



## REQUEST FOR CEO ENDORSEMENT<sup>1</sup>

PROJECT TYPE: Medium-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

### PART I: PROJECT INFORMATION

Project Title: GEF UNIDO Cleantech Programme for SMEs in India			
Country(ies):	India	GEF Project ID: <sup>2</sup>	
GEF Agency(ies):	UNIDO (select) (select)	GEF Agency Project ID:	120345
Other Executing Partner(s):	Ministry of Micro, Small and Medium Enterprises, India	Submission Date:	6 December 2012
GEF Focal Area (s):	Climate Change	Project Duration(Months)	36
Name of Parent Program (if applicable): For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	100,000

### A. FOCAL AREA STRATEGY FRAMEWORK<sup>3</sup>

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
CCM-1 (select)	Outcome 1.2.Enabling policy environment and mechanisms created for technology transfer  Indicator 1.2: Extent to which policies and mechanisms are adopted for technology transfer (score 1 to 5)	1.2 National policies for the deployment and commercialization of innovative low-carbon technologies adopted	GEF TF	910,000	2,730,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
Subtotal				910,000	2,730,000
Project management cost <sup>4</sup>			GEF TF	90,000	270,000
Total project costs				1,000,000	3,000,000

### B. PROJECT FRAMEWORK

<sup>1</sup> It is important to consult the GEF Preparation Guidelines when completing this template

<sup>2</sup> Project ID number will be assigned by GEFSEC.

<sup>3</sup> Refer to the Focal Area/LDCF/SCCF Results Framework when filling up the table in item A.

<sup>4</sup> GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

<b>Project Objective: The project aims at promoting clean energy technology innovations and entrepreneurship in selected SMEs in India through cleantech innovation platform and entrepreneurship acceleration programme.</b>						
<b>Project Component</b>	<b>Grant Type</b>	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	<b>Trust Fund</b>	<b>Grant Amount (\$)</b>	<b>Confirmed Cofinancing (\$)</b>
1. National Platform to promote clean technology innovations and competitiveness of SMEs and business models that can deliver global environmental benefits	TA	<p>1. A national level coordinating mechanism / platform established to promote clean technology innovations and entrepreneurship amongst SMEs</p> <p>2. Clean energy technologies innovators identified, and supported, and cleantech entrepreneurs promoted</p>	<p>1.1. SMEs associations and national agencies involved in promoting clean technology innovations mobilized and a coordinating platform at the national level established</p> <p>1.2. Annual cleantech business competitions held and accelerator established across selected SME clusters covering four clean energy sectors (Energy Efficiency, Renewable Energy, Waste to Energy and Water Efficiency)</p> <p>1.3. Extensive advocacy and outreach activities organized at the national level, and willing states and SME clusters identified for participation in the cleantech platform</p>	GEF TF	280,000	880,000
2. Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem	TA	<p>1. National Associations of SMEs (such as FICCI, CII etc.) involved in capacity building initiatives</p> <p>2. Mentoring and training programme developed for high-growth SMEs identified through competition and outreach activities</p> <p>3. Cleantech Institution established</p>	<p>2.1. Capacity building of national industrial association to host the cleantech programme, including training of trainers on entrepreneurship start-ups, knowledge management, benchmarking of technologies and information on best practices etc.</p> <p>2.2. Mentor Program launched - Up to 200 mentors identified and</p>	GEF TF	460,000	1,300,000

		for training of trainers and entrepreneurs and linking with universities and institutions	trained  2.3. Training Program - Intensive Training Seminar held over 3 days to support the 30 semifinalist companies. Additional training events held regionally and online  2.4. Corporate and PPP Forums held regionally			
3. Policy and institutional framework for scaling up cleantech competition, innovations and acceleration activities across India	TA	1. Policies and institutional framework strengthened to promote cleantech innovations in SMEs in the country	3.1. Enabling policy and regulatory environment created  3.2. Regional stakeholder meetings held and partnerships developed with leading institutions, agencies and universities, such as TERI University, Regional Engineering Colleges, Indian Institutes of Technologies and Indian Institute of Science in Bangalore for promoting and nurturing innovations	GEF TF	150,000	500,000
4. Monitoring and Evaluation Management	TA	1. Adequate monitoring of all project indicators together with regular evaluations to ensure successful project implementation	4.1. Mid-term and final project review/evaluation conducted  4.2. Documentation of best practices and dissemination	GEF TF	20,000	50,000
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					910,000	2,730,000
Project management Cost <sup>5</sup>				GEF TF	90,000	270,000
<b>Total project costs</b>					<b>1,000,000</b>	<b>3,000,000</b>

#### C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

<sup>5</sup> Same as footnote #4.

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
GEF Agency	UNIDO	Grant	50,000
GEF Agency	UNIDO	In-Kind	50,000
National Government	Ministry of Micro, Small and Medium Enterprises	Grant	400,000
National Government and Others	Ministry of Micro, Small and Medium Enterprises and Indian Chambers of Commerce and Industry	In-Kind	2,500,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
<b>Total Co-financing</b>			<b>3,000,000</b>

**D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>**

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
<b>Total Grant Resources</b>						

**E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:**

Component	Estimated Person Weeks	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
Local consultants*	40.00	40,000	120,000	160,000
International consultants*	40.00	120,000	180,000	300,000
<b>Total</b>		<b>200,000</b>	<b>300,000</b>	<b>460,000</b>

\* Details to be provided in Annex C.

**F. PROJECT MANAGEMENT COST**

Cost Items	Total Estimated Person Weeks/Months	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants*	96.00	73,500	100,000	173,500
International consultants*	0.00	0	0	0
Office facilities, equipment, vehicles and communications*		0	100,000	100,000
Travel*		10,000	10,000	20,000
Others**	Advertisements, publications	1,500	10,000	11,500
	Workshops,	5,000	50,000	55,000

	meeting			
<b>Total</b>		90,000	270,000	360,000

\* Details to be provided in Annex C.

\*\* For others, to be clearly specified by overwriting fields \*(1) and \*(2).

**G. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No**

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

**H. DESCRIBE THE BUDGETED M &E PLAN:**

Project monitoring and evaluation (M&E) will be conducted in accordance with established UNIDO and GEF procedures. The overall objective of the monitoring and evaluation process is to ensure successful and quality implementation of the project by: i) tracking and reviewing project activities execution and actual accomplishments; ii) providing visibility into progress as the project proceeds so that the implementation team can take early corrective action if performance deviates significantly from original plans; and iii) adjust and update project strategy and implementation plan to reflect possible changes on the ground, results achieved and corrective actions taken.

The Logical Framework Matrix in Annex A provides performance and impact indicators for project implementation along with their corresponding means of verification. These will form the basis, on which the project's M&E Plan will be built. Implementation of the M&E Plan will be undertaken by the Project Management Unit (PMU) which include representatives of MSME, DIPP, National Chambers of Industry and UNIDO.

The M&E procedure will consist of a) project inception, b) progress reporting every three months, and c) final project report. A detailed monitoring plan for tracking and reporting on project time-bound milestones and accomplishments will be prepared by UNIDO in collaboration with the PMU and project partners at the beginning of project implementation and then periodically updated. By making reference to the impact and performance indicators defined in the Project Results Framework, the monitoring plan will track, report on and review project activities and accomplishments in relation to:

- a. Energy savings and GHGs emission reductions directly generated by the project as a result of increased usage of low carbon technologies that are fostered by the innovative clean energy technology platform and the accelerator program.
- b. Energy savings and GHGs emission reductions in-directly generated by the project as a result of the strengthened policy framework
- c. Overall socio-economic impacts of the various project activities to include wide scale adoption of innovative technologies, better working environment at SMEs and increase in income levels and opportunities for entrepreneurs and workers etc.
- d. Increased awareness of initiatives promoting low carbon innovative technologies in India and the role of GEF by the general public.

The National Project Manager will be responsible for continuous monitoring of project activities execution, performance and track progress towards milestones. The UNIDO project manager will be responsible for tracking overall project milestones and progress towards the attainment of the set project outputs and will be also responsible for reporting to the GEF. A mid-term evaluation for the first year of the project implementation that includes exclusively the open competition in New Delhi will be conducted by an external consultant after approximately 16 months after the start of the project. The lessons learned from the mid-term evaluation will help to adjust and update project strategy and implementation plan to reflect possible changes on the ground, results achieved and corrective actions taken for the purpose of the smoother implementation of the second part of the competition. A final external evaluation will be carried out 4 months after operational completion of the project. The following table provides the tentative budget for the mid-term and final evaluation, which has been included in Project Component 4.

Activity	Mid-term evaluation, USD	Final evaluation, USD	Sub-total
National expert (10 work weeks)	2,000	4,000	6,000
Travel and per diem	600	2,000	2,600
<b>Total</b>			<b>8,600</b>

In addition, UNIDO will provide US\$ 50,000 as its co-financing to the project. Part of this funds will be used by the UNIDO project manager and the UNIDO regional office in New Delhi for monitoring of the project implementation.

## **PART II: PROJECT JUSTIFICATION**

### **A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

#### **A.1.1. the GEF focal area/LDCF/SCCF strategies/NPIF Initiative:**

The project is aligned with GEF's focal area strategy under Climate Change Mitigation with Objective 1: "Promote the demonstration, deployment, and transfer of innovative low-carbon technologies" and is in line with GEF-5 Modality 3: "Encouraging innovation in SMEs through a competition and incubation pilot", as it will provide support for entrepreneurs and innovators seeking to establish a commercial venture, by specifically encouraging SMEs to expand in "green" and "clean" technologies to secure national competitiveness.

The Project aims to strengthen the policy and institutional framework, and build national capacity to promote innovations in clean energy technologies in SME clusters in India. It will strive to support innovative startups and promote entrepreneurship in selected SMEs identified through the national / regional competition. The project will also mobilize investment and develop national capacity of the SME sector in India to promote clean low carbon technologies linking to global value chain resulting in a reduction of GHG emissions and carbon footprints of the selected SME clusters.

#### **A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities: N/A**

#### **A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund: N/A**

#### **A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:**

India recognizes issues of energy security and climate change mitigation as priority areas for policy action, as described in India's Second National Communication<sup>6</sup> to the United Nations Framework Convention on Climate Change (UNFCCC).

Indeed, the project is essentially an endeavor in support of the National Action Plan on Climate Change (NAPCC). The National Action Plan itself is built on the following seven guiding principles:<sup>7</sup>

1. Protecting the poor and vulnerable sections of society through an inclusive and sustainable development strategy, sensitive to climate change.
2. Achieving national growth objectives through a qualitative change in direction that enhances ecological sustainability, leading to further mitigation of greenhouse gas emissions.

<sup>6</sup> Second National Communication to the United Nations Framework Convention on Climate Change, Ministry of Environment & Forest, Government of India, May 2012

<sup>7</sup> National Action Plan on Climate Change – Government of India

3. Devising efficient and cost-effective strategies for end user Demand Side Management.
4. Deploying appropriate technologies for both adaptation and mitigation of greenhouse gases emissions extensively as well as at an accelerated pace.
5. Engineering new and innovative forms of market, regulatory and voluntary mechanisms to promote sustainable development.
6. Effecting implementation of programmes through unique linkages, including with civil society and local government institutions and through public private-partnership.
7. Welcoming international cooperation for research, development, sharing and transfer of technologies enabled by additional funding and a global IPR regime that facilitates technology transfer to developing countries under the UNFCCC.

The action plan is being implemented through eight National Missions. Two missions that are closely related to this project are the 'National Mission for Enhanced Energy Efficiency (NMEEE)' and National Mission on Strategic Knowledge for Climate Change (NMSKCC).

The NMEEE aims to create innovative mechanisms that will help finance demand side management programmes (Energy Efficiency Financing Platform- EEFP), and fiscal instruments to promote energy efficiency (Framework for Energy Efficient Economic Development-FEEED). The NMEEE will target saving about 5 % of the annual energy consumption by 2015, and nearly 100 million tons of carbon dioxide every year. Furthermore, the Twelfth Five year plan (2012-2017) of the Government of India estimates that emissions intensity of India's GDP could go down by 23 to 33 per cent over 2005 levels by 2020, depending upon the intensity of the mitigation effort, while achieving the target 9 per cent GDP growth<sup>8</sup>.

The NMSKCC aims to enlist the global community in research and technology development and collaboration through mechanisms including open source platforms, a Strategic Knowledge Mission will be set up to identify the challenges of, and the responses to, climate change. It would ensure funding of high quality and focused research into various aspects of climate change.

Almost all of the eight missions highlight the need for R&D for promoting innovations in clean technologies and thus the project is in line with the national policy and the national missions.

The Ministry of Micro, Small and Medium Enterprises (MSME) which is the main Government agency to promote the development of the SME sector in India, has established a national scheme for providing assistance to training institutions involved in promotion of entrepreneurship in SMEs in India. The Scheme envisages financial assistance for establishment of new institutions (EDIs), strengthening the infrastructure of the existing EDIs and for supporting entrepreneurship and skill development activities. The main objective of the scheme is to promote development of indigenous entrepreneurship from all walks of life for developing new micro and small enterprises, enlarging the entrepreneurial base and encouraging self-employment in rural as well as urban areas, by providing training to first generation entrepreneurs and assisting them in setting up of enterprises.

The project is also in line with the initiative of the Department of Industrial Policy Promotion (DIPP) that aims to support and accelerate entrepreneurship within industrial clusters for developing and scaling up of innovative clean technologies.

## **B. PROJECT OVERVIEW:**

### **B.1. Describe the baseline project and the problem that it seeks to address:**

The Indian economy has rebounded robustly from the global financial crisis, and is now growing steadily at a rate of around 7-8 % in real terms. The industrial sector has been a consistent driver of this growth, accounting for about 28% of GDP in the last three years. However, this rapid growth has led to a concomitant increase in energy demand and consumption as well. Commercial energy consumption in India has rose from 217 million tonnes of oil equivalent (MTOE) in 2005/06 to 272 MTOE in 2008/09. The industrial sector has consistently remained the largest contributor to this consumption accounting for about 56% of the total commercial energy consumption (as fuel and

<sup>8</sup> Planning Commission (2011): Approach to the Twelfth Five Year Plan (Draft)

feedstock) during 2007/08 (153 MTOE). This has placed India as the fourth largest global industrial energy consumer behind China, the US and Russia.

It is predicted that the Indian industrial energy consumption can increase from 3.5 to 4.2 times between years 2007 and 2050 to reach unsustainable levels threatening energy security in the long run. The composition of industrial energy requirement in India led by coal (33%) followed by oil (23%), biomass and waste (19%), electricity (15%) and natural gas (10%) further contributes to the problem. The increasing industrial energy demand and increasing greenhouse gas emissions arising from fossil fuel and power consumption, concerns the Government of India about inefficiencies with the way industry currently uses fuel and power. At the same time there is increasing international pressure for the country to stem its growing carbon dioxide emissions. It is also being realized that energy savings contribute to the profitability of businesses and also enhance their competitiveness.

The MSME (micro, small and medium enterprises) sector plays a vital role in the Indian economy. It contributes around 45% of manufacturing output, 40% of exports, and employs more than 69 million people. Most of the small-scale units are concentrated in around 400 geographical clusters across the country. Out of these, there are a large number of energy-intensive MSME clusters in the manufacturing sector (around 178 cluster manufacturing about 15 product categories), which require urgent energy efficiency measures for economic and environmental sustainability. Realizing the importance of this segment of industry, the NAPCC and the recent five year plans of the Indian government have marked energy efficiency improvement among MSMEs as a high priority agenda. The Indian Government, through Ministry of MSME, BEE and DIPP has launched programmes/schemes to promote innovations in clean energy focusing on energy efficiency and enhanced use of renewables among MSMEs. Lately, energy efficiency improvement among MSMEs is also gaining attention of multilateral organizations. GEF has funded a number of projects focusing on energy efficient technologies in the MSME sector through UNDP, UNIDO and the World Bank.

Given this scenario, investing in clean low carbon technologies is seen as a solution that can significantly reduce energy consumption and CO<sub>2</sub> emissions in India's industrial sector, while enabling the Indian economy to alleviate energy poverty and maintain steady growth. The project will help to promote SMEs that can innovate and develop commercially viable clean low carbon technologies to reduce GHG emissions.

The project aims to build on lessons learnt from similar initiatives like: (i) Cleantech program in USA and UNIDO's reliable partner after having executed a joint project in South Africa in 2011; (ii) Eco-Business Partnership Programme in Austria; (iii) and the AI Gore Sustainable Technology Venture Competition hosted by Cicero in collaboration with Confederation of Indian Industry, IITs and IIM in India.

Similarly, there are other international agencies that are working with related objectives. The Swiss Agency for Development and Cooperation (SDC) has been working over the past two decades on energy efficiency technology development and dissemination in MSME sectors. Recently, another Swedish agency, namely Swedish International Development Cooperation Agency (SIDA), has initiated a programme on introducing clean technologies for the pulp and paper sector. The Japanese government is supporting a project on transferring energy efficient Japanese technologies to Indian SMEs through promotion of private sector partnerships. And the Ministry of Economy, Trade and Industry (METI), Japan has conducted several feasibility studies for GHG reduction projects focusing on energy efficient technologies and processes in the Indian steel sector. In addition, the goal of the GIZ/BEE Indo-German energy programme is to achieve greater energy efficiency in the generation and use of electricity, oil, gas, coal, and renewable energy in all sectors, contributing to sustainable energy management and climate protection. USAID, through the Partnership to Advance Clean Energy (PACE) program, aims to accelerate deployment of clean energy technologies, systems and solutions in demand-side management and end-use energy efficiency.

As of June 2011, International Finance Corporation (IFC) held portfolio of \$3.7 billion, making India IFC's largest country of operations. Through different strategic interventions in the region, IFC aims to bring economic opportunities to underserved communities where needs are greatest, particularly in the low income states of India; help address climate change impacts; and encourage global and regional integration including promoting trade and investments within and from South Asia.



India has several chambers of commerce and industry (such as FICCI, CII, and ASSOCHEM<sup>9</sup>) which will act as counterpart executing agencies under the project (to be selected during the implementation phase):

- The Federation of Indian Chambers of Commerce & Industry (FICCI) was established in 1927 to further the interests of the Indian business community. Starting with 24 members, the number rose to 103 by 1947. Today with a membership of over 500 Chambers of Commerce, Trade Associations and Industry bodies, it is the apex industrial association that speaks directly and indirectly for over 2,50,000 business units - small, medium and large employing around 20 million people. Currently FICCI has a task force for climate change but hosts no such programmes that act as an effective platform for promotion of innovations in clean technologies. Another successful example is the India Carbon Market Conclave, the largest platform to engage with the Indian carbon market, organised by the FICCI in partnership with the ministry of environment and forests (MoEF) and the World Bank.
- Likewise, the Confederation of Indian Industry (CII) works in various areas like technology promotion, facilitating Industrial R&D and Industry's investment in R&D, facilitating partnership developments for technology/R&D collaborations, capacity building and facilitating technology exports, providing advisory and technical services for implementing technology projects benefiting society and common man all towards creating innovation eco-system in the country and many more. Global Innovation and Technology Alliance (GITA), Indian Innovation Initiative (i3), CII-Raunaq Singh Innovation Grid, Global Innovation Index, Creative India and Initiative for Research and Innovation in Science (IRIS) are some of the current initiatives of CII in the country.
- The main activities of Associated Chamber of Commerce and Industry of India (ASSOCHEM) focus on energy, environment, quality and productivity issues. It has come out recently with a national strategy document on encashing lighting energy efficiency in India, and documented best practices on waste to energy for industrial waste in India.

The Indian National Communication provides technology transfer and deployment as critical components of the toolkit to fight climate change. The project will be seeding an innovation ecosystem, driven by rewards, to assist in the development and deployment of technologies across academia, industrial sector, government and autonomous research centers in the country and abroad. This Facility will coordinate with other similar international efforts, as is critical for sharing and creating knowledge that can help mitigate climate change. It is proposed that the selected institution will be part of the network with the Climate Technology Centers Network (CTCN), and will play the connecting node with other climate technology centers in developing countries. It is expected that results of experiments such as this are likely to provide experience and inputs for the National Innovation Fund.

Moreover, the project will also link up with UNIDO's Green Industry Platform that is a global initiative to promote sustainable industrial growth. UNIDO believes that the consensus around the concept of Green Economy can only be reached if developing countries are provided with concrete opportunities to participate in the global markets for environmental goods and services and if opportunities for sustainable development are created for them in the international system for green economy. To that end, UNIDO has launched a global initiative on Green Industry, which outlines policy frameworks, instruments and concrete examples of good practice measures and programmes that would support green industries and the greening of the existing industries in developing countries and economies in transition. This project will be an integral component of UNIDO's strategy to promote the Green Industry initiative in developing countries including India.

In order for India to be able to successfully organize the national innovation and acceleration programmes, there are many barriers which need to be removed or addressed on priority:

1. Key national bodies promoting clean energy in the country require institutional capacity building and policy guidance to accelerate their ongoing efforts;
2. There is lack of trained experts for mentoring start ups and entrepreneurs actively involved in cleantech innovations;
3. There is lack of information about technology options, best practices, and benchmarks within SMEs, and

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<sup>9</sup> The Federation of Indian Chambers of Commerce & Industry (FICCI); Confederation of Indian Industry (CII) and The Associated Chambers of Commerce and Industry of India (ASSOCHEM)

linkages between research institutes and industry remain weak;

4. There is limited awareness of financial schemes, requirements and procedures to access financing for clean energy investment projects and limited government financial incentives to support industrial enterprises on the uptake of innovation in clean energy technology;
5. There is lack of an enabling policy and regulatory environment that actively supports innovations in SME clusters; and
6. There is lack of adequate institutional capacity and awareness, and hence participation and around support by key stakeholders and the public is missing.

**B. 2. incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:**

GEF resources are being requested to provide technical assistance for promotion of clean energy technology innovations and entrepreneurship in India through GEF UNIDO Cleantech Programme for SMES. The GEF intervention is sought to foster innovative technologies that can help in scaling up of clean energy technologies for fueling green growth in India. The project aims to provide a focused approach in promoting innovation in clean technologies with a special focus on Energy Efficiency, Renewable Energy, Waste to Energy and Water Efficiency. The proposed GEF project will have an emphasis on promoting innovation in the energy and climate change dimension.

Driven by the robust growth in its industrial sector (especially SMEs), India has been experiencing in the last years large economic growth. Nevertheless, the growth in India's GDP has been coupled with increased demand for energy, and consequent increase in carbon dioxide emissions. The promotion and adoption of innovations in clean technologies in India will have lasting positive effects of the global environment as it will allow tackling environmental problems at the source by simultaneously avoiding or reducing pollutant emissions and the optimum use of natural resources and energy.

The focus of the project, which is on the adoption of commercially viable clean technology innovations by SMEs, will further contribute to generate substantive and long-term benefits to the global environment as they represent the key drivers to economic activity and thus energy consumption and CO<sub>2</sub> emission. As a result, the promotion of clean technology innovations will allow striking a balance between growing economic activity and its global environmental impact.

In the absence of such an intervention it is likely that the increased growth would strain the system and lead to an increased reliance on conventional sources of energy. Without GEF support to this project, energy intensive SMEs will not be able increase their focus on technology innovation or mobilize support at the national and international level in creating business ideas around clean energy technologies and linking to value chain approach.

**Estimation of Global Environmental Benefits:**

In assessment of India's low carbon growth path and given the specific focus of the project on promoting innovations in clean energy technologies, a ten year horizon has been selected for estimating the indirect savings of GHGs. In the absence of a concrete methodology to assess reduction in GHG emissions under the project, it is assumed that given the cross-sectoral impact of the innovative clean energy technologies, the project can contribute to the savings estimated under the "all out stretch" scenario of the Low Carbon Growth study carried out by the World Bank in India in 2010. Referring to the top-down approach, it is estimated that with 0.5% and 1% as the lower and upper bound the emissions in the range of 350,000 t CO<sub>2</sub> eq to approximately 700,000 t CO<sub>2</sub> eq will be reduced over a 10 year period. Thus, the proposed GEF contribution to the project is US\$ 1 million, resulting into a unit abatement cost (UAC) of US\$ 2.86 per ton of CO<sub>2</sub> and US\$ 1.43 per ton of CO<sub>2</sub> respectively.

### **GEF project alternative scenario:**

The project is a part of a global initiative to promote innovative environmentally friendly energy technologies. The project is in line with National Policies in India and GEF focal area priorities. Clean energy technologies developed and promoted as a result of the competition and the accelerator programme will lead to reduction in GHG emissions and seek to contribute in India's sustainable green growth thereby addressing a global issue of climate change and national issues of energy security.

The Promotion of clean energy technology innovations and entrepreneurship in India through Clean Energy Innovation and Entrepreneurship Acceleration Programme is envisaged through the following four components discussed in detail below:

### **Component 1 – National Platform to promote clean technology innovations and competitiveness of SMEs and business models that can deliver global environmental benefits**

This component is based on the experience gained under the successful cleantech business competition and accelerator pilot program carried out in South Africa in 2011 as part of the Greening of COP17 project that was funded by the GEF. This competition/accelerator program was implemented by the Government of South Africa and UNIDO in conjunction with the National Cleaner Production Center (SA-NCPC), the Council for Scientific and Industrial Research (CSIR) and the Cleantech Open from USA.

In India, it is proposed to set up a national platform involving Chambers of Industry at the national / state level that will organize an annual competition to identify innovators within SME clusters, facilitate mentoring to link up with global value chain and set up a more complete accelerator, modeled on the national Cleantech Open in the United States and similar programmes in other parts of the world. The National Associations of SMEs, Cleantech Open, UNIDO and other key institutions will partner to design this program in India keeping in view local conditions and needs. To begin with, in 2013-14, given the complexities and diversity of the Indian economy at the state level, the cleantech competition and accelerator will focus on one region, expanding in 2014-15 to include two other states / regions.

#### **1.1. Guidelines for developing the competition and accelerator**

Competition and accelerator guidelines will be developed in conjunction with stakeholders that would include a schedule, eligibility requirements, competition rules, and handbooks for applicants, mentors and judges. When developing the guidelines, the successful experience with the 2011 South Africa Cleantech Competition will be leveraged, alongside the experience of the Cleantech Open and similar programmes in other countries including ECO-Business Partnership programme in Austria. The goal of the competition in India will be to both encourage SMEs to innovate and adopt clean technologies and to identify those Indian SMEs / entrepreneurs with the most innovative and breakthrough clean technologies. The development of guidelines will follow the expansion of the competition and accelerator from one region in 2013-14 to three regions in 2014-15. In 2016-17, the intention will be to launching activities across the entire country.

#### **1.2. Annual cleantech business competitions held and accelerator established across selected SME clusters covering four clean energy sectors and expanded from one state in 2013-2014 to three states in 2014-15.**

In the initial phase, given the complexities and size of the country, the proposed cleantech programme, competition and accelerator will focus on one region in 2013-14 before being expanded to three regions in 2014-15. To begin with, technology categories will consist of the four clean energy technology sectors:

- Energy Efficiency
- Renewable Energy
- Waste to Energy

- Water Efficiency

Although there may be value in adding an additional category to recognize a specific industry subsector or need in a region, care will be taken when adding new categories to maximize impact under the project. There is much benefit in standardizing categories, as it would enable effective judging, benchmarking and the sharing of mentors. A specific need to stimulate innovations in a specific area might be best served not by a new category but by a new prize that would extend across all categories and applicants, or within a given category. The opportunity for additional prizes<sup>10</sup> will be defined after further discussions with local partners and national stakeholders, but currently four prizes have been defined beyond the main competition awards:

Prize	Description
Category	Overall winner in one of the four competition categories
Sustainability	Finalist with the most effective integration of sustainability in their business model and operations
Technology prize	Semifinalist team with the technology that offers the greatest potential to recycle, reuse and reduce
University prize	Most promising entry in the competition developed from a university based team (students, researchers or faculty) linked with enterprises

### **1.3. Extensive advocacy and outreach activities in one region / state in 2013-2014 expanding to three participating states in 2014-2015**

Outreach activities will begin in Q1 2013 to raise the profile of the competition and accelerator, and the potential for clean technologies to benefit SMEs and small businesses as a whole. Activities will include briefing sessions, press releases, social media activity and advertising. The mix of these activities will vary in line with the local conditions. For example, the 2011 South Africa Cleantech Competition used radio advertising to target a more diverse range of entrepreneurs and innovators. Outreach activities will be supported by the local entrepreneurs, celebrities and earlier participants involved in similar programmes or competitions. Outreach partnerships include service providers (e.g. patent attorneys, accountants etc.), university departments and societies, including engineering, entrepreneurship and energy clubs, and organizations that are in frequent contact with entrepreneurs across numerous cleantech sectors (e.g. trade groups, entrepreneurship groups, inventors clubs etc.). Investors (VC funds, angel networks etc.) are an additional source of potential applicants due to their large networks and aligned interests. Importantly, outreach provides not only an opportunity to find potential competition and accelerator participants but a means to change awareness of clean technologies, climate change and the role of entrepreneurs.

## **Component 2 – Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem**

### **2.1. Capacity building of national industrial association to host the cleantech programme.**

To ensure the long-term growth of the cleantech competition and accelerator in India and to support cleantech startups and fostering a vibrant and sustainable cleantech ecosystem through partnerships and collaboration, partners and stakeholders including staff of National Associations of SMEs will be trained on best practices for

<sup>10</sup> Additional prizes might include: Best use of Information Communications Technology; Best Support for Climate Change Adaptation; SE4All Energy Access Prize.

management of the platform. Capacity building initiatives, among others, would include training of trainers on entrepreneurship start-ups, knowledge management and exchange of information on best practices and coordination mechanism. This will include participation at the Global Cleantech Open which brings together competition hosts and partners from around the world to share best practices and experiences.

## **2.2. Mentor Program launched – Up to 200 mentors identified and trained**

The Cleantech mentor programme would aim at maximizing every participant's chances of winning the business competition, of raising investment capital and of achieving sustainable commercial success. The mentoring programme consists of both mentoring methodology and training developed. Each semi-finalist team will be matched with one "generalist mentor" and multiple "specialist mentors" based on mutual areas of interest and proper matching of team needs and mentor strengths.

**Generalist Mentors** - A generalist mentor is the general coach, guide and advisor for the team, typically with extensive cleantech or startup experience. Often, generalist mentors are serial entrepreneurs and active investors who often become trusted advisors to and investors in the company once the competition has concluded. Mentors are unable to join or invest in a mentee company during the competition cycle.

**Specialist Mentors** – A specialist mentor is an expert in a key functional discipline such as finance, marketing, engineering or law. They act as on-call subject matter experts and may be from both large corporations and startups.

In 2013-14, up to 100 mentors will be identified and trained using international best practices, methodologies and tools. In 2014, in conjunction with the expansion of the competition pilot to three additional states, an additional 600 mentors will be identified and trained. The focus will mostly be on mentors within the three states participating in the pilot competition but activities will also include mentors with high potential in other parts of the India and overseas (through the Indian Diaspora). Training sessions will be online and in-person. Mentor development activities will begin in 2013 in conjunction with competition outreach activities. The intention is that 200+ mentors will be trained, certified and engaged before the competition launches for the third year in 2015.

## **2.3. Training Program – Intensive Training Seminar and other training events**

It is vital that more seed stage investors are brought into the ecosystem to support the growing number of companies launched through the cleantech process and supported through the accelerator. This will be achieved by bringing entirely new investors into SME sectors, and encouraging existing technology investors to invest at a much earlier and potentially riskier stages. Both groups will be supported through the dissemination of best practices from investors from around the world including case studies, new tools and organizations (e.g. formation of new angel investor groups).

The Training Programme will begin once the semifinalists are announced and run through to the final judging process. The goal is to educate and enable the semifinalists to become successful businesses. Attendance in each portion by at least one team member is highly encouraged. All semifinalist teams participate in the following with their assigned mentors: Cleantech training seminar; Special Topic Seminar; Business Clinics; and Mock Judging.

The Cleantech training seminar will be an intensive, extended long three-day weekend program for competition semifinalists that will be held in Delhi during July 2013 and 2014. The weekend is intended to address all aspects of the business model and investor pitch. The end goal is an effective business strategy and a succinct, clear pitch, so that each semifinalist company emerges from the competition and accelerator with the best shot at success. Based upon learning models used in leading MBA programs, the seminar pulls from the experience of successful entrepreneurs, business executives, investors, educators and area experts. The programme would allow for instructional learning from a lecture format tied closely with a hands-on approach, group exercises and activities. Semifinalist companies build an Action Plan as they progress through the seminar. This plan would serve as a guide for their work following the weekend and leading up to the final submission deadline in September. All presentations, slides and other material are supplied to the semifinalists for future reference. Each team works in small non-competing groups with its assigned mentors, student interns and sustainability mentors. There is plenty

of time for networking and team building built into the curriculum at the end of each day. Semifinalists are also given access to Specialist Mentors (subject matter experts) for more information in a "speed dating" event. The presenters are also available to all semifinalists outside their presentations. In 2014 due to the geographical expansion of the pilot competition, training seminars could be held both regionally and nationally.

#### **2.4. Corporate and PPP Forums held regionally**

To assist semifinalist companies in making connections to potential investors and partners, half-day forums will be held at partner corporations and government agencies to highlight opportunities for investment, loans, grants, technology adoption and partnerships. The intention is assist as many of the semifinalist companies to raise funding (grant and equity), find customers, and build partners within six months of completing the competition.

### **Component 3 – Policy and institutional framework for scaling up cleantech competition, innovations and acceleration activities across India**

#### **3.1. Enabling policy and regulatory environment created**

The project will assist in reviewing the policies and regulations relating to promotion of clean energy technologies, innovation and entrepreneurship to identify which ones need to be developed and/or improved. The related policies and regulations can be those promoting the clean energy technologies of the selected categories in SMEs, and those governing the protection of intellectual property rights, agreements on sponsorships, roles, responsibilities, and rights of different stakeholders: competition organizer and entrants, sponsors, mentors, judges, etc.

#### **3.2. Regional stakeholder meetings held and partnerships developed with leading institutions, agencies and universities across the country**

As part of the growth of the cleantech process and accelerator across India, meetings will be held with key stakeholders and partners including chambers of commerce and industry and SMEs associations in many regions. The focus on the meetings will be on communicating successes with the pilot competition in India in 2013-15 and establishing roles and commitments going forward.

When moving into three other states, especially those less associated with technology, it is important to understand the status of existing cleantech entrepreneurs, potential competition entrants and the regional opportunities and challenges. In some cases research may suggest that some states should be combined into a single competition region to achieve sufficient economies of scale.

In addition, the expansion of the competition and its acceleration to include additional three states will require substantial commitment and ongoing support from local stakeholders especially regional governments and major corporations. Therefore, significant time and effort will be spent working alongside the partner organization in India to secure local sponsorship for 2015 and beyond. Online social media activity, media campaigns and/or events will also improve awareness amongst potential entrants, volunteers and mentors in the country.

The leading universities and institutions in India such as TERI University, Regional Engineering Colleges, Indian Institutes of Technologies and Indian Institute of Science in Bangalore will be an excellent source of new clean technologies, emerging entrepreneurs and additional team members. The partnership may consist of supporting entrepreneurship education in these universities (with a focus on clean technologies), developing case studies and co-hosting events. The aim is to have the universities encouraging and facilitating their students and graduates to enter the cleantech accelerator programme.

**B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":**

The project will result in more cleantech start-up small and medium scale enterprises being identified and supported, and more innovations in clean energy technologies. The creation of a national platform for promoting innovation will result in enhancing the national human capital and thereby leading to job creation and poverty reduction. There will also be new job opportunities, as the viable clean technologies shall commence local production and scaling up of the innovation. Indigenous production of the inventions will also lead to a reduction in costs of equipment for SMEs and thereby further benefiting the small industries. The increased use of clean technology will result in reduction of GHG emissions.

The innovative technology cleantech programme for SMEs will highlight the need for supporting clean technology innovation at national level. In particular, this programme will bridge the gap between innovators and investors thereby potentially creating new business ideas and concerns. This project will try to forge synergies between innovators and international private sector that can then invest in the subsequent commercialization of the technologies.

The reduced costs, local production and local know-how of clean technologies will allow remote areas of India to harness energy to power water pumps and use innovations that will improve the lives of local communities, especially of women in these remote areas. Additionally, it will encourage women entrepreneurs to contribute to various project components and activities to support gender mainstreaming. In particular, it would enable women entrepreneurs to participate in intensive training seminars, and provide technical assistance in organizing a successful competition. That will also involve setting of gender specific targets to be monitored and evaluated throughout the project implementation.

**B.4. Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:**

Risk	Rating	Mitigation
Lack of interest by the public and industrial association in organizing the cleantech programme, resulting in limited participation, or entries with low quality, especially for the first years	Medium	Proper communication programmes will be prepared and implemented with adequate resources allocated to ensure effective and widespread communication of the cleantech programme.  Regional workshops will be carried out. Effective support will be provided to innovative SMEs. User-friendly entry form will be prepared
Lack of interest by Mentors	Low	Mentors will be identified through a stringent selection criteria and an assessment of their ownership to the competition shall be determined at an early stage
Lack of absorptive capacity by the national counterpart	Low	The cleantech programme is in line with national policies and the project will be executed in close coordination with the Ministry of MSME and FICCI

Lack of effective coordination between various project partners	Low	A proper coordination will be sought through the Project Steering Committee and ad-hoc working groups will be established if necessary
Incentive and financial support system are insufficient	Low	The capacity of financial and governmental institutions will be strengthened on energy saving opportunities and STS and their potentials. Grant and non-grant instruments will be developed and applied to ensure availability of financing resources such as revolving credit lines with private and public sector banks

**B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:**

Stakeholder and mandate	Envisaged role in the project
Indian National Chambers of Commerce and Industry such as the Federation of Indian Chambers of Commerce & Industry (FICCI), CII and ASSOCHAM	<p>A national chamber of commerce and industry (to be selected during the implementation phase) will act as national executing agency in the project</p> <p>The national project cell will be manned by well-qualified and experienced Engineers/Managers and committed to assist industries to become energy-efficient. It will have experience in similar international projects besides conducting Energy Audits, organizing Training Programmes and other allied assignments</p> <p>The concerned agency will not only provide technical inputs and overall logistics support for the project management unit, but also provide in-kind/cash inputs for the project activities</p>
Ministry of Micro, Small and Medium Enterprises, Government of India	Ministry of MSME will be a member of the PSC and participate in the policy component
Ministry of New and Renewable Energy, BEE and DIPP Government of India	MNRE, BEE and DIPP will be members of the PSC and participate in the policy component
Universities and/or Academic institutions such as TERI University, Regional Engineering Colleges, Indian Institutes of Technologies and Indian Institute of Science in Bangalore	The source of new clean technologies, emerging entrepreneurs, knowledge network, applied research collaboration and additional team members.

The project will have a Project Steering Committee (PSC), which will be chaired by the Development Commissioner and Additional Secretary, MSME, Government of India to provide strategic guidance, and supervise the project implementation. A Project Management Unit will be established and hosted by MSME. The



Unit will be responsible for the daily management of the project.

#### **B.6. Explain how cost-effectiveness is reflected in the project design:**

The development and implementation of this project will be closely coordinated with other related projects and initiatives in order to create synergies and avoid overlapping. In addition to the Project Steering Committees, working groups and other coordination mechanisms will be established when necessary to ensure the effective coordination. The Project Management Unit will become the future competition management unit of the selected Indian Chambers of Commerce and Industry. The National Project Manager is also the future competition programme Manager, and he/she will also act as the local consultant on clean energy technologies promotion and innovation consultant.

UNIDO's Green Industry Platform will provide support in bringing key stakeholders together under the project, which will aim at coordinating efforts to support the GIP and encourage green growth amongst SMEs.

The project will closely link up with other GEF projects of WB, UNDP and UNIDO projects in India for promoting business models for increasing penetration and scaling up of solar energy and promoting industrial energy efficiency in SMEs through energy management standard, system optimization and technology incubation.

#### **B.7. Outline the coordination with other related initiatives:**

UNIDO with the technical input from Cleantech Open and funding from GEF has already supported South Africa to organize successfully the 2011 SA cleantech competition on the margins of COP 17 at Durban. UNIDO will build on the experience gained under the South Africa Cleantech programme and use best practice to approach to implement proposed project in India.

Various multilateral agencies under the support of GEF have been working actively in India towards promoting energy efficiency and renewable energy, especially in the MSME sector. The project will build on the ongoing efforts of MNRE under GEF-4, specifically GEF / UNIDO's project "Promoting Energy Efficiency and Renewable Energy in Selected Micro, Small and Medium Enterprises (MSME) clusters in India". Potential synergies and relevant collaboration will be sought with the ADB/UNEP project "Pilot Asia-Pacific Climate Technology Network and Finance Center" during the project preparation phase. IFC has been actively supporting clean technology investments in India using innovative financing instruments including cleaner production lending facility, ESCO financing, risk sharing facility and carbon market products.

The project will augment the efforts of the GEF / World Bank projects "Financing Energy Efficiency at Micro, Small and Medium Enterprises (MSMEs)" and "Facility for Low Carbon Technology Deployment".

In addition, the project will also build on the efforts of the GEF/UNDP project "Achieving Reduction in GHG Emissions through Advanced Energy Efficiency Technology in Electric Motors".

Within UNIDO, potential synergies with relevant departments, such as the Business, Investment and Technology Service Branch, Trade Capacity-Building Branch, Agri-Business Development Branch, Industrial Policy and Private Sector Development Branch and Environment Management Branch will be established.

UNIDO has been working since more than 20 years on supporting SME development in developing countries including India and has a strong regional office in New Delhi.

### **C. GEF AGENCY INFORMATION:**

#### **C.1 Confirm the co-financing amount the GEF agency brings to the project:**

UNIDO will contribute USD 100,000 as co-financing for the project implementation.

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
GEF Agency	UNIDO	Cash	50,000
GEF Agency	UNIDO	In-kind	50,000
Total cofinancing			<i>100,000</i>

**C.2 how does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) And staff capacity in the country to follow up project implementation:**

UNIDO's mandate is inter-alia, to promote technology transfer, technology development and deployment in developing countries. One of the current three thematic priorities of UNIDO programme is sustainable energy and environment.

UNIDO's Energy Strategy aims at helping developing countries and countries in transition to achieve the following objectives:

- Increase the competitiveness of their industries by reducing the dependence on fossil fuels;
- Reduce their impact on climate change by decreasing the carbon emissions of their industries through energy efficiency and by promoting renewable energy technologies;
- Increase the viability of their enterprises, particularly in rural areas, by augmenting the use of locally available renewable energy sources.

UNIDO has experts at UNIDO Headquarters in Vienna that will offer technical oversight and the UNIDO regional office in New Delhi will be involved in the day-to-day operations alongside representatives from the Ministry of MSME, and other key stakeholders. UNIDO's Centres such as National Cleaner Production Centre (NCPC) and Investment and Technology Promotion Centre (ITPO) and their networks will be closely involved in key activities of the project.

### **PART III: INSTITUTIONAL COORDINATION AND SUPPORT**

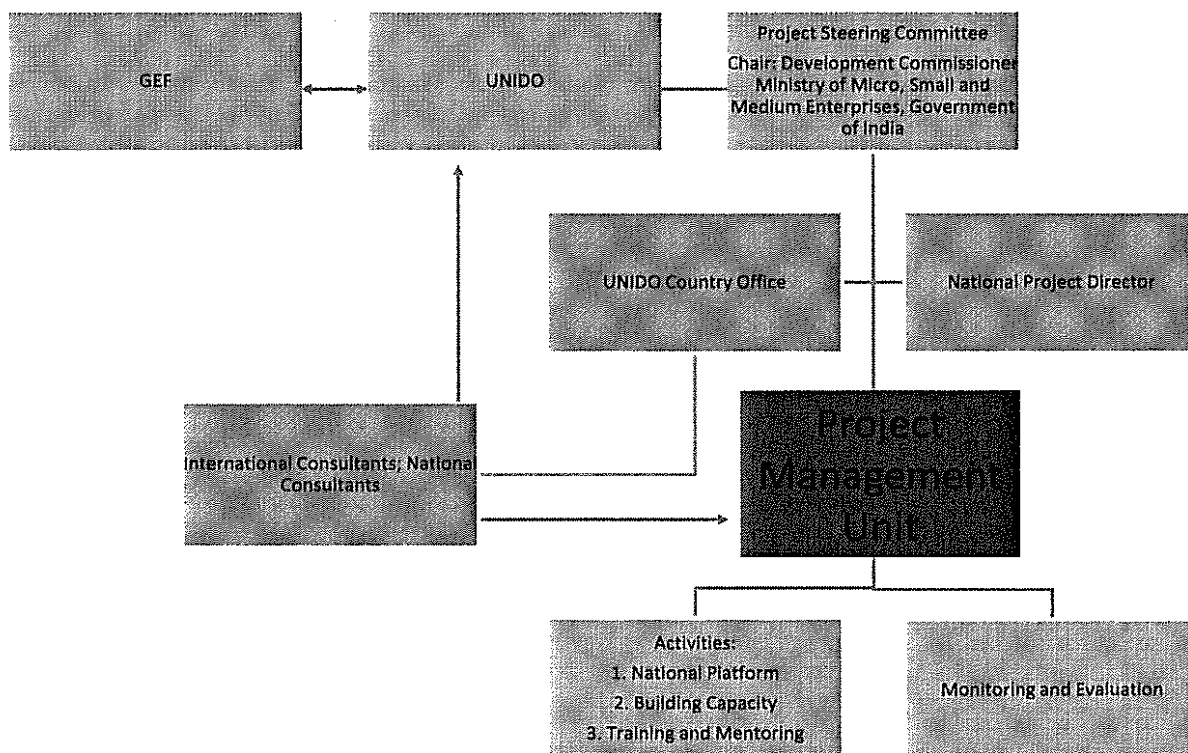
#### **A. INSTITUTIONAL ARRANGEMENT:**

UNIDO is the only GEF Implementing Agency involved in this project and no specific arrangement with other GEF Agencies is required or envisaged.

#### **B. PROJECT IMPLEMENTATION ARRANGEMENT:**

As the GEF Implementing Agency, UNIDO holds the ultimate responsibility for the timely implementation of the project, the delivery of the planned outputs and the achievement of the expected outcomes. The project will be directly implemented by UNIDO in collaboration with MSME and other national partners.

A Project Steering Committee will be established under the Chairmanship of the Development Commissioner and Additional Secretary MSME. Its members will be drawn from MSME, National Associations of Commerce and Industry, DIPP, MNRE, BEE and UNIDO. The PMU will act as the Secretariat of the PSC. The PMU will consist of the National Project Manager (NPM) and a Project Administrative Assistant (PAA). Operating as an entity, the PMU will be responsible for the day-to-day management, monitoring and evaluation of project activities as in the agreed project work plan. The PMU will coordinate all project activities being carried out by project national experts and partners. Advisory working groups will be established when necessary. Organogram of the management of the project implementation:



The PMU will be funded in part by the GEF budget and the co-financing funding. During the implementation period of the project UNIDO will provide the PMU with the necessary management and monitoring support.

#### **PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF**

N/A – NO PIF PREPARED


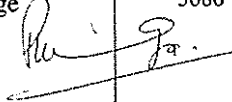
#### **PART V: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY (IES)**

- A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Hem Pande	GEF Operational Focal Point	MINISTRY OF ENVIRONMENT AND FORESTRY	07 NOVEMBER 2012

#### **B. GEF AGENCY (IES) CERTIFICATION**

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Mr. Dmitri Piskounov, Managing Director PTC, UNIDO GEF Focal Point		12/06/2012	Pradeep Monga, Energy and Climate Change Branch, UNIDO 	+43-1-26026- 3086	p.monga@unido.org

## ANNEX A: PROJECT RESULTS FRAMEWORK

Results	Indicators	Means of Verification	Assumptions and Risks
<b>Objective</b>			
Promotion of clean technology innovations and innovative clean technology entrepreneurship in India through GEF UNIDO Cleantech Programme for SMEs in India	Tons of GHG emissions avoided; Number of winners, runner ups and finalists selected; Number of business created	Project progress reports; mid-term and final project evaluation reports	Continuous government support and commitment; Lack of commitment from entrepreneurs in the SME sector to participate in the competition
<b>Outcomes</b>			
1. National Platform established to promote clean technology innovations and competitiveness of SMEs and business models that can deliver global environmental benefits	Number of winners, runner ups and finalists selected; Number of business created	Project progress reports; mid-term and final project evaluation reports	Continuous government support and participation
2. Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem	National Annual Cleantech competition to be hosted by national associations	Project progress reports; mid-term and final project evaluation reports	Sufficient commitment and participation by the experts
Mentoring and training programme developed for high-growth SMEs identified through competition activities	Number of experts participating in the mentoring programme	Feedback from entrepreneurs being mentored	
3. Policy and institutional framework strengthened for scaling up cleantech competition, innovations and acceleration activities across India	Number of new or improved policies and regulations, and guidelines prepared; number of successful competitions organized	Project progress reports; mid-term and final project evaluation reports	Continuous support and participation by MSME
<b>Outputs</b>			

1.1 SMEs associations and national agencies involved in promoting clean technology innovations mobilized and a coordinating platform established	Number of SMEs associations and national agencies involved	Monitoring and Project progress reports; mid-term and final project evaluation reports	Continuous support from government and national agencies
1.2 Annual cleantech business competition and accelerator established across selected SME clusters covering four cleantech sectors (launch Q3 2013)	Number of entries, number of semi-finalists and finalists, etc	Monitoring and Project progress reports; mid-term and final project evaluation reports	Continuous government support and committed participation of entrepreneurs
1.3 Extensive advocacy and outreach activities organized at the national level, and willing states and SME clusters identified for participation in the cleantech platform (Q2 2013)	Number of women entrepreneurs engaged and trained  Number of activities identified in the pilot phase	Monitoring and Project progress reports; mid-term and final project evaluation reports	Continuous support and participation by government and entrepreneurs
2.1. Capacity building of national industrial association to host the cleantech programme	Number of MSME staff trained to be able to organize the competition and the acceleration programme	Monitoring and Project progress reports; mid-term and final project evaluation reports	Continuous support from the government and participation of the local partners
2.2. Mentor Program - Up to 200 mentors identified and trained	Number of mentors trained	Monitoring and Project progress reports; mid-term and final project evaluation reports	Continued support from the trained mentors to participate in the program
2.3. Training Program - Intensive Training Seminar held over 3 days to support the 30 semifinalist companies. Additional training events held regionally and online	Number of semi-finalist companies supported by Cleantech Open Academy	Project progress reports; mid-term and final project evaluation reports	Committed participation of entrepreneurs
2.4. Corporate and PPP Forums held regionally	Number of shortlisted SMEs connected with funding and partnership opportunities	Monitoring and Project progress reports; mid-term and final project evaluation reports	Continuous support from SMEs, Government , National institutions and other national agencies

3.1. Enabling policy and regulatory environment created	Number of effective policies in place for promoting cleantech innovations	Project progress reports; mid-term and final project evaluation reports	Continuous support from government
3.2. Regional stakeholder meetings held and partnerships developed with leading institutions, agencies and universities across the country	Number of regional stakeholder meetings held and partnerships developed	Project progress reports; mid-term and final project evaluation reports	Continuous support and participation by relevant stakeholders

**ANNEX B: RESPONSES TO PROJECT REVIEWS** (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).



**ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF/LDCF/SCCF/NPIF RESOURCES**

<i>Position Titles</i>	<i>\$/ Person Week*</i>	<i>Estimated Person Weeks**</i>	<i>Tasks To Be Performed</i>
<b>For Project Management</b>			
<b>Local</b>			
Local Project Manager	1,000	45	The Manager is responsible for day-to-day management of the project implementation and coordination of all project counterparts and project personnel; budgeting; forward planning; liaising with project participants and stakeholders; preparation and presentation of project status reports to the Project Steering Committee; preparing subcontractors's terms of reference and contracts; supervision of contracts; and project execution of all tasks identified under the project specified in this CEO ER
Local Project Assistant	500	45	To provide administrative and accounting services to the Project Manager and other project consultants
Independent Final Evaluation Expert	1,000	6	The Independent Final Evaluation Expert will be responsible for conductin a final evaluation of the project in accordance to the agreed M&E plan. In particular, the expert will evaluate the effectiveness of all project activities in terms of delivery, quality and impact
<b>International</b>			
Justification for travel, if any: Travel within the country for meetings with stakeholders and monitoring and evaluation.			
<b>For Technical Assistance</b>			
<b>Local</b>			
Local Consultant on innovative clean energy technology competition	1,000	40	To be responsible for the successful organization of the competition and strengthening the capacity of the local institutions to be able to carry on the competition after the project completion.
<b>International</b>			
International Consultant on innovative clean energy technology competition	3,000	20	To share international best practises, lessons and to provide advisory inputs to the organization of the innovative competition, networking with other relevant international organizations
International Training Expert	3,000	20	To be responsible for the Cleantech Institute and the succesful organization of the Training Programmes
Justification for travel, if any: From the home country of the international experts to India, local travel within India by consultants, mentors, judges, winners, runner-ups and finalists, etc.			

\* Provide dollar rate per person week. \*\* Total person weeks needed to carry out the tasks.

**ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS**

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN.

N/A

B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:

N/A

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

<i>Project Preparation Activities Approved</i>	<i>Implementation Status</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>				<i>Cofinancing (\$)</i>
		<i>Amount Approved</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>	<i>Uncommitted Amount*</i>	
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
	(Select)					
<b>Total</b>		0	0	0	0	0

\* Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

# ANNEX E: TIMELINE OF THE OUTPUTS

Outputs	2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Component 1: National Platform to promote clean technology innovations and competitiveness of SMEs and business models that can deliver global environmental benefits</b>												
1.1 Guidelines for developing the competition and accelerator												
1.2. Annual cleantech business competitions held and accelerator established across selected SME clusters covering four cleantech sectors												
1.3. Extensive outreach activities organized at the national level and willing states identified for participation in the cleantech platform												
<b>Component 2: Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
2.1. Capacity building of national industrial association to host the cleantech programme												
2.2. Mentor Program - Up to 200 mentors identified and trained												
2.3. Training Program - Intensive Training Seminar held over 3 days to support the 30 semifinalist companies. Additional training events held regionally and online												
2.4. Corporate and PPP Forums held regionally												
<b>Component 3: Policy and institutional framework for scaling up cleantech competition, innovations and acceleration activities</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>

Outputs	2013				2014				2015			
across India												
3.1. Enabling policy and regulatory environment created												
3.2. Regional stakeholder meetings held and partnerships developed with leading institutions, agencies and universities across the country												
<b>Component 4: Monitoring and Evaluation Management</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
4.1. Mid-term and final project review/evaluation conducted												
4.2. Documentation of best practices and dissemination												

## ANNEX F: ORIGINAL PROJECT CONCEPT

### **Clean Technology Innovation Programme** ***“Promoting innovations in clean energy technologies in selected SMEs”***

#### **Introduction**

The promotion of renewable energy and energy efficiency remain critical in limiting GHG emissions and mitigating the effects of climate change. While several support policies and measures have been implemented worldwide to increase the share of renewable energy – in fact, national targets now exist in at least 96 countries – the technologies and/or applications needed to stabilise GHG emissions to the extent necessary are still not all there yet. Hence innovation is needed to address any shortcomings. As the private sector is often reluctant to provide this innovation without public involvement, governments are exploring policy options to foster R & D into clean technologies. Besides performance based standards, various types of subsidies and other demand-pull interventions, focus has also been on technology-push approaches such as incentives and awards. While innovation focused awards are currently mainly used within developed industries, several developing countries and countries with economies in transition have implemented similar recognition programmes as a policy measure e.g. Indonesia and Mexico to promote energy conservation.

As part of its activities at COP 17 in Durban, UNIDO helped implement such programme focused to support clean technology innovation for small- and medium sized enterprises (SMEs) in South African. One of the components of the project was the innovative technology competition for SMEs that was organised and conducted together with national partners and the activities accompanying this were highly regarded. Due to this success, national Clean Technology Innovation Programme as a policy instrument for fostering innovation on the pathway to a low-carbon economy is to be established in other countries as well. This initiative would raise awareness and change the mindset around innovative clean technology in the respective country, while enhancing opportunities for entrepreneurs and small businesses. Private sector partners will be presented with opportunities to contribute to business plans for sustainable development and expand investment in clean energy technology in the country. This would provide scale-up and replication opportunities.

In detail, the project would be conducted over a six – nine months period, during which innovators and entrepreneurs would be trained, mentored and participate in a selection process to find those with the best ideas / business plans. The winners would be announced at a formal event and awarded with grants and / or free legal services provided by private sector partners. Linkages between innovators and the private sector at local and international level that can then invest in the subsequent commercialization of the technologies are thus to be established. Moreover, the project will be linked with ongoing national innovation processes as well as relevant technology centres, e.g. National Cleaner Production Centres. Assistance with the implementation of the project will be obtained from CleanTech Open who have been conducting such competitions successfully for several years in the US and were our executing agency in South Africa.

The anticipated GEF and local partner support for innovative SMEs would hence create tangible incentives for aspiring entrepreneurs in all fields to contribute to sustainable development.

### **Objective**

To develop a GEF funded Medium Size Project to stimulate entrepreneurship and the role of SMEs in clean energy innovations.

### **Outcomes**

- Establishing a platform for promoting low carbon entrepreneurship and technologies in SMEs
- Increasing the awareness of the role of clean technology innovations in SMEs for enhancing competitiveness and economic development

### **Outputs**

1. Guidelines for organizing the clean technology innovation programme at the national level for SMEs are developed.
2. Selected innovators / entrepreneurs are trained, mentored and encouraged to submit their proposals for evaluation.
3. Committee for selecting submitted proposals for short-listing of suitable proposals is established.
4. The short-listed proposals are assisted in developing business plans (e.g. on video).
5. A competition ceremony in which the projects are presented and winners are awarded seed funds for the business plan execution is conducted.
6. Partnerships with the private sector – particularly investors and grant makers – are established and strengthened for up-scaling of best practices.
7. Clean technology innovation process is handed over to selected national institution to develop and expand the idea further with e.g. additional mentoring, training.
8. Best practices are promoted and disseminated post-project.



XI Conference of Parties  
UNFCCC COP 11  
HYDERABAD INDIA 2012



भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT AND FORESTS

D. O. No. 4 (21/10/2012 – IC (GEF)  
Dated: 7<sup>th</sup> November 2012

To: Mr George Anestis  
GEF Executive Coordinator  
UNIDO Headquarters  
Vienna

**Endorsement for "Promoting Clean Energy Technology Innovations and Competitiveness of SMEs in India"**

In my capacity as GEF Operational Focal Point for India, I confirm that the above project proposal (a) is in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and, (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of above project proposal with the support of UNIDO. If approved, the proposal will be prepared and implemented by the Ministry of Micro, Small and Medium Enterprises (MSME), Government of India. I request UNIDO to obtain the endorsement of the medium size project document and project operational manual before it is submitted to the GEF Secretariat for CEO endorsement.

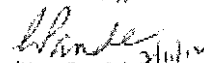
The total financing from GEF Trust Fund being requested for this project is USD 1.1 million inclusive of agency fee for project cycle management services associated with the total GEF project. The financing requested for India is detailed in the table below:

Source of Funds	GEF Agency	Focal Area	Amount (in USDM)			
			Project Preparation	Project	Fee	Total
GEF TF	UNIDO	Climate Change	0	1.0	0.1	1.1
Total GEF resources			0	1.0	0.1	1.1

I consent to the utilization of India's allocation under climate change focal area in GLF 5 as defined in the System for Transparent Allocation of Resources.

With warm regards,

Yours sincerely,

  
(Hem Pande)

Copy to:

- Mr Amarendra Sinha, Additional Secretary and Development Commissioner, MSME
- Mr R R Bashmi, Joint Secretary, MoEF and National Focal Point for UNFCCC
- Mr Nilaya Mitash, Director and GEF Political Focal Point India, Department of Economic Affairs, Ministry of Finance, Government of India, North Block, N Delhi
- Dr Pradeep Monga, Director, Energy and CC Division, UNIDO HQ, Vienna



जहाँ है हरिकली।  
वहाँ है खुरहाली।।

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(सूक्ष्म, लघु एवं मध्यम उद्यम)  
सूक्ष्म, लघु एवं मध्यम उद्यम मंत्रालय  
भारत सरकार



**MSME**  
सूक्ष्म, लघु एवं मध्यम उद्यम

OFFICE OF THE DEVELOPMENT COMMISSIONER  
(MICRO, SMALL & MEDIUM ENTERPRISES)  
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES  
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No.18/JDC(PG)/2012

Dated: 12.10.2012

To

Dr. Pradeep Monga,  
Director of Energy and Climate Change,  
UNIDO, Vienna, Austria.

Subject: UNIDO – MSME project “GEF UNIDO Cleantech Programme for SMEs in India”.

Sir,

The Ministry of Micro, Small and Medium Enterprises (MSME), Government of India accords priority to promotion of technology innovations and upgradation in SME clusters in the country. Since UNIDO/GEF project focuses on promotion of clean technologies in SMEs through innovations, mentoring and value chain approach, it is in line with the national priorities and concrete programmes supported by the Office of Development Commissioner, MSME for selected SME clusters.

In view of the above, I would like to convey support of MSME to the project, and confirm co-financing to the tune of US \$ 2,900,000 (US\$ 400,000 in cash and US \$ 2,500,000 in kind) under the project for strengthening the national capacity for technology innovations in SMEs cluster in India.

We look forward to a close cooperation with UNIDO in making this project a success.

Yours sincerely,

  
(Pankaj Garg)

Joint Development Commissioner