		each 5 selected		Target group
		countries		for the training
		- # of EnMS tools		programmes
3- Pipeline		disseminated in 5		well identified
Development:		selected countries.		in each
- Engage target				country.
sectors and member		3- Pipeline		
companies around EE		Development:		Access to data
- Design solution: Run		- # of target sectors		and
workshops to		and member		information
determine relevant EE		companies engaged		regarding
projects, leveraging		around EE in each 5		energy
international best		selected countries		efficiency
practice		- # of workshops		projects in
- Creation of buy-in		conducted to		selected
and investment cases		determine relevant EE		countries
- Communications		projects, leveraging		facilitated.
and dissemination of		international best		
materials, case studies		practice		Responsive
		- # of buy-in and		entities
4- Financing		investment cases		involved in
Mechanisms:		created		deployment of
- Assess Financing		- # of materials, case		energy
Options: Work with		studies disseminated		efficiency
government to				projects are
determine range of		4- Financing		fully
financing mechanisms		Mechanisms		committed and

Component 3. Leveraging learn	- Engage with private Fls around EE financing - Design EE financing mechanisms - Explore opportunities to mobilize Funding	to scale-up to an addition	Financing options assessments in work with governments of 5 selected countries to determine range of financing mechanisms - # of private FIs engaged around EE financing - EE financing mechanisms designed in 5 selected countries - # opportunities/ solutions explored for mobilized funding	high level plans for the	cooperative.
Outcome 3.1. Engagement scaled up in 10 additional countries	Scaling up the programme up to 10 countries' engagement.	Countries are not actively and/or sufficiently engaged in a global initiative on industrial energy efficiency.	# of countries engaged in the programme	Project progress and evaluation reports.	To improve energy efficiency policy is a priority for the selected countries' Governments. Sufficient commitment and participation by the local authorities.

Outputs:	- Disseminate	No report on best	- # of International Best	Project progress	Governments
3.1.1. A global best practices	International Best	practices synthesis	Practice Policies	and evaluation	and
synthesis report is drafted	Practice Policies	exist	disseminated	reports.	beneficiaries
3.1.2. Package of tools, material	- Communications		- # of materials, case		are interested
compiled and disseminated	and dissemination of	No consolidated	studies disseminated	Country	in participating
3.1.3. Basic assessments of	materials, case studies	package of updated	across the 10 selected	assessment	in the
interventions in 10 new	- Assess landscape,	tools, materials to	countries	reports.	workshops.
countries completed	current activities and	disseminate across	- Assessment of		Governments
	key actors in these 10	countries exist.	landscape, current	Updated package	and private
	countries		activities and key actors	of tools and	sector are
	- High level	No assessments of	in these 10 countries	materials	committed in
	assessment of country	intervention of these	- High level		deployment of
	support requirements	countries exist.	assessment of country		energy
	across 4 pillars		support requirements		efficiency
			across 4 pillars		(EnMS)
					projects.

ANNEX B – GEF Grant BUDGET

Component	Activity GEF grant Agency dis		istribution	
		anocation	UNIDO	СТ
	Mobilizing Country strategies, and Catalysing Action (First 5 Countries) - Strategy, high level plans, programme vision	325,909	40%	60%
Component 1: Maximizing the impact of the Accelerator through multi-country private sector engagement, political commitment and creating a roadmap of interventions across the first 5 high impact countries	- Assess landscape, current activities and key actors in these 5 countries		130,364	195,545
	 High level assessment of country support requirements across 4 pillars Local workshops Select 5 countries Strategy Private sector engagement Deploy activities 			
	Commence More Detailed Support		40%	60%
	(1) Policy Support - National Level Engagement: Agree with government Industrial competitiveness improvement and decarbonisation roadmap	276,364	110,546	165,818
Component 2: Unlocking industrial energy efficiency	- Design National Policies: Define policies that could facilitate impact, including incentives, CO2 taxes, etc.			
opportunities in 5 countries by leveraging 4 pillars (policy,	(2) Capacity Building - Determine need for EnMS, and	280,455	80%	20%
skills and capacity building, pipeline development and financing)	construct programme of engagement - Train trainers and run training programmes - Certification schemes - Engage industry in EnMS - Global dialogue on EnMS tools - Dissemination Tools		224,364	56,091
	(3) Pipeline Development	279,636	50%	50%
	 Engage target sectors and member companies around EE 		139,818	139,818

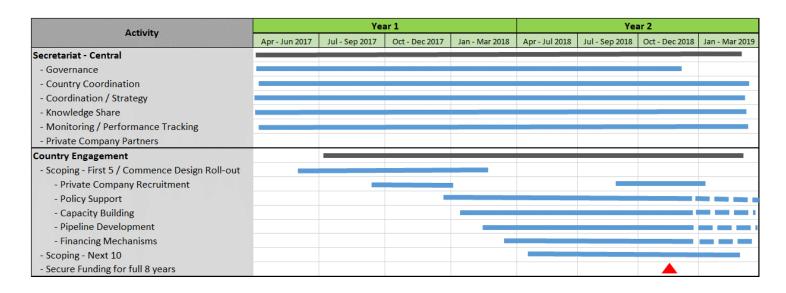
Component	Activity	GEF grant allocation	Agency d	istribution
		unocation	UNIDO	СТ
	-Design solution: Run workshops to determine relevant EE projects, leveraging international best practice - Create buy-in and investment cases - Communications and dissemination of materials, case studies			
	(4) Financing Mechanisms	272,273	20%	80%
	 - Assess Financing Options: Work with government to determine range of financing mechanisms - Engage with private FIs around EE financing - Design EE financing mechanisms - Explore opportunities to mobilize funding 		54,455	217,818
	Sub-total component 2	1,108,728	529,182	579,546
Component 3: Leveraging learnings from first five countries to scale-up to an additional 10 countries, producing high level plans for these 10 additional countries	 Disseminate International Best Practice Policies Communications and dissemination of materials, case studies Assess landscape, current activities and key actors in these 10 countries High level assessment of country support requirements across 4 pillars 	293,545	50% 146,773	50% 146,772
	Monitoring and performance Tracking	60,000	70%	30%
Component 4:	 - Agree KPIs - Create tracking framework - Undertake ongoing tracking for each country 		42,000	18,000
Monitoring and evaluation	Final Evaluation	30,000	100%	
			30,000	
	Sub-total component 4	90,000	72,000	18,000

Component	Activity	GEF grant allocation	Agency distribution	
			UNIDO	СТ
Programme Management Cost	Governance	18,182	100%	0%
	- Governing Principles, Legal Set Up		18,182	-
	- Selection of and Meetings with Partners			
	Country Engagement	45,455	50%	50%
	- Country Options - Initiate Dialogue		22,727	22,727
	Coordination - Scheduling, planning, document compilation, organizational aspects, discussions with	118, 182	80%	20%
	partners		80,000	38,182
	Sub-total project management	181,818	120,909	60,909
Total project budget		2,000,000	999,227	1,000,772

Co-financing budget

Co-financing						
	UNIDO	Carbon Trust	C2E2	Private Sector	Government	Total
Component 1	75,000	50,000	0	550,000	390,000	1,065,000
Component 2	100,000	50,000	0	1,600,000	1,500,000	3,250,000
Component 3	85,000	50,000	50,000	1,000,000	900,000	2,085,000
MNE	100,000	10,000	0	0	0	110,000
Total Components	360,000	160,000	50,000	3,150,000	2,790,000	6,510,000
PMC	50,000	40,000	0	0	210,000	300,000
GRAND TOTAL	410,000	200,000	50,000	3,150,000	3,000,000	6,810,000

ANNEX C - TIMELINE OF THE ACTIVITIES



ANNEX D – ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

	E&S risks	Mitigating Measure	Technical details of the mitigation technology, process, equipment, design and operating procedures	Location	Timeline, including frequency, start and end date	Responsibility	Cost of Mitigation (If Substantial; to be covered by the GEF grant or non-UNIDO co-financing)
Risks identified during the PIF	Climate Change Risk	The project supports the industries in becoming resilient to climate change by enabling the roll out of Energy Management Systems (EnMS), including ISO 50001.	This project will design and conduct varied national and regional training programmes and tools focused on EnMS to develop exerts. It also will build a pipeline list of investable energy efficiency projects in EnMS including ISO 50001. Effort will be made that suitable financing instrument in each country will be in place and adequate fund mobilization through partnership with Governments, financial institutions and international entities materialized.	Global	The timeline will be linked to the selection of the countries.	Local authorities and UNIDO in close cooperation with the executing partner.	Part of the defined budget for Component 3 and 4.
preparation and verified during the project preparation(PPG)	Socio-economic Risk: Governments or Industrial enterprise owners lose interest in the programme due to lower energy prices and longer payback periods	The project is planning to design or modified the energy efficiency policies with close collaboration with Government of selected countries to have a plan to phase out the subsidies, which still makes the overall cost of energy higher. Further the security of the energy supply for industrial consumers has become a major driver for EE. The project will highlight the benefits both financial and social of energy efficient motors as a means to mitigate the risk.	This project will conduct national- level policy assessments in selected countries. It also will draft a global best practices synthesis report. At the end based on the achieved results national level policies in selected countries will be designed or modified.	Global	The timeline will be linked to the selection of the countries.	Local authorities and UNIDO in close cooperation with the executing partner.	Part of the defined budget for Component 1.