

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

VIENNA INTERNATIONAL CENTRE P.O. BOX 300, A-1400 VIENNA, AUSTRIA

TELEPHONE: (+43 1) 260 26-0 FAX: (+43 1) 269 26 69

www.unido.org

unido@unido.org

11 September 2008

Dear Mr. Zhang

We are pleased to submit the revised PIF and OPF endorsement letter for the project entitled "Promoting Energy Efficiency and Renewable Energy in Selected Micro, Small and Medium Enterprises (MSME) Clusters in India" for your kind consideration.

Yours sincerely,

Edward Clarence-Smith Senior GEF Coordinator

Programme Development and Technical

Cooperation Division

Mr. Zhihong Zhang Program Manager/ Sr. Climate Change Specialist GEF Secretariat 1818 H Street, NW, MSN G6-602 Washington, DC 20433 U.S.A.



PROJECT IDENTIFICATION FORM (PIF)1

PROJECT TYPE: FULL-SIZED PROJECT

THE GEF TRUST FUND

Submission Date: 31 December 2007 Re-submission Date: 11 September 2008

PART I: PROJECT IDENTIFICATION

GEFSEC PROJECT ID²: GEF AGENCY PROJECT ID: COUNTRY (IES): India

PROJECT TITLE: Promoting Energy Efficiency and Renewable Energy in Selected Micro, Small and Medium Enterprises (MSME) Clusters in India

GEF AGENCY (IES): UNIDO

OTHER EXECUTING PARTNERS: DC MSME, BEE, IREDA AND SIDBI

GEF FOCAL AREAS: Climate Change

GEF-4 STRATEGIC PROGRAM (S): CC - Strategic Program 2: Promoting Energy Efficiency in the Industrial Sector and CC - Strategic Program 4:

Promoting Sustainable Energy Production from Biomass

INDICATIVE CALENDAR			
Milestones	Expected Dates		
Work Program (for FSP)	November 2008		
CEO Endorsement/Approval	August 2009		
GEF Agency Approval	October 2009		
Implementation Start	December 2009		
Mid-term Review	December 2011		
Implementation Completion	December 2013		

1

A. PROJECT FRAMEWORK (Expand table as necessary)

Project Objective:

The main objective of the project is to develop and promote a market environment for introducing energy efficiencies and enhanced use of renewable energy technologies in process applications of energy intensive MSMES in India as a basis to promote their competitiveness while ensuring an integrated approach for lower carbon intensity and improvement in productivity and local environment.

The project aims at promoting end use and supply side energy efficiency and renewable energy in selected energy intensive micro, small and medium enterprise (MSME) clusters (mainly energy intensive manufacturing SMEs such as ceramics, tiles, hand tools, glass, bakeries, iron forging etc.) in India. The proposed GEF project will also focus on mainstreaming energy efficiency (EE) and renewable energy (RE) into national programmes and policies concerning MSME development, and achieve substantial reduction in their GHG emissions. The project will strive to integrate with the national MSME cluster development programme of Development Commissioner (DC), MSME; regulatory and policy mechanisms for MSMEs under the Bureau of Energy Efficiency (BEE); and RE based industrial applications programme of Ministry of New andRenewable Energy (MNRE). Taking an integrated approach, the proposed project will, among others, focus on 1) mainstreaming EE and RE into national policies and programmes; 2) introducing end use and supply side energy efficiency interventions and measures including energy management standards and tools; 3) implementing RE technologies and measures for thermal and allied applications; 4) strenghthening frameworks for techno-commercial mechanisms such as DPR preparation, technology/solution supply chain management, common facility centres, clean fuel supply infrastructure, financing etc.; and 5) capacity building and providing training to industry, institutions and other service providers to promote access of selected MSMEs to EE and RE markets, technologies and services. In consulations with the national counterparts and MSME associations, all energy intensive MSME clusters (namely foundaries, ceramics, tiles, hand tools, glass, bakeries, iron forging, brass wares, paper and pulp and spices etc.) have been identified for intervention under the project.

Special efforts will be made to integrate all main components under the project to provide cohesiveness by focusing on selected MSME clusters as identified by BEE and Ministry of MSME, and linking up with upstream policy and regulatory framework options. The proposed project is an integral component of the umbrella programmatic framework approach on energy efficiency developed by the Government of India to seek GEF support, and approved by GEF with World Bank as the lead agency and UNDP & UNIDO as agencies for specific components. Thus, this project would specifically link up with ongoing / pipeline national EE and RE programmes including GEF funded projects of World Bank and UNDP with specific focus on MSMEs to ensure coordination and synergies in addressing key barriers to wide scale adoption of improved EE and RE technologies and measures by MSME sector in the country.

Project Components Type Expected Outcomes	ype Expected Outcomes Expected Outputs	Indicative GEF Financing*		Indicative Co- financing*		Total (\$)		
				(\$)	%	(\$)	%	
1.Mainstreaming EE and RE into national policies and programmes on MSMEs	TA	Strengthened policy framework for promoting EE and RE in selected energy intensive MSME clusters	- Detailed review of policy and regulatory framework on end use and supply side energy efficiency in MSMEs - Policy incentives developed and put in place	500,000	33	1,000,000	67	1,500,000

¹ PIF submission is limited only to 4 pages, excluding Part III.

Project ID number will be assigned initially by GEFSEC.

- dovolenment	T	T	Tools to strongth as institutional	1			Τ	r
development			- Tools to strengthen institutional framework on end use and supply					
			side energy efficiency developed					
			and disseminated					
2. Scaling up	TA/	Improved productivity	-Cluster diagnostic study reports	2,000,000	24	6,300,000	76	8,3000,000
end use and	Inve	an competitiveness	focusing on energy consumption /					
supply side	stm	of selected MSME	audit in selected MSME clusters					
energy	ent	clusters; reduced	- Energy efficiency technologies					
efficiency interventions by		energy costs; and increased	and systems optimization results recommended for selected MSME					
way of improved		compliance with	units					
technologies,		national energy	-Cluster level energy efficiency					
management		efficiency standards /	and management plans					
standards and		guidelines	developed in consultation with					
tools in selected		(prescribed by the	selected MSME clusters					
energy intensive		Bureau of Energy	- Scaling up EE Energy					
MSME Clusters		Efficiency)	technologies and management standards introduced in selected					
			MSME units					
			- Demonstrating returns on					
			investments made in terms of					
	İ		procurement of equipment,					
			operational modalities and					
			maintenance systems on EE					
ļ			through systems approach in selected MSMEs					
3. Introducing	TA/	Reduced fossil fuel	- Cluster level reports focusing on	2,000,000	20	8,000,000	80	10,000,000
improved and	Inve	consumption and	fossil fuel consumption in	2,000,000	20	0,000,000	00	10,000,000
nearly	stm	costs; improved	selected MSME clusters					
commercial RE	ent	productivity and	- Techno-economic feasibility of					
technologies		competitiveness of	introducing RE primarily for					
(primarily		selected MSMEs;	process heat applications in					
modern biomass technologies		and increased compliance with the	selected MSME clusters - Cluster level renewable energy					
and wherever		national	plans developed in consultation					
found feasible,		environmental	with MSMEs;					
other RE		standards /	- Demonstrating commercial					
technologies		guidelines	viability of investments made in					
such as solar			RE technologies adoption for					
etc.) and			process heat applications (mainly					
systems for process heat			through fuel switching) achieved in selected MSME units					
and allied			in selected work and		l			
applications in								
selected MSME					ļ			
clusters	T 4 7		0	1000				
4. Promoting	TA /	Increased	- Cluster level EE and RE	1,000,000	11	8,000,000	89	9,000,000
and Scaling up markets for EE	Inve stm	investments and targeted financing in	infrastructure and service providers promoted for MSMEs		ļ			
and RE	ent	creating support	clusters covered under					
technologies	V.11	infra-structure for	components 2 and 3					
and standards in		improved EE and RE	- Preparation of DPRs for MSMEs					
selected MSME		technologies and	clusters not covered in				İ	
clusters		standards for MSMEs	components 2 and 3					
		selected under	- Financing packages for					
		components 2 and 3; and Scaling up	financing of projects based on DPRs					
		markets for other	-Sustainability standards					
		MSME Clusters for	developed for biomass use					
		MISIME CIUSTEIS IOI	developed for biomass use					J

5. Capacity building of MSMEs, equipment suppliers and ESCOs, training of experts and institutions, information dissemination for sustainability and replication of EE / RE technologies and measures in selected MSME clusters	TA	wide coverage of improved EE and RE Technologies and standards Enhanced capacity of MSMEs, local industry associations, vendors and suppliers; Transformed equipment and service markets for both EE and RE technologies targeted at MSMEs; Increased awareness of policy makers, experts and MSMES; and enhanced synergies with other ongoing similar programmes including WB and UNDP projects on MSMEs	- Dissemination of best practices on improved EE and RE technologies and standards in all MSME clusters in the country -Experts, engineers and staff of MSMEs trained in EE and RE technologies/standards -RE/ EE equipment/service providers & resource supply linkages strengthened -Cluster level energy management cells made functional -Policy makers, experts and MSMEs sensitized - Cooperation and synergies with other similar projects enhanced through information sharing on best practices and joint workshops	1,250,000	45	1,500,000	55	2,750,000
6. Project management and coordination				423,000	26	1,200,000	74	1,623,000
Total project costs				7,173,000	22	26,000,000	78	33,173,000

^{*} List the dollar amount by project components. The percentage is the share of GEF/co-financing amount to the total amount for the component.
** STA = Scientific & technical analysis.

B. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Project Preparation	Project	Agency Fee	Total
GEF Grant	100,000	7,173,000	727,000	8,000,000
Co-financing	100,000	26,000,000		26,100,000
Total	200,000	33,173,000	727,000	34,100,000

C. INDICATIVE <u>CO-FINANCING</u> FOR THE PROJECT BY SOURCE (\$), IF AVAILABLE

Co-financing Source	Cash	In-kind	Total
Project Government Contribution	2,500,000	2,500,000	5,000,000
GEF Agency (ies)	250,000	250,000	500,000
Private Sector	16,000,000		16,000,000
Others (Bilateral partners, banking institutions like SIDBI, IREDA etc., and MSME associations)	4,600,000		4,600,000
Total co-financing	23,350,000	2,750,000	26,100,000

D. GEF RESOURCES REQUESTED BY FOCAL AREA(S), AGENCY (IES) SHARE AND COUNTRY(IES)*

		Country Name/ Global	(in \$)			
GEF Agency	Focal Area		Project Preparation	Project	Fee	Total
Total GEF Resources						

^{*} No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO SOLVE IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

According to the recent report (2007) of the Ministry of Micro, Small and Medium Enterprises (MSMEs), Government of India, there are over thirteen million MSMEs in the country, employing over 41 million people and contributing more than 45 percent of the country's total manufacturing output. As estimated by the Indian Institute of Foreign Trade, approximately 40 percent of the country's exports come directly or indirectly from MSMEs. The 2006 Integrated Energy Policy Report of the Planning Committee noted that lowering the energy intensity of GDP growth through higher energy efficiency and enhancing use of renewable energy by MSMEs is an important element for meeting India's future energy challenges and ensuring its energy security. Currently, India consumes 0.16 kg of oil equivalent (kgoe) per dollar of GDP expressed in purchasing power parity terms, and its CO₂ intensity per GDP (adjusted for PPP) has shown a slight decline over time.

The Government of India (GOI) has launched an ambitious energy efficiency and conservation programme under its Eleventh Five Year Plan (2007-12) that aims at savings of 5 percent of consumption levels through implementation of a set of energy efficiency interventions and enhanced use of renewable energy in industrial processes. The targeted reduction of energy use is in line with the objectives as enumerated in the Energy Conservation Act, 2001 which provides for coordination of such initiatives at the central / state level.

Energy is a key input in industrial processes of most of the MSMEs in India, especially in the case of energy intensive manufacturing enterprises such as those involved in mineral processing (ceramic, tiles, pottery, glass, brick, etc.), metallurgical and metal industries (foundry, forging, heat treatment, steel re-rolling, etc.) and agro and food processing (bakeries, dairies, rice mills, etc.). Currently these MSMEs use significant amounts of electricity as well as large amounts of fossil fuels (about 65 Mtoe) in the form of furnace oil, diesel, natural gas and coal or traditional biomass fuels to meet their thermal heat requirements. Despite the recent GOI efforts to reduce overall energy intensity, MSMEs have fallen behind benchmarks in terms of productivity, technology and end use energy efficiencies. Recent steep increases in fossil fuel prices along with shortage of fuels/electricity and air pollution caused due to inefficient technologies are potential threats to the sustenance of energy-intensive MSME clusters in India. Numerous sector-specific studies have confirmed that energy intensity in MSMEs can be further reduced, with the widespread adoption of commercially available technologies to improve energy efficiency and use of renewable energy in process applications. Energy audits carried out in various MSMEs clusters under various UNIDO projects show that, in general, there exists a scope for 20-40% energy savings by shifting to energy-efficient technologies and reducing dependence on fossil fuels through fuel switching to renewables. Such shifts would bring about significant aggregate impacts and global benefits from reduced emissions of Greenhouse Gases. In addition, MSMEs, especially those for whom energy costs represent a large portion of total production costs, can reap especially high direct economic benefits from improving efficiency of energy conversion and increased use of renewable energy.

While adopting systems approach to introduce EE technologies in MSME sector has concrete benefits, recent field reports in India have revealed that fuel switching from fossil fuels to modern biomass energy technologies (particularly biomass gasifiers) has proved to be both economically and technically viable. The penetration of gasifiers in energy-intensive SMEs e.g. ceramic, food processing, rubber processing, metallurgical/metal industries is steadily increasing. Similarly, solar concentrator and flat plate collectors have been proven to be viable in dairy and several other process industries. The project aims at mainstreaming these pilot initiatives into large scale dissemination using a systematic approach.

However, numerous barriers and market failures exist that have prevented widespread adoption of efficiency measures and renewable energies by MSMEs, which among others, include technology, policy, financial, business skills and awareness barriers. Hence, there is a need to support a market environment and an integrated approach to address these barriers, and demonstrate the commercial viability of improved EE and RE technologies and measures specifically targeted on the MSME sector. Although recently a few projects have demonstrated the techno-commercial viability of utilizing EE / RE technologies like end use efficiencies as well as biomass gasifiers for substituting fossil fuels for process heat applications, their adoption is still in its infancy. Barring a few pilot initiatives, no national level initiative has been effectively implemented to improve energy-efficiency and fossil fuel replacement on commercial basis in MSME clusters. Thus the proposed project would be the first of its kind to focus on both EE and RE technologies, and take an integrated approach to mainstream EE and RE into national policies on MSMEs, promote modern and near commercial technologies, and address key barriers, especially technical, policy and business skills barriers for wide replication of improved EE and RE technologies in MSME sector in the country.

In order to ensure cohesiveness in various components, the project will work at three levels, which are all interlinked. At the policy level, it will work at mainstreaming EE and RE in national policies aimed at MSMEs, to increase the support policies are giving to MSMEs switching to EE and RE. These policy signals will help drive MSMEs towards EE and RE but this alone will not be sufficient. The MSMEs needs specific technical assistance to use energy efficiently, hence this project will therefore also aim at formulation and dissemination of energy management standards and tools to create a favourable environment for EE / RE technology adoption and demonstration. Since the culture of industrial clustering is particularly strong in India, the project will focus on selected MSME clusters, using UNIDO's tested cluster development methodology to provide the necessary training and assistance for DPRs preparation and technology implementation. In order to be completely successful, the MSMEs in the clusters will need external market support. Therefore, the project will also work at creating a robust supply chain for the provision of technology solutions and building the necessary infrastructure and supply chain for alternate fuel supply.

Once successfully implemented, the project would have considerable global environmental benefits in terms of reduction in GHG emissions through substantial reduction in electricity consumption, fuel switching by replacing fossil fuels with renewables, and putting in place suitable policy incentives focusing on energy intensive MSMEs. In the process, the project would also help in improving the productivity and competitiveness of participating.

MSMEs with huge replication and sustainability potential in India. Initially, ten energy intensive MSME clusters (namely foundries, ceramics, tiles, hand tools, glass, bakeries, iron forging, brass wares, paper and pulp, and spices) covering more than 300,000 enterpises of various sizes have been identified for immediate interventions under the project.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL PRIORITIES/PLANS:

India's national energy policy document projects 3-4 times increase in primary energy demand during the period 2006-2031. It identifies energy efficiency including demand side management and increased use of renewable energy as priority areas for immediate intervention. One of the priority areas for EE and RE improvements is the MSME sector in India. An Inter-Ministerial Working Group (IMWG) on Energy Conservation has been constituted for planning and directing national energy efficiency efforts. Regulatory reforms initiated for rational pricing of various energy fuels have brought retail energy prices to levels that are at a par with or above the cost of supply. Coal and petroleum prices have been largely deregulated and average electricity prices paid by the end-users now approximate long run marginal costs. The Bureau of Energy Efficiency (BEE) has been established for the development and planning of energy efficiency programs and policies in the country. The Energy Conservation Act, 2001 provides for efficient use of energy, conservation and has accorded special priority and thrust to energy efficiency measures through various policies and institutional measures with active participation of MSMEs. Due to their large economic and social contribution (particularly their ability to generate employment opportunities), MSMEs have a special place in the development agenda of the Government of India. The project is consistent with the national priorities as the Ministry of MSME is implementing an umbrella cluster development programme to promote productivity and competitiveness of MSMEs through introduction of new and clean technologies and processes. During the XI five-year plan period (2007-12), BEE has plans to undertake energy efficiency initiatives in 25 MSME clusters, while the Ministry of New and Renewable Energy (MNRE) and Department of Industrial Policy Promotion (DIPP) have proposed scaling-up of their programmes for promoting EE and RE applications in industries and urban / rural areas. The ten energy intensive MSME clusters which the project will focus on have been chosen out of 25 priority MSME clusters identified by BEE so as to ensure consistency with the national programme on energy efficiency and renewable energy for MSMEs.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND FIT WITH STRATEGIC PROGRAMS:

The project is designed to promote end use and supply side energy efficiency and renewable energy use in selected MSME clusters in India, thus contributing to the GEF Strategic Program 2: Promoting Energy Efficiency in the Industry Sector, through promoting the deployment and diffusion of energy-efficient technologies and practices in industrial production and manufacturing processes in SME sector, and GEF Strategic Program 4: Promoting Sustainable Energy Production from Biomass, through adoption of modern biomass conversion technologies to meet process heat applications of selected MSMEs in India.

In line with the Strategic Program 2, the project would focus on the energy efficiency systems in MSME manufacturing and processing, including combustion, steam, process heat, combined heat and power, electricity generation, and other public utilities. Small and Medium Enterprises (SMEs) in developing countries (like India) demonstrate significant potential for improved efficiency and reduced GHG emissions as they frequently have limited access to the technology and capital necessary for improving their facilities.

In line with the Strategic Program 3, the project specifically focuses on the increased use of biomass for the production of energy services (electricity, heat, etc.) in modern efficient technologies. However, in all instances, sustainability criteria needs to be adhered to strictly to meet GEF requirements in promoting use of modern and nearly commercial technologies such as biomass gasification technologies for producing electricity and process heat applications. The biomass usage will be sustainable and does not contribute to deforestation, reduced soil fertility, or increased GHG emission beyond the project boundaries.

D. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

Recognizing that there are substantial synergies between lower carbon intensity, improved economic efficiency and overall country-wide performance, the Government of India is in the process of finalizing a Low Carbon Programmatic Framework strategy. This project fits well within this programmatic approach. This project will support the desired shift towards lower carbon intensity by improving energy efficiency and promoting renewable energy in the MSME sector, while yielding significant local and global environmental benefits. The current project builds on the projects and programmes initiated by GOI, GEF and multi/bilateral agencies and cooperating institutions to promote energy efficiency and renewable energy in India. Some of the specific projects where EE and RE have been/are being introduced in making the MSME sector more efficient and competitive in India include, among others: a) the GEF funded WB project on India Energy Efficiency, which aims at overcoming the barriers to private investment in energy efficiency by catalyzing, supporting and funding private energy efficiency service companies (ESCOs) and directly financing end-user energy efficiency investments; b) GEF funded UNDP projects on national communications to UNFCCC, removal of barriers to energy efficiency improvement in the Steel Rerolling Mills and energy conservation in small sector tea processing units in South India; and c) National Programmes such as i) DC MSME / DIPP funded and executed by UNIDO to promote energy efficiency in Hand Tools, Glass and Ceramics MSMEs; ii) Alternate modern bioenergy technology packages for low, medium and high temperature applications in MSMEs, and iii) MNRE funded power generation and heat utilization based on renewable energy technologies in industries.

The project will link up with recently approved GEF funded UNDP projects on the brick industry, efficient motors and tea processing small scale industry in South India. The GEF/UNDP project in the brick industry aims at improving the energy efficiency in the brick production, while advanced energy efficiency technology in electric motors project specifically focuses on promoting high efficiency motors/pumps. Third project on tea industry aims at creating awareness, remove barriers and develop strategies for replicability for energy efficiency and energy conservation interventions in the tea processing industry in South India. In addition to technology upgradation and awareness raising, lessons learned under these UNDP

projects will be very helpful in scaling up efforts under the proposed project that would take more of a programmatic approach to introduce EE / RE technologies, and ensure synergies and cohesiveness, to begin with, in 10 selected MSME clusters, and then covering all 25 MSME clusters identified by BEE.

This project would specifically link up with the WB projects on financing energy efficiency in the MSME sector, and energy efficiency in Chillers. WB's project on financing energy efficiency would specifically target bankers, financial institutions, service providers and investors, and build their confidence and ability to formulate, appraise and invest in energy efficiency technologies and measures in MSMEs. Close linkage with this project would help in addressing financial barriers, which are so crucial in scaling up markets for EE and RE technologies targeted at MSMEs in India.

Since no specific study or data are available on the joint status and potential of introducing both EE and RE technologies and measures in energy intensive MSME clusters, special efforts will be made to exchange information on best practices and experience gained under ongoing GEF funded and national programmes / projects to ensure synergies and wide scale replication.

E. DESCRIBE THE INCREMENTAL REASONING OF THE PROJECT:

Without the GEF project, the "business as usual" scenario will involve a gradual increase in end use energy efficiencies and use of renewable energy by MSMEs; however, the full potential of EE and RE technologies and measures will not be harnessed. In particular, energy efficient and renewable energy technologies will not be used by MSMEs until the technical and commercial feasibility of doing so is proven in selected MSME clusters; and a robust market and supply chain for delivering technology and management solutions as well as policy framework is developed and put in place.

As described earlier, previous efforts to promote use of energy efficiencies and renewable energy in MSMEs have had limited impacts, and could not achieve widespread replication. Compared to ongoing baseline efforts, the project would result in manifold increases and scaling up of markets for enhanced use of energy efficiencies and renewable energy technologies by MSME sector in India, especially by energy intensive manufacturing MSME clusters already identified by BEE and Ministry of MSME.

F. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED.

OUTLINE THE RISK MANAGEMENT MEASURES, INCLUDING IMPROVING RESILIENCE TO CLIMATE CHANGE, THAT THE PROJECT PROPOSES TO UNDERTAKE:

Technical risks – EE and RE technologies for enhancing efficiency and meeting growing energy needs of MSMEs and improving their competitiveness are not mature yet. Rating: moderate

Economic risks – Demonstration of EE / RE technologies are not economically viable. Rating: low.

Market risks -Increased investments on EE and RE technologies do not provide higher returns as well as development of markets. Rating: moderate.

Financial risks – MSMEs involved in demonstration of improved energy efficiencies and renewable energies are not able to make bankable projects or attract required finances from the financial institutions. Rating: low.

Implementation risks – Coordination between key ministries and agencies (MSME, BEE and MNRE and MSME associations) remains weak, and the selected MSME clusters do not actively participate under the project. Rating: low.

Fall in electricity / fossil fuel prices. Electricity demand has been increasing at higher pace than production for the past 10 years, and the trend in fossil fuel prices is upwards. Rating: low.

Policy framework not in place –Government of India has accorded priority to EE and RE technologies and measures in SME sector, and BEE is already working towards this. Rating: low.

G. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT (e.g. \$/ton of CO₂ abated). If COST-EFFECTIVENESS IS NOT PRESENTED, OUTLINE THE STEPS THAT PROJECT PREPARATION WOULD UNDERTAKE TO PRESENT COST-EFFECTIVENESS AT CEO ENDORSEMENT:

The project is considered to be a cost-effective intervention for the GEF due to the CO₂ emission reduction potential of increased energy efficiency and enhanced use of renewable energy in energy intensive MSME sector in India. To begin with, the project will focus on ten MSME clusters (in all, 350 enterprises – 35 units per MSME cluster) which have been selected from 25 priority MSME clusters identified by BEE so as to ensure consistency with the national programme on energy efficiency and renewable energy for MSMEs. As direct impact, CO₂ reduced under this project over a life period of 15 years would translate into 2.3 million tonnes of CO₂. Hence the cost of emission reduction per ton of CO₂ equivalent through GEF funding is estimated at about US \$ 4/ton of CO₂ abated under direct impact (for selected MSMEs). Importantly, since this project has huge replication potential, it is expected to result in a substantial reduction in electricity and fossil fuel consumption by the MSME sector as a whole in India. So far there have been a number of EE projects focusing on MSMEs, which have been implemented or under implementation by various agencies in India. But no project so far has taken an integrated approach to focus on both – EE and RE technologies for MSMEs. Hence this project would be unique in the sense that it would link up – technology upgradation, investments, awareness raising and business skills development in the field of EE and RE technologies and measures targeted at the MSME sector, and would help in scaling up markets by ensuring synergies and cohesiveness with other ongoing similar projects including that of GEF funded WB and UNDP projects in the country.

H. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

The project is a Technical Assistance/Capacity Development intervention (linked with investments for market creation) that fits well within the comparative advantage of UNIDO for GEF projects under climate change portfolio for India. As one of the six executing agencies of the GEF,

UNIDO brings with it in-house capacity to provide technical assistance and mobilize resources, both internally and from its partners targeted at MSME sector. This project will support the transition towards lower carbon economy by promoting renewable energy based electricity generation in Ukraine besides yielding significant local and global environmental benefits.in India. It also draws upon its experience and policy dialogue with MSME, BEE, DIPP and MNRE on identification and implementation of technical cooperation projects that simultaneously promote EE / RE and cluster approach for enhancing productivity and competitiveness of MSMEs besides improving the local and global environment. UNIDO is especially well placed to implement this project because of its experience and expertise in MSME sector in India, its long history of cooperation with key stakeholders in MSME sector, and its high standards of fiduciary responsibility. UNIDO's mandate is assist SMEs for wealth creation with emphasis on enhancing their productivity and competitiveness. UNIDO has been very successful in facilitating engagement with MSME associations, improving their productivity in beneficiary countries and helping in mobilizing resources and transformation of markets so that global environmental benefits flow as a result of introduction of clean (EE and RE) technologies.

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

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the country <u>endorsement letter(s)</u> or <u>regional endorsement letter(s)</u> with this template).

Mr. Sudhir Mital Joint Secretary and GEF Focal Point Ministry of Environment and Forestry Government of India	Date: 10 November 2007
---	------------------------

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation. Mr. Dmitri Piskounov Mr. Pradeep Monga Managing Director Chief and Deputy to the Director Programme Development and Technical Renewable and Rural Energy Unit, Cooperation Division Energy and Climate Change Branch UNIDO PTC Division, UNIDO **GEF Agency Coordinator Project Contact Person** Date: : 11 September 2008 Tel. / Email: + 43 1 26026 3018; p.monga@unido.org



भारत सरकार

पर्यावरण एवं वन मंत्रालय GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT & FORESTS

Mr. Steve Gorman GEF Executive Coordinator The World Bank, Washington DC, USA

> D.O. No. 4(2)/13/2006 – IC & SD.I Date: 8th December 2007

den de somme.

Subject: Endorsement for Programmatic Approach on Energy Efficiency (EE)

This is in continuation to my earlier dated: November 10, 2007. In my capacity as GEF Operational Focal Point for India, I confirm that the above project proposal (a) is in accordance with the government's national priorities and the commitments made by India under the relevant global environmental conventions and (b) has been discussed with relevant stakeholders, including the global environmental convention focal points, in accordance with GEF's policy on public involvement.

Accordingly, I am pleased to endorse the umbrella PIF, the four sub projects attached (Energy Efficiency Improvements in Commercial Buildings; Financing Energy Efficiency at SMEs; Promoting Energy Efficiency and Renewable Energy in selected SME clusters in India; and, Improving Energy Efficiency in the Indian Railways system) for GEF consideration and approval. If approved, the proposals for Programmatic Approach on Energy Efficiency will be prepared and implemented by the Bureau of Energy Efficiency, GoI, the World Bank, UNDP and UNIDO along with other partners.

I understand that the total GEF financing being requested for this project is USD 33 million from India's Climate Change RAF, which includes the agency fee (10%) to the concerned implementing partners of this project.

With warm regards,

Yours sincerely,

(Sudhir Mital)

Joint Secretary and GEF Operational Focal Point India Ministry of Environment and Forests, Government of India

Copy to:

Dr. Ajay Mathur, Director General, Bureau of Energy Efficiency, 4th Floor, Sewa Bhawan, R.K. Puram, New Delhi-110066

Mr. M. Prasad, Joint Secretary, DEA, North Block, New Delhi

Ms. Isabel Gurrero, Country Director, The World Bank, 70, Lodhi Estate, N Delhi

Ms. D Boyd, Country Director, UNDP CO, 55 Lodhi Estate, New Delhi

Mr. Philippe Scholtes, Representative, UNIDO, 55 Lodhi Estate, New Delhi

जहाँ है हरियाली। यहाँ है खुशहाली।।

पर्यावरण भवन, सी.जी.ओ. कांम्पलेक्स, लोदी रोड, नई दिल्ली - 110 003 PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003