



Leonard Good
Chief Executive Officer
and Chairman

Global Environment Facility

1818 H Street, NW
Washington, DC 20433 USA
Tel: 202.473.3202
Fax: 202.522.3240/3245
Email: lgood@TheGEF.org

November 11, 2004

Dear Council Member:

I am writing to notify you that UNDP, the Implementing Agency for the project entitled, *Vietnam: Promoting Energy Conservation in Small and Medium Scale Enterprises (PECSME)*, has submitted the proposed project document for CEO endorsement prior to final approval of the project in accordance with UNDP procedures.

Over the next four weeks, the Secretariat will be reviewing the project document to ascertain that it is consistent with the proposal included in the work program approved by the Council in September 2004, and with GEF policies and procedures. The Secretariat will also ascertain whether the proposed level of GEF financing is appropriate in light of the project's objectives.

If by December 9, 2004, I have not received requests from at least four Council Members to have the proposed project reviewed at a Council meeting because in the Member's view the project is not consistent with the Instrument or GEF policies and procedures, I will complete the Secretariat's assessment with a view to endorsing the proposed project document.

We have today posted the proposed project document on the GEF website at www.gefweb.org. If you do not have access to the Web, you may request the local field office of UNDP or the World Bank to download the document for you. Alternatively, you may request a copy of the document from the Secretariat. If you make such a request, please confirm for us your current mailing address.

Sincerely,

A handwritten signature in black ink, appearing to be "L. Good", written over a white background.

Cc: Alternates, Implementing Agencies, STAP



5 November 2004

pen
Dear Mr. Good,

Subject: CC/OP-5 “Vietnam: Promoting Energy Conservation in Small and Medium Scale Enterprises (PECSME)” PIMS No. 2057

I am pleased to attach herewith the above-mentioned revised project document which addresses comments made by the Council members from Germany, Switzerland and United States. The UNDP/GEF response to these comments are attached to the project document. Also attached are 15 co-financing letters. The brief was approved at the GEF Intersessional Council Meeting in July 2004.

As per paragraph 29 and 30 of the GEF Project Cycle, we are submitting this project document for circulation to the members of the GEF Council and, subsequently, for your final endorsement.

Thank you in advance for expediting the review and endorsement of this project.

Yours sincerely,

Warm regards.

A handwritten signature in black ink, appearing to read 'Frank Pinto', is written over a horizontal line.

Frank Pinto
Executive Coordinator

Mr. Leonard Good
Chief Executive Officer and Chairman
Global Environment Facility
Room G6005
1776 G Street
Washington D.C. 20433

Cc: Mr. Manuel Soriano, GEF Regional Coordinator

VIETNAM: PROMOTING ENERGY CONSERVATION IN SMALL AND MEDIUM SCALE ENTERPRISES (PECSME)

Responses to GEF Council Comments

A. SWITZERLAND

COMMENTS & RESPONSES	REFERENCE
MAIN CONCERNS:	
<p>Comment: Coordination and collaboration with initiatives of other donor organizations: The project developers claim that they have consulted and involved the various stakeholders from the Vietnam Energy Conservation Program (VECP) and related activities that have been implemented in Vietnam with assistance from a variety of international donors since 1995. However, there is no mention of the SDC-supported Vietnam – Energy Efficiency Brick Project, initiated in 2001, which aims at identifying and developing efficient and environmentally sound solutions for improvements in the private brick-making sector. Furthermore, in the response to the STAP Reviewer it is claimed that the project envisages strong links with other international programs in Vietnam, in particular cleaner production, and EC&EE for SMEs. However, in the Project Brief no mention of the Swiss-supported Vietnam Cleaner Production Center (VCPC) can be found. It is not clear how activities proposed under PECSME will be coordinated with the aforementioned initiatives to generate synergies and avoid duplications.</p>	
<p>Response: The Action Research Related to Energy Efficiency and Environmental Management in Brick and Tile Industry in Vietnam supported by SDC has been implemented during 2002 - 2004. It is aimed at assisting the private brick making industry in Vietnam and related institutions to initiate the needed technological changes. The main objectives of the project are to: (1) Identify and test measures for technological changes towards sound production processes; (2) Identify appropriate measures and technology to optimize the current applied processes; and identify appropriate SME promotional measures and instruments for business development. Currently, an upgraded design for local tunnel kiln prepared by international tunnel kiln engineers has been demonstrated in Nam Dinh Province. Assessment of the effectiveness of this model is currently being undertaken. The PECSME project development team will follow up its progress to explore the potential for dissemination of this model as a further technology solution for brick making sector in addition to VSBK technology already developed and proven in Vietnam conditions. The results and lessons learned from this project will be very helpful for PECSME implementation.</p>	<p>Project Brief (PB): Paras 59-63;</p> <p>Executive Summary (ES): Section 3.d & Section 5.a;</p> <p>Project Document (PD): Section I- Part III</p>
<p>The Vietnam Cleaner Production Centre (VNCPC) is an UNIDO two-phase project supported by Switzerland. The main objective of the VNCPC is to promote and disseminate the concept of cleaner production through the development and operation of a Vietnam National Cleaner Production Centre under the Hanoi University of Technology. The VNCPC is divided into two phases. During the first phase from 1998-2003, the four main components of the project were training, policy assistance,</p>	

<p>and information dissemination and in-plant demonstrations undertaken as pilot activities to prepare for the VNCPC's full operations. Currently, VNCPC is moving to its second phase that will be started in 2005. In Phase 2, the VNCPC will be fully operational and will also be preparing for mobilizing other funding sources for ongoing financial sustainability.</p> <p>During the PECSME PDF-B exercise, the PECSME project development team has closely consulted with the VNCPC project team. In particular, the following lessons have been learned from VNCPC in carrying out its training and in-plant demonstration program and were considered in the designs of the relevant PECSME components:</p> <ol style="list-style-type: none"> 1. One key activity of training program of CP is to build up the numbers of well-trained and experienced CP specialists. Therefore the VNCPC has focused on providing two types of training: sector specific training for representatives of selected sector and potential service providers/promoters of CP and special skills training for trainees from CP service providers. 2. The training courses should be organized in combination with in-plant demonstration activities so that participants gain practical experience in CP assessment. <p>In addition, the national experts involved in VNCPC have taken part in preparing the activities of the PECSME project components during the PECSME PDF-B exercise - therefore their knowledge as well as their experience gained from VNCPC has already been included into the PECSME full-scale project design.</p> <p>Given that the PECSME project and VNCPC Phase 2 project address two of the same target sectors, namely Textile and Paper and Pulp, as well as both projects being scheduled to start in the beginning of year 2005, the PECSME development team and the VNCPC team has held initial discussions to cooperate in carrying out training, demonstrations, as well as information dissemination and awareness raising activities.</p>	
<p>Comment: Coordination and collaboration with other GEF initiatives: The recently approved UNDP/GEF Vietnam Energy Efficient Public Lighting (VEEPL) project has a similar organizational structure as the PRESME with a Project Management Office and an Advisory Board. In order to facilitate coordination between the two initiatives, it is proposed that the two Advisory Boards have regular joint meetings.</p> <p>Response: The two Advisory Boards will have regular joint meetings during the PECSME implementation. The schedule of joint meetings of the two Advisory Boards will be set up during the inception workshops of the above two projects.</p>	PB: Para 120
<p>Comment: Institutional framework and implementation arrangements: With Vietnam's highly disaggregated institutional framework any project implementation arrangement becomes complex. This especially applies to projects dealing with SME, due to the large number of ministries and agencies involved in development, promotion and support of this sector. It is believed that this aspect will be one of the major challenges</p>	

<p>of PECSME and thus should be included in the discussion of project risks and corresponding mitigation measures.</p> <p>Response: Given the large number of ministries and agencies involved in development, promotion and support of SME sector, the Project Development Team has paid considerable attention to the establishment of sound implementation arrangement through consultation with key stakeholders from the very beginning of the project development. The stakeholders' participation and their roles have been identified in the section of Stakeholder Participation and Implementation Arrangements in the Project Brief as well as in the Project Document.</p> <p>The discussions on institutional risks and the corresponding mitigation measures to manage these risks have been included in Section III of the Project Document.</p>	<p>PB: Paras 116, 119-129; PD: Section I- Part III</p>
<p>Comment: Use of GEF funds: Out of the 6 project components, by far the largest GEF contribution is allocated to component 5 (Financing Support Program). From the incremental cost analysis it is not exactly clear for what these considerable funds will be used. In particular it is not clear whether an injection of GEF funds into the proposed guarantee funding mechanism is planned. If so, the reasons for using GEF funds for this purpose, as well as the sustainability of the mechanism beyond GEF support, should be further discussed.</p> <p>Response: GEF assistance with the provision of the amount of US\$ 2,395,000 allocated to Component 5 is required to remove barriers that could hinder the effective implementation and utilization of the current and future SME support programs in Vietnam. Such assistance is also needed to develop the means to better utilize the existing financing schemes and credit facilities for SMEs to assist in their development efforts, in particular their EC&EE activities. The PDF-B exercise identified opportunities for GEF involvement in improving the utilization of existing financial mechanisms. The GEF contribution to the full-scale project will be used for designing and implementing the enhanced use of existing schemes for financing EC&EE in SMEs, and to support incremental financing that would facilitate expansion and enhanced mobilization of existing funds for financing EC&EE activities of SMEs.</p> <p>The amount of US\$ 1.95 million of the proposed GEF assistance will be added as the incremental cost to the existing Loan Guarantee Fund (LGF) under the Vietnam-Germany Credit Guarantee Program (VGCP) managed by INCOMBANK (See paragraphs 27 and 28 of Annex A in the Project Brief). This amount will be used to guarantee SME borrowers, who are short of collateral to obtain the necessary commercial bank credit to invest to EC&EE projects. The residual US\$ 445,000 from GEF for this component will be used for capacity building and support activities. The injection of GEF funds into the LGF of the VGCP are planned to provide the necessary loan guarantees to mobilize US\$ 18 million for 500 EC&EE investment projects from INCOMBANK as well as from the Pollution Mitigation Fund. These arrangements have been already committed by these two co-financing sources (See</p>	<p>PB: Paras 109 & 112; Annex A: Paras 25, 27 & 28.</p>

<p>Co-financing commitment Letters attached). The incremental cost analysis of Component 5 (EC&EE Financing Support Program) in paragraph 25 of Annex A in the Project Brief has been revised in accordance with this comment to make this linkage more explicit.</p> <p>The reasons for the proposed use of GEF funds for the guarantee funding mechanism are given in paragraphs 27-28 in the Project Brief.</p> <p>The sustainability of the financial program is a key factor in project design. In order to ensure the sustainability of the financial mechanisms beyond the duration of GEF funding support, the project financial aspect has been already embedded with relevant stakeholders in the existing institutional structure such as: the existing Loan Guarantee Fund of INCOMBANK will be expanded to provide guarantee for SME borrowers; the relevant staff of the existing development and environment funds will be trained and assisted to provide funding for EC&EE investment projects in the SME sector beyond the end of the project.</p>	
Conclusions and Recommendations	
<p>Comment: A major challenge to successful project implementation will likely be the management of the overall project in view of Vietnam's complex institutional framework.</p> <p>Response: The importance of project management to successful project implementation is well recognized. The project development team as well as the MOST project sponsors of the project has therefore carefully considered the management of the overall project. Part III (Management Arrangements) of the Project Document has clearly articulated the critical role and necessary skills of the project management officer, the tasks of national experts and the assignment of the subcontractors as well as the modalities of coordination between key stakeholders.</p> <p>The project will establish an Advisory Board chaired by the relevant vice Minister of MOST. The Advisory Board will be responsible for overall coordination and management of the project. The Board will consist of representatives from the relevant departments of the ministries involved in SME development support. This Board will facilitate the smooth and necessary high-level coordination amongst the various ministries and agencies involved in the project's implementation.</p>	<p>PD: Section I: Part III, Annex 1&2;</p> <p>PB: Paras 119-121.</p>
<p>Comment: The project proponents are advised to further explore any potential for cooperation with similar initiatives related to energy efficiency and energy conservation in Vietnam, in particular also with the above-mentioned Swiss supported projects.</p> <p>Response: The cooperation plans with additional similar initiatives related to EC&EE in Vietnam will be established during the PECSME Inception Phase. The potential for cooperation with the Swiss supported projects have been mentioned in the response of the first comment. Please see responses to the first comment.</p>	<p>PD: Section I- Part III</p>
FURTHER COMMENTARIES	
<p>Comment:</p>	

<p>In the project's logical framework, the success indicator for reaching the project's global environmental goal is the average annual reduction of GHG emissions for the period from 2005 to 2015. However, in order to allow an evaluation at the end of the proposed project duration of 5 years, a success indicator should be defined for this period only.</p> <p><u>Response:</u> The success indicator for reaching the project global environmental goal has been revised to reflect the PECSME achievements from 2005-2009 only. The estimated collective CO2 emissions reductions by the end of the project are thus 962.0 ktonnes.</p>	<p>PB: Annex B -Success Indicators of Project Goal and Purpose</p>
--	--

B. United States of America

COMMENTS & RESPONSE	REFERENCE
<p><u>Comment:</u> The UNDP energy conservation project in Vietnam appears to be well conceived and structured. However, given the project's time frame from 2005-2015, there need to be better benchmarks for work completion and implementation, including clear and monitorable interim indicators.</p> <p><u>Response:</u> The project duration is 5 years from 2005 to 2009 only. Thus the success indicators of each project component have been defined for the 5 years of the project's duration only. Given that the life cycle of EC&EE investment projects is 10 years, the project's global environmental goal is therefore defined for 10 years.</p> <p>Regarding the council member's concerns on evaluation and progress assessment, the success indicators for project global environment goal and project purpose are revised to reflect the PECSME achievements for 5 years only as follows:</p> <ul style="list-style-type: none"> - The success indicator of project global environment goal: the total GHG emission reduction is 962.0 ktonnes CO2 by the end of the project (year 2009). - The success indicator of project purpose: the total energy saving is 136.1 ktoe by the end of the project (2009). 	<p>PB: Annex B -Success Indicators of Project Goal and Purpose; Annex E: Part E.3.</p>
<p><u>Comment:</u> As it stands, much of what will be accomplished are tasks that have no baseline data and are without interim goals, making it difficult to assess progress.</p> <p><u>Response:</u> A set of baseline data for the project goal, purpose and outputs/outcomes is presented in the Annex 4 of this Project Document.</p> <p>As stated in the Project Planning Matrix, the project purpose is achieved if the following objectives (as interim goals) are achieved:</p> <ul style="list-style-type: none"> • Increased impact of existing policies and the recently enacted EC&EE decree 	<p>PD: Annex 4</p> <p>PB: Annex B: Project Log Frame Matrix,</p>

<p>through strengthened capacity of relevant government Ministries, Departments and Agencies in effective policy and institutional design, guidance, implementation and enforcement of energy conservation measures.</p> <ul style="list-style-type: none"> • Enhanced SME and public awareness of EC&EE through increased effectiveness and regular updating of an integrated communications system including information collection, dissemination and reporting. • Improved skills in EC&EE implementation through enhanced training, evaluation and R&D • Fostering of a growing, competitive and sustainable energy efficiency services provision industry through enhanced business, engineering and financial skills. • Increased willingness to lend to SMEs for EC&EE projects through enhanced knowledge of financial sector on EC&EE and greater skills in preparing and evaluating loan applications. • Increased credibility of EC&EE through successfully implemented and evaluated demonstration projects. <p>Each project objective (project output or project outcome) is presented under each project component in the Project Log Frame Matrix with very clear success indicators as well as timeframes of implementation (See Project Log Frame in Annex B of Project Brief).</p> <p>All success indicators for implementation of the six project components as presented in the PECSME’s Logical Framework Analysis are defined for the project duration of 5 years. All indicators can be quantified with very clear timeframes of implementation.</p> <p>A set of baseline data for calculation of the global benefits is presented in the Annex E of the Project Brief.</p> <p>The success indicators of the project goal and project purpose as presented in the Project Log Frame (Annex B of the Project Brief) have been revised to reflect the project achievement only in the 5-year project duration.</p>	<p>Annex E; ES: Annex B.</p>
<p><u>Comment:</u> In addition, the project utilizes a loan guarantee mechanism that is not adequately justified.</p> <p><u>Response:</u> The mobilization of the Guarantee Funding Mechanism has been proposed to be included in the PECSME project as a measure to remove the financial barriers for the following reasons as detailed in the project documents:</p> <ul style="list-style-type: none"> - The findings during the PECSME PDF-B exercise showed that there are a number of existing financial mechanisms supporting SME sector in place in Vietnam with significant funds allocated, but not yet being disbursed due to their requiring SME borrowers to guarantee sufficient collateral to cover the loan sought by the SMEs. In fact, the key financial barrier identified during extensive analysis during the PDF-B exercise has been the limited asset collateral available for most SMEs, due to their leasing of their land for reasonably short tenure from the state, rather than 	<p>PB: Paras 25-26; 74, 75, 84.h; Part of Financing and Banking Institutions of Para. 116.</p>

<p>their owning the land that their businesses are located on.</p> <ul style="list-style-type: none"> - Based on the findings of the Financial Subcontractor Team during the PDF-B Exercise, there do exist loan guarantee funds (LGFs) in Vietnam that could successfully assist SMEs in accessing commercial loans. The legal frameworks for these kinds of funds have already been established, and some of the key banking/financial institutions in Vietnam are already involved in their operation. These include the Industrial and Commercial Bank of Vietnam (INCOMBANK) and the Development Assistance Fund. PECSME intends to supplement one of these existing funds to further support the EC&EE projects of the SMEs. The INCOMBANK was selected as the preferred PECSME partner for this purpose for the following reasons: a) The Credit Guarantee Fund (CGF), which is part of the Vietnam–Germany Credit Program, has been developed and implemented by INCOMBANK for the past 10 years; and, b) INCOMBANK has a suitable nationwide network that already provides loans to industrial SMEs in all provinces. The Credit Guarantee Fund (CGF) is intended to provide guarantees for SME borrowers who are short of collateral to obtain commercial bank credit. Up until the end of 2002, INCOMBANK had financed 4,018 projects with a total amount of US\$ 44 million lent. Based on its successful experience in promoting SME development, GOV has now issued a decision to establish the credit guarantee fund in the provinces of Vietnam. - The GEF assistance for the expansion of the existing Loan Guarantee Fund (LGF) under the Vietnam-Germany Credit Guarantee Program (VGCP) managed by INCOMBANK will unblock currently available but underutilized funding sources for EC&EE investment in energy conservation. 	
--	--

C. GERMANY – NO COMMENTS. SUPPORTS THE PROJECT.

D. Canada

COMMENTS & RESPONSE	REFERENCE
<p><u>Comment:</u> Based on analysis of project rationale, objectives and keys indicators, we have serious concerns regarding the design of the project. Fox example, the success indicators specify an annual GHG emissions reduction of 1,004 ktonnes of Carbon Dioxide from 2005-2015 and average annual energy saving of 189.5 KTOE. We believe these figures are highly unrealistic and project document should have an annex with the calculations to prove how these figures were estimated, the present benchmarks and the estimated future ones.</p> <p><u>Response:</u> The success indicators have been revised to address these concerns, and now only include the projected achievements during 5 years of the project’s duration from 2005-2009.</p> <p>Annex E of the Project Brief was further elaborated to explain how these figures were calculated.</p>	<p>PB: Para 92; Annex E;</p> <p>PD: Annexes 5 & 6</p>

<p>Annex 5 of this Project Document shows the baseline data for the project components, as well as the annual targets for the various key impact indicators.</p> <p>The explanations of how the energy savings and CO2 emissions were calculated are summarized in Annex 6 of this Project Document.</p>	
<p>Comment: As well, the project document does not present any details regarding the implementation strategy and the monitoring procedures to ensure achievement of its targets</p> <p>Response: The elaboration of the detailed implementation arrangements and monitoring and evaluation methodology is presented in Part III & IV of Section I as well as in Annexes 1 & 2 of this Project Document.</p>	<p>PD: Sec I: Parts III & IV; Annex 1 & 2</p>
<p>Comment: The proposal should give some indication of scale. E.g. how many SMEs will be targeted/affected by this project? What kind of technologies will be used to transform SMEs in Vietnam – energy efficiency, fuel switching, others?</p> <p>Response: As presented in Annex E of the Project Brief, a total number of 500 SMEs will be targeted/affected by the PECSME project. The technologies that will be used to transform SMEs in Vietnam under the full-scale PECSME are as follows:</p> <ol style="list-style-type: none"> 1. Brick Sector: Replacement of traditional Kilns with Vertical Shaft Brick Kilns 2. Ceramic Sector: Replacement of traditional coal-fired Kilns with modern high efficiency LPG-Fired Kilns 3. Textile Sector: Insulation of heating pipes and valves; Condensate recovery; Installation of VSD; Replacement of old motors with new high efficiency motors; Improvement of lighting systems and Improvement of boiler operation. 4. Food Processing Sector: Overhaul of cooling machines; Application of cooling accumulation at off-peak hours; Installation of VSD for motors of chilled water pumps, fans and compressors; Insulation for cool stores; Improvement of lighting systems. 5. Pulp & Paper Sector: Installation of VSD for motors; Insulation of dryers; Improvement of steam distribution systems; Process waste water recycling; Improvement of boilers. 	<p>Project Brief: Parts E.3 & E.4 of Annex E</p>
<p>Comment: The project should also provide detail on the partnerships in place that will allow it to achieve success in areas such as the creation of tax incentives.</p> <p>Response: The Department for Banking and Financial Institutions and the Department for Financial Policy of the Ministry of Finance (MOF) will be key participants in the project. They will be responsible for the development of Circular on Tax Incentives and Financial Incentives. These two government departments have taken part in VECP program in Vietnam since 1998. They are responsible for developing financial policies in Vietnam, so their participation will ensure the government approval for issuance of the circular.</p>	<p>Project Brief: Para 116 – Part of Ministry of Finance</p>

Government of Vietnam

United Nations Development Programme

**VIETNAM: PROMOTING ENERGY CONSERVATION IN SMALL AND MEDIUM ENTERPRISES
(PECSME)**

The project comprises an integrated set of activities designed to address in a holistic fashion the barriers to widespread utilization of energy efficient management practices, operations and technologies in Small and Medium Enterprise (SME) sectors in Vietnam. SMEs are a key target for energy conservation in Vietnam as they now account for 95% of enterprises, provide 26% of employment, contribute up to 25% GDP and are expected to fuel Vietnam's future employment growth. The five key SME sectors being addressed in the project are brick, ceramics, textiles, paper and food processing. The project will take the results of ten carefully targeted demonstration projects in the five SME sectors and apply them to a pipeline of 500 projects to be implemented during the project. The project will achieve its objectives by supporting an integrated set of six component programs comprising: policy and institutional support development; communications and awareness; technical capacity development; energy efficiency services provision support; financing support; and demonstrations. The successful implementation of the project will result in the cumulative energy saving of 136.1 KTOE and the cumulative CO₂ annual emission reduction of 962.0 ktonnes during the period 2005-2009.

TABLE OF CONTENTS

Cover Page (Responses to GEF Council Comments)	1
List of Acronyms	11
SECTION I: ELABORATION OF THE NARRATIVE	13
Part I – Situation Analysis	13
Part II – Strategy	13
Part III – Management Arrangements	15
Part IV – Monitoring and Evaluation	19
Part V – Legal Context	25
SECTION II: TOTAL WORK PLAN AND BUDGET	26
SECTION III: OTHER AGREEMENTS	46
SECTION IV: APPROVED BRIEF/EXECUTIVE SUMMARY AND ANNEXES	47
Annex 1: PECSME Management Arrangement	54
Annex 2a: Terms of References for PMO Staff, International and National Experts and Sub-Contractors	61
Annex 2b: Summary of Duration of Assignment and Budget Allocation for PMO Personnel and Sub-Contractors	126
Annex 3: List of Equipment	128
Annex 4: Indicative Monitoring and Evaluation Work Plan and Corresponding Budget	129
Annex 5: Baseline Data and Annual Targets	131
Annex 6: Energy Consumption and CO2 Emission Calculation Methodology	134
Annex 7: Incremental Cost	138
Annex 8: Log Frame	139
ANNUAL WORKPLAN	48
SIGNATURE PAGE	53

List of Acronyms

Acronym	Meaning
ADB	Asian Development Bank
APEC	Asia Pacific Economic Cooperation forum
ASEAN	Association of Southeast Asian Nations
Asia-BRESL	Asia: Barrier Removal to Cost Effective Energy Efficiency Standards & Labeling
CBC	Capacity Building Center for the Sustainable Development of SMEs
CIEM	Central Institute for Economic Management
CLASP	Collaborative Standards and Labeling Program
DOIs	Departments of Industry in Provinces
DOSTs	Departments of Science and Technology in Provinces
DSM	Demand Side Management
ECCs	Energy Conservation Centers (Hanoi, Haiphong, Danang, Cantho & HCMC)
EC&EE	Energy Conservation and Energy Efficiency
EDP	Foundation for Energy Development Planning (Netherlands)
EESPs	Energy Efficiency Service Provision/Providers
ELI	Efficient Lighting Initiative
GEF	Global Environmental Facility
GHG	Greenhouse Gases
GOV	Government of Vietnam
HCMC	Ho Chi Minh City
HUT	Hanoi University of Technology
ICs	International Consultants
IE	Institute of Energy (MOI)
IFC	International Finance Corporation (of the World Bank Group)
IHER	Institute of Heat Engineering and Refrigeration (HUT)
INCOMBANK	Industrial and Commercial Bank of Vietnam
IPMVP	International Monitoring and Verification Protocol
LGF	Loan Guarantee Fund
LPG	Liquefied Petroleum Gas
MDG	Millennium Development Goals
MEPS	Minimum Energy Performance Standards
MOC	Ministry of Construction
MOF	Ministry of Finance
MOI	Ministry of Industry
MOST	Ministry of Science and Technology (since 2003)
MOSTE	Ministry of Science, Technology and Environment (pre-2003)
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
NCs	National Consultants
NEA	National Environmental Agency
NEDCEN	Non-State Economic Development Center

Acronym	Meaning
NGOs	Non Government Organizations
PDF-B	Project Development Fund – Block B
PECSME	Promoting Energy Conservation in Small and Medium Enterprises (in Vietnam)
PFD	Project Framework Design
PMO	Project Management Office
SDC	Swiss Agency for Development Cooperation
SIDA	Swedish International Development Agency
SMEs	Small and Medium Enterprises
SMEDD	SME Development Department
SMEPC	SME Promotion Council
SOEs	State Owned Enterprises
Svc Co	Service Company
TOE	Tonnes of Oil Equivalent
TOR	Terms of Reference
TPR	Tripartite Review
UNDP	United Nations Development Programme
UN-ESCAP	UN Economic and Social Commission for Asia and the Pacific
VCA	Vietnam Cooperative Association – formerly VICOOPSME
VCCI	Vietnam Chamber for Commerce and Industry
VECP	Vietnam Energy Conservation Program
PECSME	Vietnam Energy Efficient Public Lighting
VGCP	Vietnam-Germany Credit Program
VINACEGLASS	Vietnam Ceramic and Glass Corporation
VICOOPSME	Vietnam Central Council for Cooperative Union and Small and Medium Enterprises
VNCPC	Vietnam Cleaner Production Centre
VN DSM &EE	Vietnam Demand Side Management and Energy Efficiency
VSBK	Vertical Shaft Brick Kiln
WB	World Bank
WU	Women Union

Section I—Elaboration of the narrative

Part I. Situation Analysis

Over the past decade, Vietnam has taken important legal and institutional measures to protect its environment and conserve its natural resources. Some of these include the National Plan for Environment and Sustainable Development 1991-2000 Framework for Action, which was published in 1991; the National Environment Agency, which was established in 1993; a comprehensive Environment Protection Law that was enacted in 1993; and the Energy Conservation and Energy Efficiency Degree that were enacted in 2003. The Government of Vietnam also ratified several major international environment conventions and agreements, such as the Agenda 21 of the UNCED and the Conventions on biodiversity and climate change. However, the lack of necessary capacity and awareness in energy conservation and energy efficiency are the main reasons that explain why under a baseline scenario, the efforts on energy conservation in SME in Vietnam will continue to be promoted in a fragmented, inadequately funded and inadequately coordinated manner through the various central and local programs of various agencies. A detailed description of the problems to be addressed is presented in the section on Barriers to Energy Conservation and Energy Efficiency in SMEs in Vietnam of the Project Brief (See Section IV; Project Brief, Para. 84a-k). Moreover, the national institutional and legal framework on energy conservation and energy efficiency is described in the section on Energy Conservation and Energy Efficiency Policy in the Project Brief (See Section IV; Paras 38-48).

The main direct beneficiaries of the PECSME project are: (1) SMEs in five sub-sectors: brick, ceramics, textiles, paper and food processing; (2) energy efficiency services providers; (3) energy efficiency equipment manufacturers; and, (4) local communities in the ceramic and brick making areas. Other main stakeholders, namely MOST, SMEDD, SMEPC, MOI, MOF, local government agencies (DOSTEs, DOI, ECCs), banking institutions, environment protection funding institutions, NGOs and technical universities and colleges will benefit through capacity building and technical assistance.

Part II. Strategy

The PECSME is designed to provide an innovative program approach by integrating a range of complementary components and activities into an overall synergistic program. The project will cover technologies, management practices, technician and operator training, funding mobilization, and policy and institutional capacity building. It will contribute to the transformation of Vietnam's SMEs from highly energy inefficient and polluting to energy efficient with greatly reduced pollution through the operation of a carefully chosen and integrated mix of project components operated by government agencies, financial institutions, education providers, and mostly private sector energy efficiency service providers. These strategies primarily address the Environment Practice identified in the UNDAF, but also the Governance and Rural Development Practices.

The PECSME project comprises an integrated set of activities designed to address in a holistic fashion the barriers to widespread utilization of energy efficient management practices, operations and technologies in SME sectors in Vietnam. The project will achieve its objectives by supporting an integrated set of six component programs comprising: policy and institutional support development; communications and awareness; technical capacity development; energy efficiency services

provision support; financing support; and demonstrations. The successful implementation of the project will contribute to achieve an intended outcome of UNDAF: energy and environment for sustainable development as well as to achieve two MYFF outcomes: an increasingly competitive domestic private sector contributing employment generation and poverty reduction and reduced greenhouse gas emissions as well as improved global environment.

PECSME Program Components

Each of the components of the PECSME project is comprised of a range of defined activities (See Section IV; Project Brief; Paras 98 to 104). The project will produce the following outputs:

- Increased impact of existing policies and the recently enacted EC&EE decree through strengthened capacity of relevant government Ministries, Departments and Agencies in effective policy and institutional design, guidance, implementation and enforcement of energy conservation measures.
- Enhanced SME and public awareness of EC&EE through increased effectiveness and regular updating of an integrated communications system including information collection, dissemination and reporting.
- Improved skills in EC&EE implementation through enhanced training and evaluation
- Fostering of growing, competitive and sustainable energy efficiency services provision industry through enhanced business, engineering and financial skills.
- Increased financial system willingness to lend to SMEs for EC&EE projects through enhanced knowledge of EC&EE and greater skills in preparing and evaluating loan applications.
- Increased credibility of EC&EE through successfully implemented and evaluated demonstration projects.

The above project outputs will contribute to achieving UNDAF's outcome for energy and environment for sustainable development through strengthening natural resource management, promoting better urban and industrial pollution management, and strengthening sector capacity and planning.

Project Sustainability

The primary objectives of the project are directed toward sustainability by accelerating the availability and uptake of energy efficient technologies, management and operational practices in Vietnam. Sustainability of project is ensured through the outputs of most of the project components that have been carefully designed to endure in a viable form after the completion of PECSME in December 2009. In particular, durable PECSME legacies will include, the demonstration of energy efficient upgrades at representative SME sites and hence making the necessary breakthrough in the credibility of SME EC&EE cost-effectiveness; enabling future SME EC&EE investment projects to utilize existing environmental and investment funds through an effective loan guarantee facility that will persist after the project; enhanced policy, institutional, energy labeling and norms development capacity in the responsible central and local government agencies; the establishment of an effective information dissemination network through the VCCI, existing SME association and locally supported ECCs under DOSTs; the establishment of commercially based and successful EESP businesses; establishment of sustainable training network for training of trainers, SME managers, technicians, finance sector, and tertiary education sector; sustainable enhancement of the local manufacturing, refurbishment and importation capacity of affordable EC&EE equipment; and design of a sustainable EC&EE R&D program to continue after the project.

To ensure the sustainability of the project beyond its end in 2009, the project will embed the various components and activities with stakeholders who are likely to be able and willing to continue the project objectives after the project ends. In particular this entails embedding the financial aspects with long-term financial institutions, the technical aspects with energy efficiency service, technology suppliers as well as educational institutions, and the policy aspects with the appropriate central and local government agencies and ministries with a proven track record of ongoing EC&EE support.

The Rationale for UNDP-GEF Assistance

Apart from the domestic socio-economic benefits that the proposed project is expected to bring about, the reduction in energy consumption resulting from improved EC&EE practices in SMEs will also contribute to the protection of the natural environment. The proposed project is consistent with GEF Operational Program #5, which calls for the reduction of greenhouse gas emissions through the removal of barriers to energy efficiency and energy conservation. It is also consistent with the GEF strategic priority on the transformation of markets for high volume, commercial, low GHG processes. The successful implementation of PECSME is estimated to achieve the collective energy savings of 136.1 KTOE and the collective greenhouse gas (GHG) emissions reduction of 962.0 ktonnes of CO₂ during the period 2005-2009. The project interventions are also expected to have significant additional but unquantifiable effects on the impacts of other future EC&EE projects in Vietnam.

UNDP has extensive experience in providing technical assistance oriented activities and other capacity building initiatives to help improve local government capabilities and enabling environment for implementing environmental and sustainable energy programs in Vietnam. It is well placed to work with and advise GOV on policy, strategy and best approach to meet serious environmental and energy challenges based on its respective comparative advantage.

Part III. Management Arrangements

Given the large number of ministries and agencies involved in development, promotion and support of SME sector, the Project Development Team has paid considerable attention to the establishment of sound implementation arrangement through consultation with key stakeholders from the very beginning of the project development. The following overall management arrangement will ensure the successful implementation of PECSME project.

Ministry of Science and Technology (MOST)

MOST will be the executing agency for the proposed PECSME, and will ensure that all project activities are coordinated with related initiatives and are complementary to activities already undertaken. Successful project execution will require close cooperation with the abovementioned stakeholders.

As executing agency, MOST will ensure the delivery of the project outputs and the judicious use of project resources. MOST, will coordinate with UNDP-Vietnam in the implementation of the project activities and project monitoring and evaluation. MOST, through the Director of the Department for Science and Technology Management in all Economic Sectors (DOST), acting as the National Project Director (NPD), will be responsible to UNDP for the achievement of the project objectives, and for all project reporting monitoring and evaluation, including the submission of work plans and financial reports.

UNDP-Vietnam, together with the UNDP-GEF Regional Coordinator for Climate Change in the Asia-Pacific region, will undertake the GEF oversight.

The project will establish an Advisory Board chaired by MOST. MOST, through the Advisory Board, will provide policy and technical advice to the project and will consist of representatives from the relevant departments of MOST, MPI, MOI, MOF, MONRE, VCCI, VCA, ECCs, academe through HUT, VECP, and other stakeholders, as well as the GEF Country Focal Point and UNDP-Vietnam.

The Advisory Board will meet twice a year, once in June and once in December, to establish overall coordination of the project and management and integration of its components and activities. The Advisory Board will also provide a formal forum for key stakeholders to discuss the progress of the project and provide policy guidelines for the various project components. The December meeting will be the Tripartite Review (TPR). The MOST Minister will assign a Vice Minister to chair the Board.

MOST will establish a Project Management Office (PMO) based in VECP. The PMO will be responsible for the overall coordination and management of the project components and activities, as well as management of day-to-day operations of the project, and the overall operational and financial management and reporting of the UNDP-GEF funds in accordance with UNDP National Execution (NEX) Procedures.

MOST through the PMO will be responsible for the staffing, planning and implementation of project activities, will provide mechanisms and technical inputs necessary to integrate the results of various activities, will ensure satisfactory performance of the project members and contractors, and will provide official reports to the Project Director and the Advisory Board as needed.

The PMO will comprise of one National Project Director (NPD) and one **Deputy Project Director (DPD)**, who work part-time for the project and will be appointed by the Government as an in-kind contribution, one Project Manager (PM), who will manage the day-to-day operations of the PMO, one **National Project Technical Adviser (PTA)** and five National Experts (NE) covering Policy and Institutions (P&I); Training (T); Communications and Awareness (CA); EESP & Financing (EESP&F) and Technology Demonstration (TD); two project assistants (PA) and one accountant (A). In addition, several subcontractors and national consultants (NCs) and international consultants (ICs) will be involved in the project. Local and international experts will be brought in to support the PMO as and when needed to undertake the project activities. The Terms of References (TORs) for PMO staff, the consultants and subcontractors that will be hired in the project are given in Annex 2.

The National Project Director and Deputy Project Director will be responsible for the overall supervision of the project implementation of behalf of MOST with the following major responsibilities:

- Assuming overall responsibility for the successful execution and implementation of the project toward achieving project objectives, and accountability to UNDP and the Government for the proper and effective use of the project resources;
- Serving as focal point for coordination of the project with MOST, UNDP and other Government agencies;
- Ensuring all Government inputs committed to the project are made available;
- Ensuring the compliance of co-financiers with project action plans;
- Selecting and arranging the appointment of the NPM, in consultation with UNDP;

- Supervising the work of the NPM and ensure NPM is empowered to effectively manage the project, and the other project staff to perform their duties effectively;
- Ensuring required project work plans are prepared and updated, in consultation with and with agreement by UNDP, and distributed to MPI and other relevant agencies;
- Undertaking or arranging the agreed recruitment system, for the recruitment of project professional and support staff charged against the UNDP budget, if any;
- Opening and operating as separate project bank account in the name of the MOST, and serving as Approving Officer for recruitment, procurement, training, sub-contracting and financial operations of the project; and
- Representing the MOST and the project at meetings of the project parties.

The PMO will be responsible for the overall operational and financial management of the project in accordance with financial rules and regulations for UNDP/GEF nationally executed projects. The PMO's tasks will include:

- Preparation of annual and quarterly work plans and budgets for UNDP-Vietnam review;
- Development of TORs for National and international experts and subcontractors;
- Monitoring and evaluating the outputs of PMO staff to ensure high quality outputs;
- Controlling the quality of outputs produced by subcontractors and coordinate activities implemented by subcontractors to ensure smooth project implementation;
- Supporting national and international experts to facilitate their activities and ensure high quality outputs;
- Producing progress reports. The PMO will formulate quarterly progress reports, which will be submitted to UNDP Vietnam. The PMO will hold quarterly progress report meetings with UNDP Vietnam to discuss the quarterly work plan, quarterly budget and issues regarding project implementation. The PMO will also produce annual progress reports, which will be submitted to the Advisory Board at least two weeks before the annual TPR meeting.
- At the end of the project, the PMO will produce the terminal report, which will be submitted to the Advisory Group at least two weeks before the Terminal TPR meeting;
- Arranging regular meetings and hold project workshops;
- Arranging missions and visits to project sites for project inception, implementation activities and monitoring & evaluation.
- Documenting and disseminating project reports and other information materials to raise awareness; and
- Maintaining suitable books and records for financial record-keeping and internal control.

The salary cost of the NPD and DPD will be borne by the government in-kind contribution. According to the requirements of the project work, PMO may hire short-term contracted personnel, in addition to its full time staff, as and when needed to accomplish the designated work.

GEF grant will be used to support the PMO's cost of management and related activities, including printing and publishing, communication fee, conference fee, office facilities, consumption materials, etc. as noted in the attached PMO budget.

UNDP Country Office

- The UNDP Resident Representative ensures that the UNDP country office has an internal control system that allows it to monitor effectively the financial activities of the project and to support and monitor the progress towards achieving results. Moreover, the UNDP-Vietnam office will be requested to provide the following services: (1) Identification and

recruitment of project international consultants; and, (2) Making direct payments to international consultants.

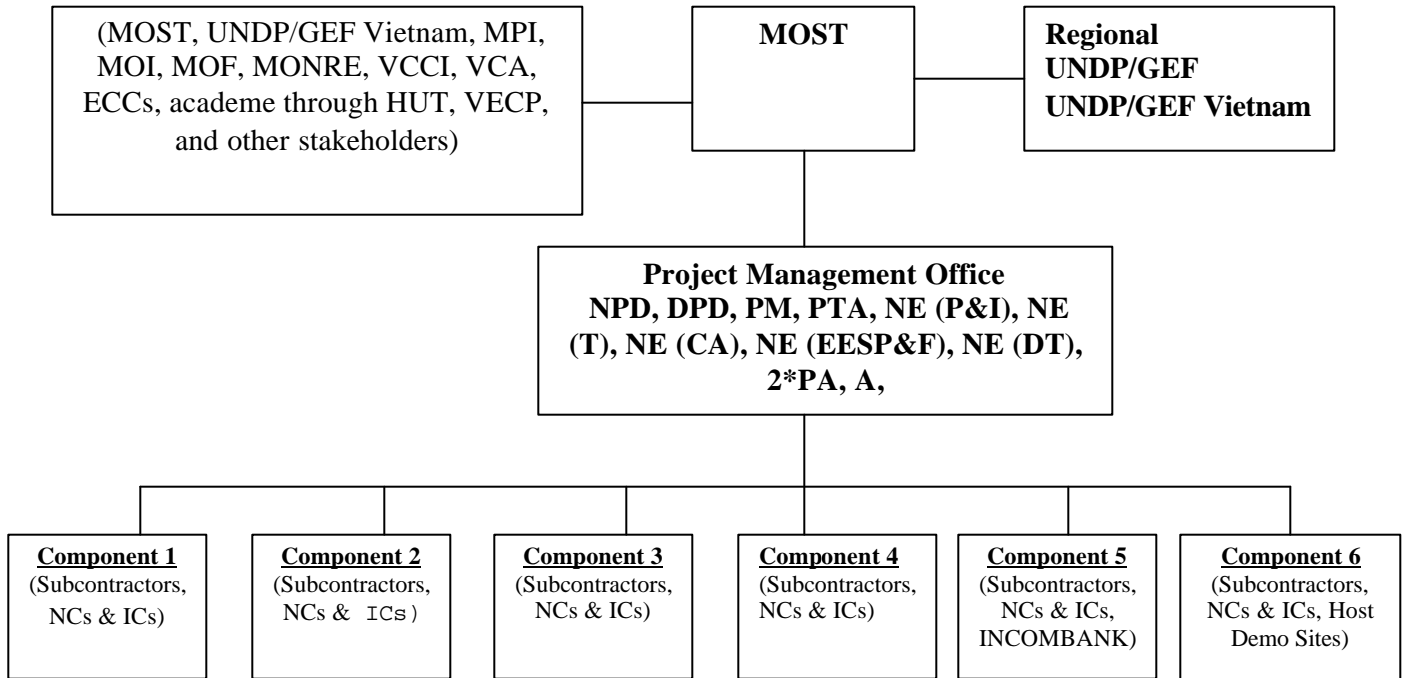


Fig.1: PECSME Project Implementation Arrangements

Collaborative Arrangements

Currently, the INCOMBANK is handling the Credit Guarantee Fund, which is part of the Vietnam-Germany Credit Program. The total capital of the LGF of the (VGCP) under INCOMBANK is about US\$ 1 million. This is to guarantee SME borrowers, who are short of collateral to obtain commercial bank credit to invest to production activities - but EC&EE projects are not considered to be the target group of this existing LGF. This amount is accounted as baseline cost. The amount of US\$ 1.95 million from GEF will be added as the incremental cost to the LGF of the VGCP and will be used to guarantee SME loans for the (PECSME) SME EC&EE project. The INCOMBANK will be responsible for reporting its performance quarterly to PMO.

VINACEGLASS has been implementing the program called “Financing the replacement of traditional coal-fired kilns with LPG-fired kilns to solve environmental pollution from SMES in ceramic villages in Vietnam” funded by MOI. The investment funding of the program is about VND 60 billion supported by the Assistance Development Fund. VINACEGLASS has committed to cooperate with the PECSME project to disseminate 100 LPG fired kilns to SMEs as well as to participate in the technical capacity development for local equipment manufacturers/ fabrications of the PECSME project. The VINACEGLASS will set of a team to carry out the related project activities as well as to report the implementation progress to the PMO.

In the implementation of phase of PECSME, there will be strong co-ordination will be implemented to ensure that synergies are fully realized with the MOI led second stage of the WB/GEF energy

DSM efficiency project, the Vietnam Energy Efficiency Public Lighting Project (VEEPL) as well as the Vietnam National Cleaner Production Center (VNCPC). The cooperation plans with these initiatives will be established during the PECSME Inception Phase.

Part IV. Monitoring and Evaluation

PECSME will be monitored and evaluated in accordance with established UNDP-GEF procedures. The Logical Framework Matrix in Section IV 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 Monitoring and Evaluation system will be built.

The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

1. MONITORING AND REPORTING

1.1. Project Inception Phase

A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP-VIETNAM and representation from the UNDP-GEF Regional Coordinating Unit, as well as UNDP-GEF (HQs) as appropriate.

A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's log frame matrix. This will include reviewing the log frame (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

Additionally, the purpose and objective of the Inception Workshop (IW) will be to: (i) introduce project staff with the UNDP-GEF *expanded team* which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-VIETNAM and RCU staff vis-à-vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as mid-term and final evaluations. Equally, the IW will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget re-phrasings.

The IW will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff

and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

1.2. Monitoring responsibilities and events

A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Tripartite Reviews, Advisory Board Meetings, and (ii) project related Monitoring and Evaluation activities.

Continuous self-monitoring of implementation progress will be the responsibility of the Project Management Office (PMO) based on the project's Annual Work Plan and its indicators. The PMO will inform the UNDP-Vietnam of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

The Project Manager will fine-tune the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-Vietnam and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. The local implementing agencies will also take part in the Inception Workshop in which a common vision of overall project goals will be established. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop. The measurement of these will be undertaken through subcontracts or retainers with relevant institutions or through specific studies that are to form part of the project surveys.

Periodic monitoring of implementation progress will be undertaken by the UNDP-Vietnam through quarterly meetings with MOST and PMO, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

UNDP-Vietnam and UNDP-GEF KL will conduct yearly visits to PECSME activities in the field as appropriate or more often based on an agreed upon schedule to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. A Field Visit Report will be prepared by UNDP-Vietnam and circulated no less than one month after the visit to the project team, all Advisory Board members, and UNDP-GEF.

Annual Monitoring will occur through the ***Tripartite Project Review (TPR)***. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Tripartite Project Review (TPR) at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The PECSME PMO will prepare an Annual Project Report (APR) and submit it to UNDP-Vietnam and the UNDP-GEF regional office at least two weeks prior to the TPR for review and comments.

The APR will be used as one of the basic documents for discussions in the TPR meeting. The PMO

will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The PMO also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

Terminal Tripartite Review (TTR)

The terminal tripartite review is held in the last month of project operations. The PMO is responsible for preparing the Terminal Report and submitting it to UNDP-Vietnam and UNDP-GEF Regional Coordinating Unit (Asia-Pacific). It shall be prepared in draft at least two months in advance of the TTR in order to allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks are will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs.

1.3. Project Monitoring Reporting

The Project Manager in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Items (a) through (f) are mandatory and strictly related to monitoring, while (g) through (h) have a broader function and the frequency and nature is project specific to be defined throughout implementation.

Inception Report (IR)

A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year/ Annual Work Plan divided in quarterly time frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-Vietnam or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP-Vietnam Office and UNDP-GEF Regional Coordinating Unit will review the document.

Annual Project Report (APR)

The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self -assessment report by project management to UNDP-Vietnam and provides input to the country office reporting process and the ROAR, as well as forming a key input to the Tripartite Project Review. An APR will be prepared on an annual basis prior to the Tripartite Project Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

The format of the APR is flexible but should include the following:

- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- AWP, CAE and other expenditure reports (ERP generated)
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress

Project Implementation Review (PIR)

The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the PECSME project has been under implementation for a year, the CO together with the project must complete a Project Implementation Report. The PIR can be prepared any time during the year (July-June) and ideally prior to the TPR. The PIR should then be discussed in the TPR so that the result would be a PIR that has been agreed upon by the project, the executing agency, UNDP-Vietnam and the concerned RC.

The individual PIRs are collected, reviewed and analyzed by the RCs prior to sending them to the focal area clusters at the UNDP/GEF headquarters. The focal area clusters supported by the UNDP/GEF M&E Unit analyze the PIRs by focal area, theme and region for common issues/results and lessons. The TAs and PTAs play a key role in this consolidating analysis.

The focal area PIRs are then discussed in the GEF Interagency Focal Area Task Forces in or around November each year and consolidated reports by focal area are collated by the GEF Independent M&E Unit based on the Task Force findings.

The GEF M&E Unit provides the scope and content of the PIR. In light of the similarities of both APR and PIR, UNDP/GEF has prepared a harmonized format for reference.

Quarterly Progress Reports

Short reports outlining main updates in project progress will be provided quarterly to UNDP-Vietnam Office and the UNDP-GEF regional office by the project team.

Periodic Thematic Reports

As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or as troubleshooting exercises to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

Project Terminal Report

During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also recommend any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

Technical Reports (project specific- optional)

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project and its sites. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

Project Publications (project specific - optional)

Project Publications will form a key method of crystallizing and disseminating the results and achievements of the Project. These publications may be scientific or informational texts on the activities and achievements of the Project, in the form of journal articles, multimedia publications, etc. These publications can be based on Technical Reports, depending upon the relevance, scientific worth, etc. of these Reports, or may be summaries or compilations of a series of Technical Reports and other research. The project team will determine if any of the Technical Reports merit formal publication, and will also (in consultation with UNDP, the government and other relevant stakeholder groups) plan and produce these Publications in a consistent and recognizable format. Project resources will need to be defined and allocated for these activities as appropriate and in a manner commensurate with the project's budget.

2. INDEPENDENT EVALUATION

The project will be subjected to at least two independent external evaluations as follows:

Mid-term Evaluation

An independent Mid-Term Evaluation will be undertaken at the end of the second year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP-Vietnam based on guidance from the Regional Coordinating Unit and UNDP-GEF.

Final Evaluation

An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP-Vietnam based on guidance from the Regional Coordinating Unit and UNDP-GEF.

Audit Clause

The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

3. LEARNING AND KNOWLEDGE SHARING

Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums. In addition:

- The project will participate, as relevant and appropriate, in UNDP/GEF sponsored networks, organized for Senior Personnel working on projects that share common characteristics. UNDP/GEF shall establish a number of networks, such as Integrated Ecosystem Management, eco-tourism, co-management, etc, that will largely function on the basis of an electronic platform.
- The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned.

The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identify and analyzing lessons learned is an on- going

process, and the need to communicate such lessons, as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF shall provide a format and assist the project team in categorizing, documenting and reporting on lessons learned. To this end a percentage of project resources will need to be allocated for these activities.

Part V. Legal Context

Project Revisions

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Vietnam and the United Nations Development Programme, signed by the parties on 21 March 1978. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that agreement.

The following types of revisions may be made to this project document with the signature of the UNDP Resident Representative, provided he or she is assured that the other signatories of the project document have no objection to the proposed changes:

- a) Revisions in, or addition to, any of the annexes of the project document;
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation; and
- c) Mandatory annual revisions, which re-phase the delivery of agreed project inputs, or reflect increased expert or other costs due to inflation, or take into account agency expenditure flexibility.

National Professional Project Personnel


The Government agrees to the recruitment of nationally recruited project professional personnel (NPPP) required for the implementation of this project, in accordance with UNDP policies and procedures established within the United Nations system for this purpose. These services constitute an addition to the regular personnel resources to be provided by the Government and will be available for the duration of UNDP participation in the project. The remuneration of NPPP will be determined on a case-by-case basis in accordance with the policies and procedures of UNDP; it should exceed neither the prevailing compensation for comparable functions in the host country nor remuneration levels applicable within the United Nation system.

Section II—Total Work Plan and Budget

The total estimated project cost (excluding the PDF-B exercise, which cost US\$ 458,250 to carry out) is US\$ 28,769,000. In addition to the US\$ 5,469,000 requested from GEF, a baseline cost of US\$ 23,300,000 will be contributed by the GOV and private sector. Contribution from relevant government ministries amounts to US\$ 1,100,000 (cash and in-kind). A total of US\$ 19,100,000 will come from private sector companies such as INCOMBANK and VINACEGLASS. Local government agencies (namely ECCs, HCMC DOST and HCMC Pollution Mitigation Fund) will provide US\$ 2,600,000. Other institutions namely HUT; IHER, WU and IE will provide US\$ 500,000. The project budget will be distributed as follows: US\$ 1,239,000 for policy and institutional support development; US\$ 1,466,000 for information dissemination and awareness; US\$ 1,502,000 for technical capacity development; US\$ 2,162,000 for energy efficiency services provision support promotion; US\$ 3,545,000 for financing assistance; and, US\$ 18,855,000 for demonstration and implementation.

The funding request from GEF will be utilized to support all project activities (see project budget for details). Of the GEF funds requested, US\$ 1,950,000 would be utilized to top up an existing loan guarantee fund to allow funding of EC&EE projects of SMEs, US\$ 3,519,000 will be used for the provision of technical assistance in the various barrier removal activities, including training and purchase of necessary equipment for capacity building and project management and administration.

TOTAL PROJECT BUDGET (GEF)

 United Nations Development Programme Total Budget and Work Plan (GEF) Project Number: Project Title: Promoting Energy Conservation in Small and Medium Enterprise													
Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Source of Fund		Planned Budget			
		Y1	Y2	Y3	Y4	Y5		Fund Code	Donor	Account	Budget Description	Amount (US\$)	
1. EC&EE Policy and Institutional Support Development Program													
Increased impact of existing policies as well as from the recently enacted EC&EE decree through strengthened capacity of relevant Govt. Ministries, Departments and Agencies in effective policy and institutional design, guidance, implementation and enforcement of energy conservation measures.	1.1 Improvement of EC&EE Awareness & Building Capacity on EC&EE Policy Development.	X	X	X		X	MOST	62000	GEF	71600	Travel - Study Tours	80,000	
								62000		74500	Miscellaneous Expenses - Training & Seminars	43,915	
	1.2 Development of Incentive Policies for Supporting EC&EE Investment in SMEs			X	X		X	MOST	62000	GEF	71600	Travel	5,000
									62000	GEF	72100	Svc Co - Devt. of Circular on Tax and Financial Incentives	15,000
									62000	GEF	72100	Svc Co - Devt. of Regulation on EC&EE Technology Transfer	15,000
									62000	GEF	72100	Svc Co - Devt. Of Circular on EC Labeling	10,000
									62000	GEF	74500	Miscellaneous Expenses -WS	16,993
	1.3 Provision of TA to Incorporate EC&EE into SME Development Support Program					X		MOST	62000	GEF	71300	Local Consultants - EC Program Design Experts (2)	22,400
									62000	GEF	74500	Miscellaneous Expenses	4,128



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

	1.4 Establishment and Operation of EC&EE Coordinating Agencies	X		X			MOST	62000	GEF	71300	Local Consultant - Management Info Expert	15,000
								62000	GEF	71600	Travel	10,000
								62000	GEF	72200	Equipment and Furniture	60,000
								62000	GEF	74500	Miscellaneous Expenses	3,520
	1.5 Supporting Relevant State Agencies in Developing EC&EE Regulation		X	X			MOST	62000	GEF	71600	Travel	4,000
								62000	GEF	72100	Svc Co - Devt. of Regulation on EESP's Accreditation & Direction on Energy Consumption Reporting	15,000
								62000	GEF	74500	Miscellaneous Expenses	3,166
	1.6 Supporting NEA in Studying & modifying Environment Standards related to GHG Emissions				X		MOST	62000	GEF	71600	Travel	2,000
								62000	GEF	72100	Svc Co - Devt. Of Environmental Standards	20,000
								62000	GEF	74500	Miscellaneous Expenses	4,528
	1.7 Monitoring and Component Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO: Local Task Expert on Policy and Institutional Development	62,700
	Sub-total											412,350



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise


2. EC&EE Communication and Awareness Program

Enhanced SME and public awareness of EC&EE through increased effectiveness and regular updating of an integrated information collection, dissemination and reporting system.	2.1 Development of Integrated Communication and Dissemination Strategy	X					MOST	62000	GEF	71200	Int. consultant - Communication & Awareness Expert	3,500
								62000	GEF	71300	Local Consultants - Communication Strategy (2)	8,400
								62000	GEF	74500	Miscellaneous Expenses	3,284
	2.2 Est. Info. Dissemination Network & Strengthening Capacity of Org. Info. Network	X	X				MOST	62000	GEF	71200	International consultant - Communication and Awareness	14,000
								62000	GEF	71600	Travel - Mission & Study Tours	15,000
								62000	GEF	72100	Svc Co - Design and Implementation of Dissemination Info Package	11,000
								62000	GEF	74500	Miscellaneous Expenses	7,526
	2.3 Assessment of Awareness of SME and General Public on EC&EE	X		X		X	MOST	62000	GEF	71200	International consultant	7,000
								62000	GEF	72100	Svc Co - Assess. Of EC&EE Awareness and Feedback Survey	30,000
62000								GEF	74500	Miscellaneous Expenses	20,016	



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

2.4 Development of SME Energy- Use Database		X	X				MOST	62000	GEF	72100	Svc Co - Devt. Of SME Energy Use Database	20,000
								62000	GEF	72200	Equipment & Furniture	15,000
								62000	GEF	74500	Miscellaneous Expenses	12,526
2.5 Dissemination of EC&EE Information to SMEs through the Network	X	X	X	X	X		MOST	62000	GEF	71200	International consultant - Communication and Awareness	24,500
								62000	GEF	71600	Travel	20,000
								62000	GEF	72100	Svc Co - Design and Implementation of Dissemination Info Package	150,000
								62000	GEF	74200	Miscellaneous Expenses - Printing	43,055
2.6 EC&EE advocacy and Awareness Campaigns	X	X	X	X	X		MOST	62000	GEF	71600	Travel	10,000
								62000	GEF	72100	Svc Co - Organization of Two Exhibitions	80,000
								62000	GEF	74500	Miscellaneous Expenses - WS	43,012
2.7 SME's Registration of Getting Technical Assistance to Carry out EC&EE	.	X	X	X	X		MOST	62000	GEF	71300	Local support staff of ECCs	28,546

 United Nations Development Programme Total Budget and Work Plan (GEF) Project Number: Project Title: Promoting Energy Conservation in Small and Medium Enterprise												
	2.8 Monitoring and Component Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO - Local Task Expert on Communication and Awareness	62,700
	Sub-total											629,065
3. EC& EE Technical Capacity Development Program												
Improved skills in EC&EE implementation through enhanced training and evaluation	3.1 Provision of Training for Trainers	X	X				MOST	62000	GEF	71200	International Consultant - EC&EE Training Expert	28,000
								62000	GEF	71600	Travel - Abroad Training	65,000
								62000	GEF	72100	Svc Co - Conduct of Training Courses for EC&EE Trainers	60,000
								62000	GEF	74200	Miscellaneous Expenses - Printing	9,756
	3.2 Conduct of Training Courses for SMEs		X	X			MOST	62000	GEF	72100	Svc Co - Conduct of Training Courses for SMEs ...	270,000
								62000	GEF	74500	Miscellaneous Expenses	99,841
	3.3 Development of Sustainable EC&EE Training Program for University and Colleges				X		MOST	62000	GEF	71200	International Consultant - EC&EE Training Expert	14,000
								62000	GEF	71600	Travel	5,000
								62000	GEF	72100	Svc Co - Design of Sustainable EC&EE Training Program	15,000



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

								62000	GEF	74500	Miscellaneous Expenses	6,134
	3.4 Conduct of Energy Auditor Training		X	X			MOST	62000	GEF	72100	Svc Co -Conduct of Training Courses for SMEs and Energy Auditors	40,000
								62000	GEF	72200	Equipment -Energy auditing Equip...	58,800
								62000	GEF	74500	Miscellaneous Expenses	6,881
	3.5 Evaluation of Training Program			X		X		62000	GEF	72100	Svc Co - Evaluation of Training Program	19,500
	3.5 Monitoring and Component Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO - Local Task Expert on Training	62,700
	Sub-total											760,612
4. Energy Efficiency Services Provision Support Program												
Fostering of a growing, competitive and sustainable energy efficiency services provision industry through enhanced business.	4.1 EESP Training Program	X	X				MOST	62000	GEF	71200	International Consultant - EESP Expert	14,000
								62000	GEF	71600	Travel	5,000
								62000	GEF	72100	Svc Co – EESP Business & Financing Capacity Building	35,000
								62000	GEF	74500	Miscellaneous Expenses	2,672



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

business, engineering and financial skills	4.2 Development of a Suitable Institutional and Legal Framework for EESP Activities		X				MOST	62000	GEF	72100	Svc Co - Devt. Of a Suitable Institutional and Legal Framework for EESPs	15,000	
								62000	GEF	74500	Miscellaneous Expenses	2,455	
	4.3 Provision of Assistance for EESP Operations				X	X		MOST	62000	GEF	71200	International Consultant - EESP Expert	14,000
									62000	GEF	71300	Local Consultants	50,400
									62000	GEF	71600	Travel	10,000
									62000	GEF	74500	Miscellaneous Expenses	25,950
	4.4 Supporting the Implementation of Standardized Contracts to Deliver EESP Services to SMEs				X	X	X	MOST	62000	GEF	71200	Int. Consultant - EESP Expert	14,000
									62000	GEF	72100	Svc Co - EESP Business & Financing Capacity Building..	29,600
	4.5 Assessment of Local Capabilities for Energy Efficiency Equipment Provision			X				MOST	62000	GEF	72100	Svc Co - Assess. Of Local Capabilities for EE Equip. Provision and Technical Capacity Building	15,000
									62000	GEF	74500	Miscellaneous Expenses	2,455



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

	4.6 Evaluation of Energy Performance of Locally Industrial Equipment		X				MOST	62000	GEF	72100	Svc Co -Assess. Of Local Capability for EE Equip. Provision and Technical Capacity Building	15,000	
								62000	GEF	74500	Miscellaneous Expenses	2,455	
	4.7 Technical Capacity Building for Local Equipment Manufacturers/Fabricators			X			MOST	62000	GEF	71200	International Consultant	28,000	
								62000	GEF	72100	Svc Co - Assess. Of Local Capabilities for EE Equip. Provision and Technical Capacity Building	26,060	
	4.8 Design of a Sustainable EC&EE R&D Program				X		MOST	62000	GEF	72100	Svc Co - Design of a Sustainable EC&EE R&D Program	15,000	
								62000		74500	Miscellaneous Expenses	2,455	
	4.9 Monitoring and Component Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO - Local Task Expert on EESP and Financing	31,350	
	Sub-total											355,852	
	5. EC&EE Financing Program												
	Increased financial system willingness to lend to SMEs for EC&EE projects	5.1 Increasing Banking and Finance Sector's Awareness of Benefit of EC&EE Projects		X	X			MOST	62000	GEF	71200	Int. Consultant - Bankable Project Appraisal	28,000
62000									GEF	71600	Travel	5,000	



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

EC&EE projects through enhanced knowledge of EC&EE and greater skills in preparing and evaluating loan applications								62000	GEF	72100	Svc Co -Business Capacity Building for Banking and Financial Sector	25,000
								62000	GEF	74500	Miscellaneous Expenses	9,331
	5.2 Facilitating SMEs to Access Financing for EC&EE Projects		X	X	X	X	MOST	62000	GEF	71600	Travel	2,499
								62000	GEF	72100	Svc Co -Business Capacity Building for Banking and Financial Sector	20,000
								62000	GEF	74500	Miscellaneous Expenses	6,934
	5.3 Mobilization of Guarantee Funding Mechanism	X	X	X	X	X	MOST	62000	GEF	71200	Int. Consultant - SME Guarantee Funding	14,000
								62000	GEF	71600	Travel	4,452
								62000	GEF	72100	Svc Co - Design and Implementation of Guarantee Funding Mechanism	30,000
								62000	GEF	63300	Grants	1,950,000
								62000	GEF	74100	Professional Services - Management of Guarantee Fund	100,000
	5.4 Provision of T.A for Existing Funds for EC&EE Investment		X	X	X		MOST	62000	GEF	71300	Local Consultants	50,000
								62000	GEF	71600	Travel	17,331



United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

	5.5 Evaluation of Established Financing Mechanism					X	MOST	62000	GEF	71200	International Consultant	7,000	
								62000	GEF	71600	Travel	5,000	
								62000	GEF	71300	Local Consultants	8,400	
								62000	GEF	74500	Miscellaneous Expenses -WS	10,800	
	5.6 Monitoring and Component Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO - Local Task Expert on EESP and Financing	31,500	
Sub-total												2,325,247	
6. EC&EE Demonstration Program													
Increased credibility of EC&EE through successfully implemented and evaluated demonstration projects	6.1 Conduct of Techno-Economic Feasibility Analyses of Investment Projects	X					MOST	62000	GEF	71600	Travel	2,000	
								62000	GEF	72100	Svc Cos (5) - Provision TA to EC&EE Projects in Each Sector	10,000	
								62000	GEF	74500	Miscellaneous Expenses	1,420	
	6.2 Identification and Evaluation of Demonstration Requirement	X					MOST				MOST contribution will cover this cost	0	
	6.3 Identification and Implementation of Actions to Remove Barriers to the Demo Projects	X	X					MOST	62000	GEF	71600	Travel	2,000
									62000	GEF	72100	Svc Cos (5) - Provision of TA to EC&EE Project in Each Sector	20,000
									62000	GEF	74500	Miscellaneous Expenses	4,840



**United Nations Development Programme
Total Budget and Work Plan (GEF)**

Project Number:

Project Title: Promoting Energy Conservation in Small and Medium Enterprise

6.4 Establishment of Baseline Data for Demo Sites	X	X				MOST	62000	GEF	71600	Travel	2,000
							62000	GEF	72100	Svc Cos (5) - Provision of TA to EC&EE Project in Each Sector	20,000
								GEF	74500	Miscellaneous Expenses	4,840
6.5 Demo Project Implementation		X	X			MOST	62000	GEF	71600	Travel	10,000
							62000	GEF	72100	Svc Cos (5) - Provision of TA to EC&EE Project in Each Sector	25,000
							62000	GEF	74500	Miscellaneous Expenses	5,260
6.6 Evaluation and Dissemination of Demonstration Projects			X		X	MOST	62000	GEF	72100	Svc Co - Evaluation of Impact of Demonstration Project	15,000
							62000	GEF	74200	Miscellaneous Expenses -WS & Printing	25,260
6.7 Follow up Disseminating the Demo Project to 500 Other Invest. Projects			X	X	X	MOST	62000	GEF	71300	Local Consultants	50,000
							62000	GEF	71600	Travel	23,954
							62000	GEF	72100	Svc Cos (5) - Provision of TA to EC&EE Project in Each Sector	150,000
6.8 Monitoring and Component Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO -Local Task Expert on Technology Demonstration	62,700
Sub-total											434,274




United Nations Development Programme
Total Budget and Work Plan (GEF)
Project Number:
Project Title: Promoting Energy Conservation in Small and Medium Enterprise

7. Project Management and Monitoring & Evaluation

PECSME implemented, monitored and Evaluated	7.1 Management	X	X	X	X	X	MOST	62000	GEF	71400	PMO: Project Manager	84,000
		X	X	X	X	X	MOST	62000	GEF	71400	PMO: Project Adviser	84,000
		X	X	X	X	X	MOST	62000	GEF	64200	PMO: Support Staff	97,200
		X	X	X	X	X	MOST	62000	GEF	72200	Equipment and Furniture	59,400
		X	X	X	X	X	MOST	62000	GEF	71600	Travel	60,000
		X	X	X	X	X	MOST	62000	GEF	74500	Miscellaneous Expenses	40,000
	Sub-total											424,600
	7.2 Monitoring and Evaluation	X	X	X	X	X	MOST	62000	GEF	71600	Travel	20,000
								62000	GEF	74500	Miscellaneous Expenses – WS & printing	47,000
								62000	GEF	74100	Professional Services - External Evaluation	50,000
								62000	GEF	74100	Professional Services - Audits	10,000
Sub-total											127,000	
TOTAL												5,469,000

TOTAL PROJECT BUDGET (CO-FINANCING)

 United Nations Development Programme Total Budget and Work Plan (Co- Financing) Project Number: Project Title: Promoting Energy Conservation in Small and Medium Enterprise											
Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget			
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount	
1. EC&EE POLICY AND INSTITUTIONAL SUPPORT DEVELOPMENT PROGRAM											
Increased impact of existing policies as well as from the recently enacted EC&EE decree through strengthened capacity of relevant Govt. Ministries, Departments and Agencies in effective policy and institutional design, guidance, implementation and enforcement of energy conservation measures	1.1 Improvement of EC&EE Awareness & Building Capacity on EC&EE Policy Development.	X	X	X		X	MOST	HCM DOST	Miscellaneous Expenses	50,000	
	1.2 Development of Incentive Policies for Supporting EC&EE Investment in SMEs		X	X		X	MOST	MOST & MOI	Local Consultants	70,000	
									Miscellaneous Expenses	30,000	
	1.3 Provision of TA to Incorporate EC&EE into SME Development Support Program				X		MOST	MPI	Local Consultants	50,000	
	1.4 Establishment and Operation of EC&EE Coordinating Agencies		X		X			MOST	MOST & EECs	Local Consultants	150,000
										Equipment and Furniture	300,000
1.5 Supporting Relevant State Agencies in Developing EC&EE Regulation			X	X			MOST			0	



United Nations Development Programme
 Total Budget and Work Plan (Co- Financing)
 Project Number:
 Project Title: Promoting Energy Conservation in Small and Medium
 Enterprise

Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget		
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount
	1.6 Supporting NEA in Studying & modifying Envi. Standards related to GHG Emissions				X		MOST			0
	1.7 Monitoring and Evaluation	X	X	X	X	X	MOST			0
	Sub-total									650,000
2. EC&EE COMMUNICATION AND AWARENESS PROGRAM										
EC&EE through increased effectiveness and regular updating of an integrated information collection, dissemination and reporting system	2.1 Development of Integrated Communication and Dissemination Strategy	X					MOST			0
	2.2 Est. Info. Dissemination Network & Strengthening Capacity of Org. Info. Network	X	X				MOST			0
	2.3 Assessment of Awareness of SME and General Public on EC&EE	X		X		X	MOST	HCM DOST, WU & IE	Local Consultants	150,000
	2.4 Development of SME Energy- Use Database		X	X			MOST			0
	2.5 Dissemination of EC&EE Information to SMEs through the Network	X	X	X	X	X	MOST	HCM DOST, WU & IE	Local Consultants	120,000
								Equipment and Furniture	30,000	



United Nations Development Programme
 Total Budget and Work Plan (Co- Financing)
 Project Number:
 Project Title: Promoting Energy Conservation in Small and Medium
 Enterprise

Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget		
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount
	2.6 EC&EE advocacy and Awareness Campaigns	X	X	X	X	X	MOST	MOST, HCM DOST & WU & IE	Local Consultants	70,000
									Equipment and Furniture	80,000
									Miscellaneous Expenses	150,000
	2.7 SME's Registration of Getting Technical Assistance to Carry out EC&EE		X	X	X	X	MOST	HCM DOST	Local Consultants	20,000
	2.8 Monitoring and Evaluation	X	X	X	X	X	MOST			0
	Sub-total									620,000
3. EC& EE TECHNICAL CAPACITY DEVELOPMENT PROGRAM										
Improved skills in EC&EE implementation through enhanced training and evaluation	3.1 Provision of Training for Trainers	X	X				MOST	HUT	Miscellaneous Expenses	15,000
	3.2 Conduct of Training Courses for SMEs		X	X			MOST	HCM DOST, HUT	Local Consultants	100,000
									Equipment and Furniture	150,000
									Miscellaneous Expenses	100,000
	3.3 Development of Sustainable EC&EE Training Program for University and Colleges				X		MOST			0
3.4 Conduct of Energy Auditor Training			X	X			MOST	HCM DOST	Local Consultants	30,000
							Equipment and Furniture		60,000	
							Miscellaneous Expenses		10,000	



United Nations Development Programme
 Total Budget and Work Plan (Co- Financing)
 Project Number:
 Project Title: Promoting Energy Conservation in Small and Medium
 Enterprise

Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget			
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount	
	3.5 Monitoring and Evaluation of Training Program			X		X	MOST	HUT	Local Consultants	35,000	
	Sub-total									500,000	
4. ENERGY EFFICIENCY SERVICES PROVISION SUPPORT PROGRAM											
Fostering of a growing, competitive and sustainable energy efficiency services provision industry through enhanced business, engineering and financial skills	4.1 EESP Training Program	X	X				MOST			0	
	4.2 Development of a Suitable Institutional and Legal Framework for EESP Activities		X				MOST			0	
	4.3 Provision of Assistance for EESP Operations				X	X		MOST	ECCs & IHER	Local Consultants	90,000
							Equipment and Furniture			120,000	
							Miscellaneous Expenses			90,000	
	4.4 Supporting the Implementation of Standardized Contracts to Deliver EESP Services to SMEs			X	X	X	MOST			0	
	4.5 Assessment of Local Capabilities for Energy Efficiency Equipment Provision		X				MOST	HCM DOST	Miscellaneous Expenses	20,000	
4.6 Evaluation of Energy Performance of Locally Industrial Equipment		X				MOST	HCM DOST	Miscellaneous Expenses	20,000		



United Nations Development Programme
 Total Budget and Work Plan (Co- Financing)
 Project Number:
 Project Title: Promoting Energy Conservation in Small and Medium
 Enterprise

Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget		
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount
	4.7 Technical Capacity Building for Local Equipment Manufacturers/Fabricators			X			MOST	MOST VINACE GLASS	Materials & Goods (Investment)	1,350,000
	4.8 Design of a Sustainable EC&EE R&D Program				X		MOST			0
	4.9 Monitoring and Evaluation	X	X	X	X	X	MOST			0
	Sub-total									1,690,000
5. EC&EE FINANCING PROGRAM										
Increased financial system willingness to lend to SMEs for EC&EE projects through enhanced knowledge of EC&EE and greater skills in preparing and evaluating loan applications	5.1 Increasing Banking and Finance Sector's Awareness of Benefit of EC&EE Projects		X	X			MOST			0
	5.2 Facilitating SMEs to Access Financing for EC&EE Projects		X	X	X	X	MOST			0
	5.3 Mobilization of Guarantee Funding Mechanism	X	X	X	X	X	MOST	INCOM BANK	Loan Guarantee Fund	1,000,000
	5.4 Provision of T.A for Existing Funds for EC&EE Investment		X	X	X		MOST		Miscellaneous Expenses	100,000



United Nations Development Programme
 Total Budget and Work Plan (Co- Financing)
 Project Number:
 Project Title: Promoting Energy Conservation in Small and Medium
 Enterprise

Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget		
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount
	5.5 Evaluation of Established Financing Mechanism					X	MOST			0
	Sub-total						MOST			1,100,000
6. EC&EE DEMONSTRATION PROGRAM										
Increased credibility of EC&EE through successfully implemented and evaluated demonstration projects	6.1 Conduct of Techno-Economic Feasibility Analyses of Investment Projects	X					MOST			0
	6.2 Identification and Evaluation of Demonstration Requirement	X					MOST	MOST	Local Consultants	20,000
	6.3 Identification and Implementation Actions to Remove Barriers to the Demo Projects	X	X				MOST			0
	6.4 Establishment of Baseline Data for Demo Sites	X	X				MOST			0
	6.5 Demo Project Implementation		X	X				MOST	HCMC Pollution Fund & INCOM BANK	Materials & Goods (Investment)



United Nations Development Programme
 Total Budget and Work Plan (Co- Financing)
 Project Number:
 Project Title: Promoting Energy Conservation in Small and Medium
 Enterprise

Expected Outputs	ACTIVITIES	TIMEFRAME					Resp. Party	Planned Budget		
		Y1	Y2	Y3	Y4	Y5		Source of Fund	Budget Description	Amount
	6.6 Follow up Disseminating the Demo Project to 500 Other Invest. Projects			X	X	X	MOST	HCMC Pollution Fund, INCOM BANK VINACE GLASS	Materials & Goods (Investment)	17,880,000
	6.7 Monitoring, Evaluation and Dissemination of Demo Projects			X		X	MOST			0
	Sub-total						MOST			18,260,000
PECSME implemented, monitored and evaluated	7. Project Management and Monitoring & Evaluation	X	X	X	X	X	MOST	MOST	Contract Services -Indivd	180,000
									Equipment and Furniture	50,000
									Rental &Maintenance-Premises	120,000
									Miscellaneous Expenses	130,000
	Sub-total						MOST			480,000
TOTAL										23,300,000

Section III— Other Agreements

Section IV - UNDP-GEF Project Brief & Executive Summary

Attached as separate document.

ANNUAL WORK PLAN (GEF) Year 1



United Nations Development Programme
Vietnam

Annual Work Plan

VIETNAM

Award Id:

Report

Date:

1.11.2004

Award Title: VIETNAM: Promoting Energy Conservation in Small and Medium Scale Enterprises

Year: 2004

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget							
			Start	End		Fund	Donor	Budget Descr	Amount US\$	Sub-Total			
000xxxxx	Promoting Energy Conservation in Small and Medium Scale Enterprises	1. EC&EE Policy and Institutional Support Development Program -			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71600	Travel & Study Tours	58333			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71300	Local Consultants	5000			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71400	PMO: Local Task Expert on Policy & Inst Dev.	11000			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	72200	Equipment and Furniture	60000			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	74500	Miscellaneous Expenses	12739	147072		
				2. EC&EE Communication and Awareness Program			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71200	International Consultants	14000	
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71300	Local Consultants	8400			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71400	PMO Local Task Expert	11000			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71600	Travel mission & Study Tours	13500			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	72100	Awareness & Feedback Survey	51000			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	74500	Miscellaneous Expenses	22322			
					MOST	62000-GEF Prog. Resources	10003-GEFTrustee	74200	Printing	8611	128833		
		3. Improved skills in EC&EE implementation through enhanced training and evaluation			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71200	International Consultants	18667			
			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	71400	PMO Local Task Expert	11000					
			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	72100	Conduct Training Courses	40000					
			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	74200	Printing	6504					
			MOST	62000-GEF Prog. Resources	10003-GEFTrustee	72100	EESP Bus & Fin Cap Buld	17500	76171				

Project ID	Expected Outputs	Key Activities	Timeframe		Responsible Party	Planned Budget			Sub-Total		
			Start	End		Fund	Donor	Budget Descr		Amount US\$	
		4. Energy Efficiency Services Provision Support Program		MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71200	International Consultants	7000	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71400	PMO Local Task Expert	5500	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71600	Travel	2500	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	74500	Miscellaneous Expenses	1336	33836
		5. EC&EE Financing Program		MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71200	International Consultants	14000	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71400	PMO Local Task Expert	5526	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71600	Travel	1484	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	72100	Design & Impl	10000	31010
		6. EC&EE Demonstration Program		MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71400	Local Consultants	40450	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71600	Travel	5000	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	72100	Provision of TA	10000	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	74500	Miscellaneous Expenses	7420	62870
		7. Project Management and Monitoring & Evaluation		MOST		62000-GEF Prog. Resources	10003-GEFTrustee	64200	Support Staff	19440	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71400	Local Consultants	33600	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	71600	Travel	16000	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	72200	Furniture & Equipment	59400	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	74100	Audit	2000	
				MOST		62000-GEF Prog. Resources	10003-GEFTrustee	74500	Miscellaneous Expenses	17400	147840
								Grand Total:			627632

ANNUAL WORK PLAN (Co-Financing)

Year 1

Expected Outputs	ACTIVITIES	TIMEFRAME				Resp. Party	Planned Budget		
		Q1	Q2	Q3	Q4		Source of Fund	Budget Description	Amount
1. EC&EE Policy and Institutional Support Development Program									
Increased impact of existing policies as well as from the recently enacted EC&EE decree through strengthened capacity of relevant Govt. Ministries, Departments and Agencies in effective policy and institutional design, guidance, implementation and enforcement of energy conservation measures	1.1 Improvement of EC&EE Awareness & Building Capacity on EC&EE Policy Development.		X	X	X	MOST	HCM DOST	Miscellaneous Expenses - Training & Seminars	10,000
	1.4 Establishment and Operation of EC&EE Coordinating Agencies	X	X	X	X	MOST	MOST & EECs	Local Consultants	50,000
								Equipment and Furniture	300,000
	1.7 Monitoring and Evaluation	X	X	X	X	MOST			0
Sub-total									360,000
2. EC&EE Communication and Awareness Program									
EC&EE through increased effectiveness and regular updating of an integrated information collection, dissemination and reporting system	2.1 Development of Integrated Communication and Dissemination Strategy	X	X	X		MOST			0
	2.2 Est. Info. Dissemination Network & Strengthening Capacity of Org. Info. Network			X	X	MOST			0
	2.3 Assessment of Awareness of SME and General Public on EC&EE		X			MOST	HCM DOST, WU & IE	Local Consultants	50,000

Expected Outputs	ACTIVITIES	TIMEFRAME				Resp. Party	Planned Budget		
		Q1	Q2	Q3	Q4		Source of Fund	Budget Description	Amount
	2.5 Dissemination of EC&EE Information to SMEs through the Network		X	X	X	MOST	HCM DOST, WU & IE	Local Consultants	20,000
								Equipment and Furniture	10,000
	2.6 EC&EE advocacy and Awareness Campaigns				X	MOST	MOST, HCM DOST & WU & IE	Miscellaneous Expenses	30,000
	2.8 Monitoring and Evaluation	X	X	X	X	MOST			0
	Sub-total								110,000
3. EC& EE Technical Capacity Development Program									
Improved skills in EC&EE implementation through enhanced training and evaluation	3.1 Provision of Training for Trainers	X	X	X	X	MOST	HUT	Miscellaneous Expenses	10,000
	Sub-total								10,000
4. Energy Efficiency Services Provision Support Program									
	4.1 EESP Training Program		X	X	X				0
	4.9 Monitoring and Evaluation		X	X	X	MOST			0
	Sub-total								0
5. EC&EE Financing Program									
Increased financial system willingness to lend to SMEs for EC&EE projects	5.3 Mobilization of Guarantee Funding Mechanism	X	X	X	X	MOST	INCOM BANK	Miscellaneous Expenses	20,000
	5.6 Monitoring and Evaluation	X	X	X	X	MOST			0

Expected Outputs	ACTIVITIES	TIMEFRAME				Resp. Party	Planned Budget		
		Q1	Q2	Q3	Q4		Source of Fund	Budget Description	Amount
	Sub-total					MOST			20,000
6. EC&EE Demonstration Program									
Increased credibility of EC&EE through successfully implemented and evaluated demonstration projects	6.1 Conduct of Techno-Economic Feasibility Analyses of Investment Projects	X	X	X	X	MOST			0
	6.2 Identification and Evaluation of Demonstration Requirement		X	X	X	MOST	MOST	Local Consultants	20,000
	6.3 Identification and Implementation of Actions to Remove Barriers to the Demo Projects		X	X	X	MOST			0
	6.4 Establishment of Baseline Data for Demo Sites		X	X	X	MOST			0
	6.7 Monitoring & Evaluation	X	X	X	X	MOST			0
	Sub-total					MOST			20,000
7. Project Management and Monitoring & Evaluation									
PECSME implemented, monitored and evaluated	Project Management and Monitoring & Evaluation	X	X	X	X	MOST	MOST	Contract Services -Individ	18,000
								Equipment and Furniture	50,000
								Rental & Maintenance-Premises	24,000
								Miscellaneous Expenses	10,000
	Sub-total								102,000
TOTAL									622,000

Signature Page

Country: Vietnam

UNDAF Outcome(s):

Outcome 3: Energy and environment for sustainable development.

Goal 1: Strengthen national resource management.

Goal 2: Better urban and industrial pollution management.

Goal 3: Strengthen sector capacity and planning.

Expected MYFF Outcome(s):

SL 3.3-Outcome 3.3.1: Assistance provided to the removal of institutional, economic and social barriers to energy conservation and energy efficiency for climate change mitigation

SL 1.9 Outcome: An increasingly competitive domestic private sector contributing to employment generation and poverty reduction.

Implementing partner:

MINISTRY OF SCIENCE AND TECHNOLOGY

<p>Programme Period: 2005-2009 Programme Component: Goal 3 Project Title: Vietnam: Promoting Energy Conservation in Small and Medium Enterprises (PECSME) Project Code: Project Duration: 5 years Management Arrangement: NEX modality</p>

Total Budget: (US\$)	28,769,000
GEF:	5,469,000
CO-FINANCING	
Government Ministries	1,100,000
MOST	1,000,000
MOI	50,000
MPI	50,000
Local Govt. Agencies	2,600,000
ECCs	600,000
HCMC DOST	1,000,000
Pollution Mitigation Fund	1,000,000
Private	19,100,000
INCOMBANK	14,100,000
VINACEGLASS	5,000,000
Others	500,000
Total Co-financing:	23,300,000

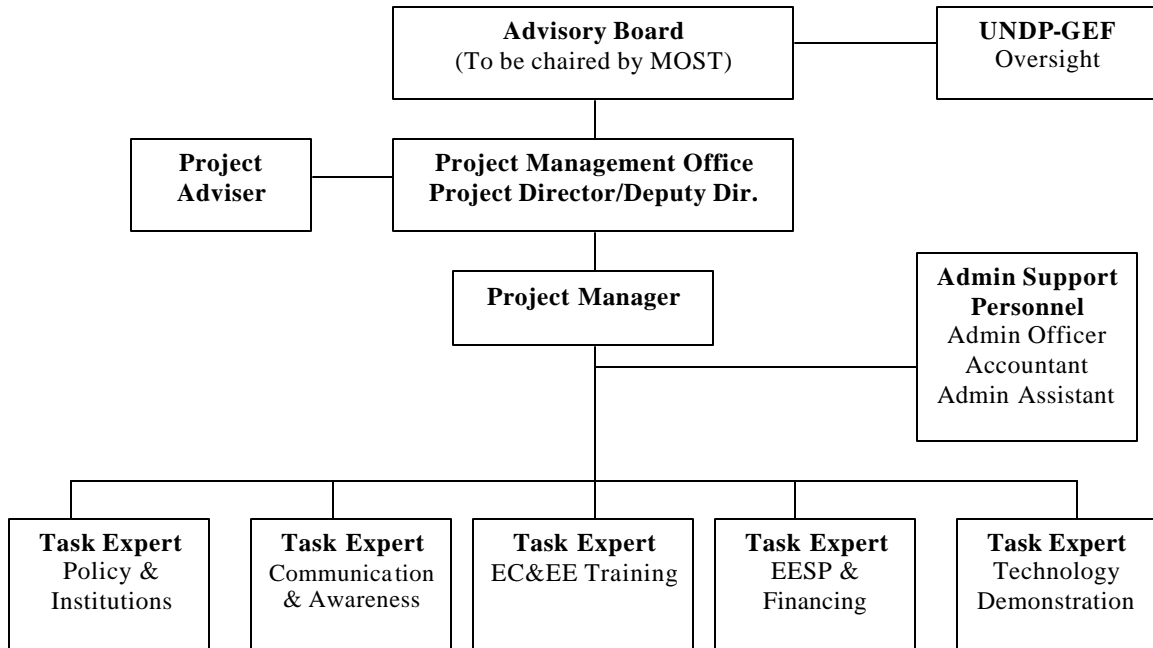
Agreed by Government: _____

Agreed by Implementing partner: _____

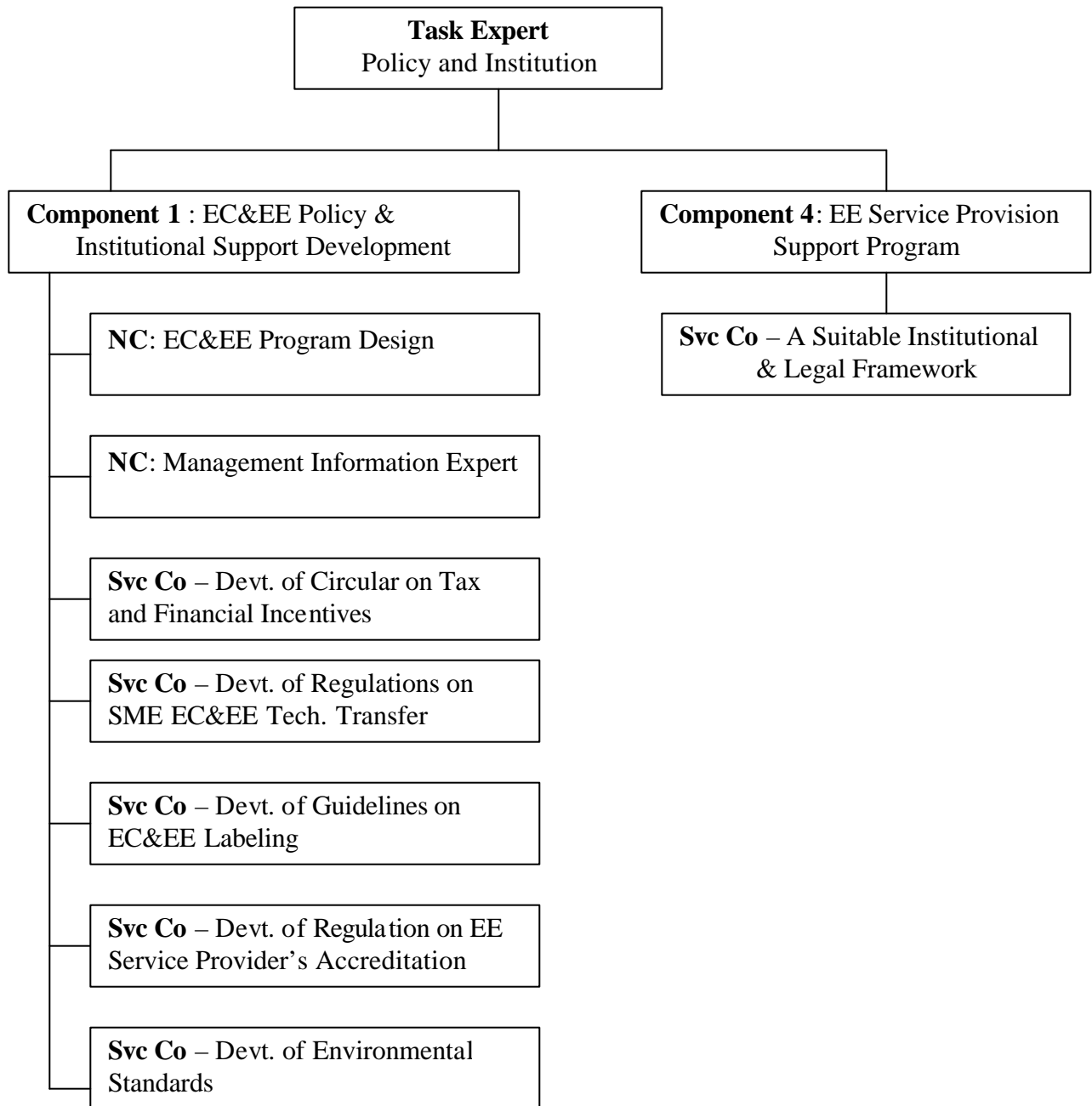
Agreed by (UNDP): _____

Annex 1

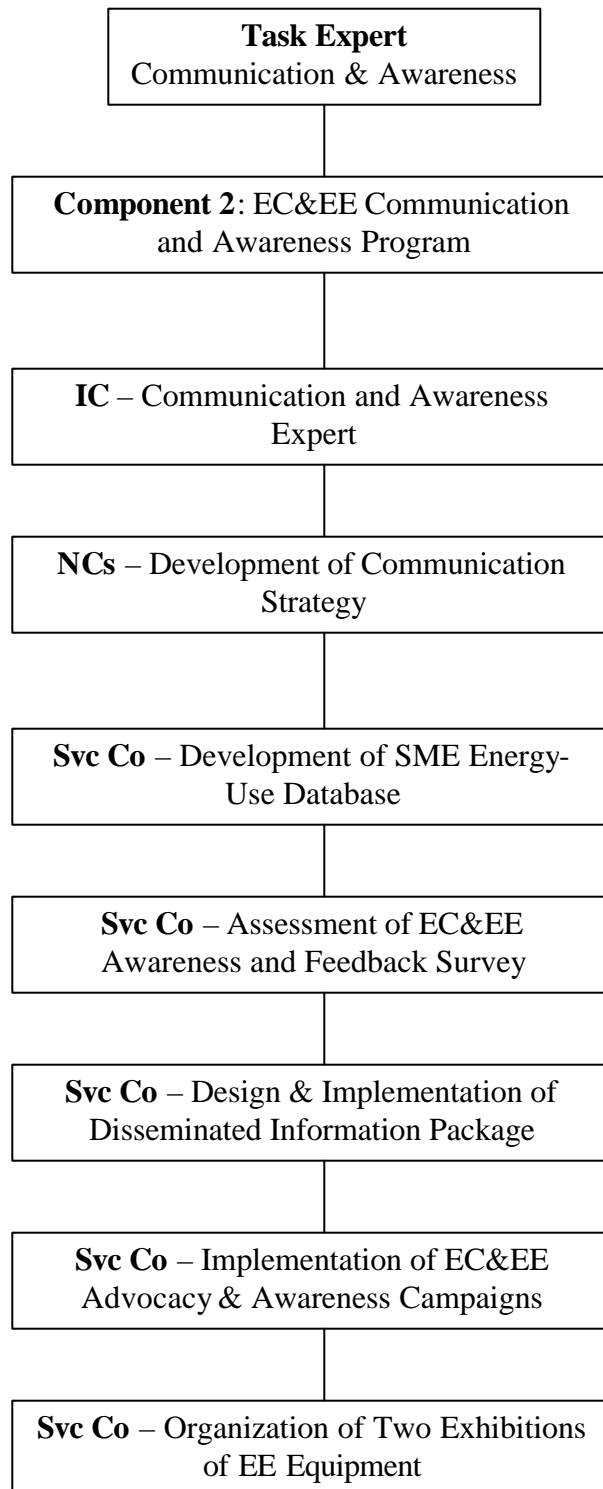
PECSME Management Arrangement



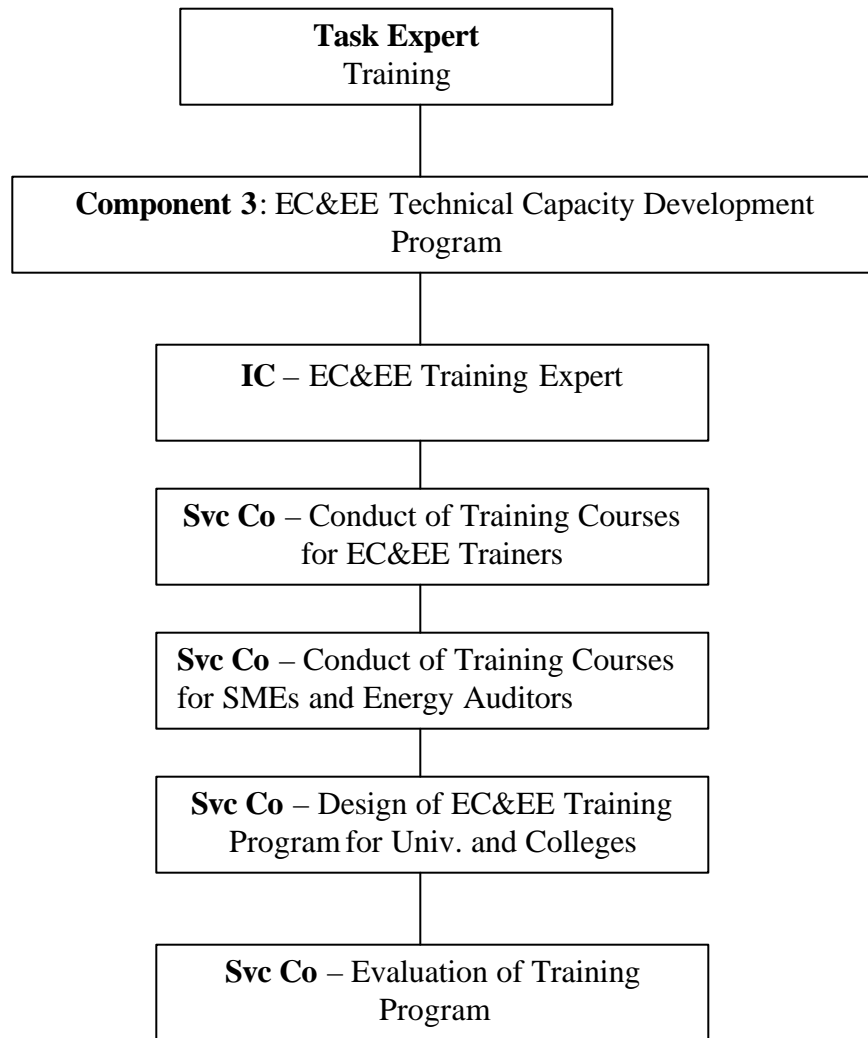
Management Arrangements for Component 1



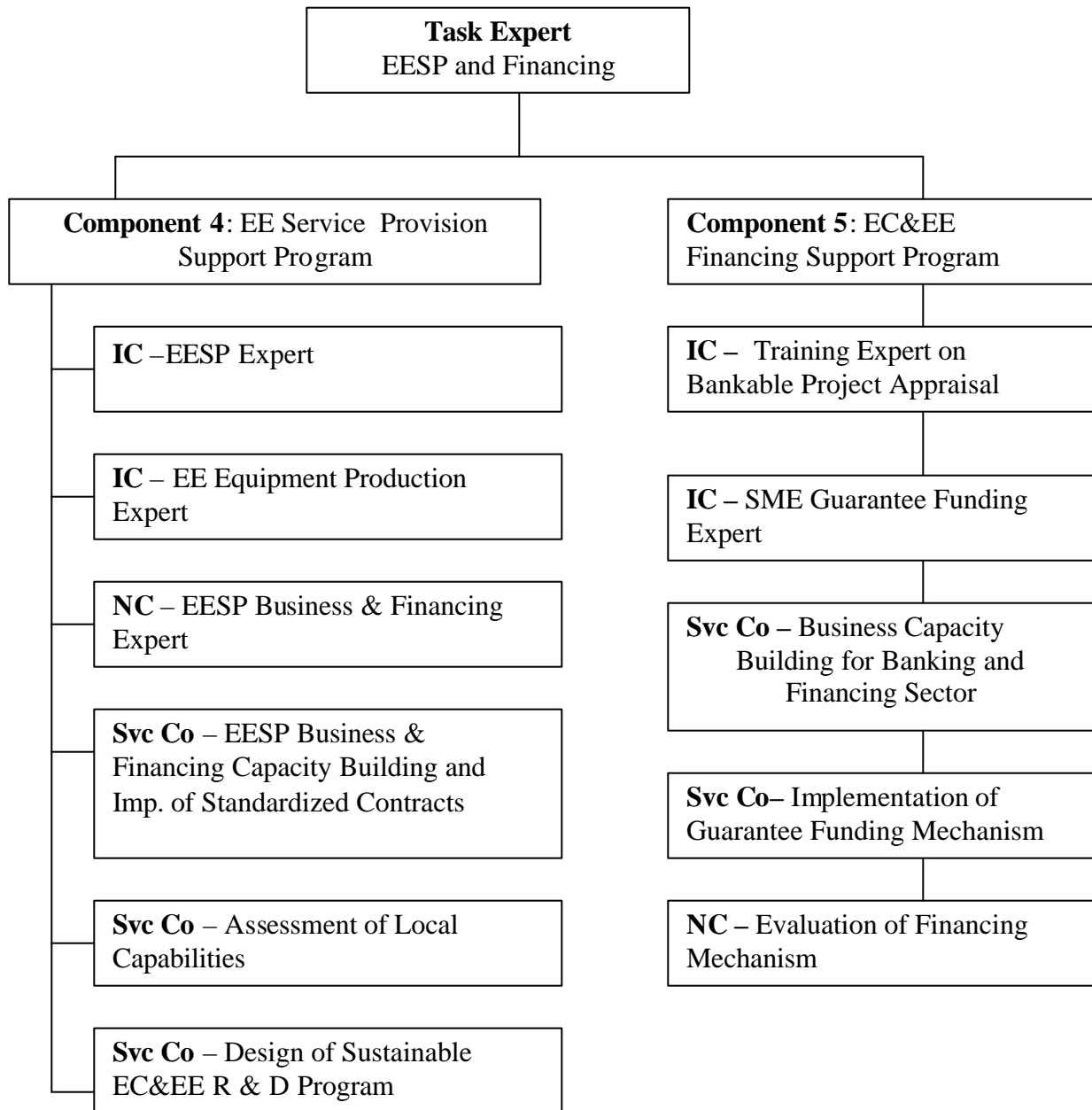
Management Arrangements for Component 2



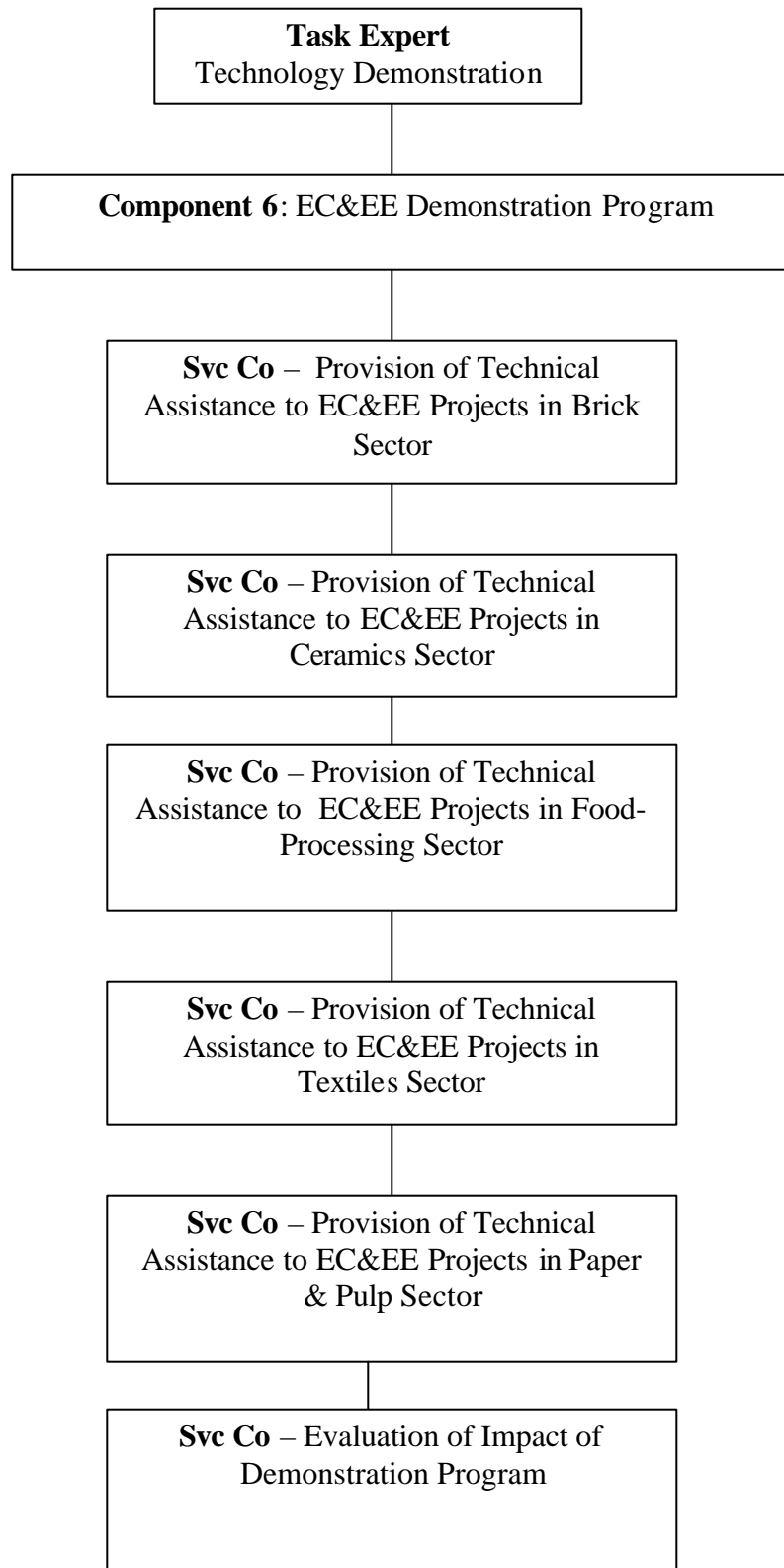
Management Arrangements for Component 3



Management Arrangements for Component 4



Management Arrangements for Component 6



Annex 2a

Terms of References of PMO Staff, International and National Experts and Sub-Contractors

Project Management Office:

1. Project Manager
2. Project Technical Adviser
3. Administrative Support
 - a. Administrative Officer
 - b. Accountant
 - c. Administrative Assistant
4. Task Expert – EC&EE Policy and Institutional Development
5. Task Expert – Training
6. Task Expert – Communication and Awareness
7. Task Expert – EESP and Financing
8. Task Expert – Technology Demonstration

Component 1: EC&EE Policy and Institutional Support Development Program

1. NCs – EC&EE and SME Development Program Design
2. NC – Management Information System Expert
3. Svc Co – Development of the Circular on Tax Incentive and Financial Incentives
4. Svc Co – Development of the Regulation on SME EC&EE Technology Transfer
5. Svc Co – Development of the Circular on Labeling
6. Svc Co – Regulations on EE Service Providers' Accreditation and Direction on Energy Consumption Reporting
7. Svc Co – Development of Environmental Standards

Component 2: EC&EE Communication and Awareness Program

1. IC – Communication and Awareness Expert
2. NCs – Development of Communication Strategy
3. Svc Co – Development of SME Energy-Use Database
4. Svc Co – Assessment of EC&EE Awareness and Feedback Survey
5. Svc Co – Design and Implementation of Disseminated Information Package
6. Svc Co – Implementation of EC&EE Advocacy & Awareness Campaigns
7. Svc Co – Organization of 2 Exhibition of EE Equipment

Component 3: EC&EE Technical Capacity Development Program

1. IC – EC&EE Training Expert
2. Svc Co – Conduct of Training Courses for EC&EE Trainers
3. Svc Co – Conduct of Training Courses for SMEs and for Energy Auditors
4. Svc Co - Design of Sustainable EC&EE Training Program for Universities and Colleges

5. Svc Co – Evaluation of Training Program

Component 4 – EE Services Provision Support Program

1. IC - EESP Expert
2. IC – EE Equipment Production Expert
3. NC – EESP Business and Financing Expert
4. Svc Co – Development of a Suitable Institutional and Legal Framework for EESP Activities
5. Svc Co - EESP Business & Financing Capacity Building and Implementation of Standardized Contracts to Deliver EESP Services
6. Svc Co – Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equipment Manufacturers
7. Svc Co – Design of a Sustainable EC&EE Research and Development Program

Component 5 – EC&EE Financing Program

1. IC – Training Expert on Bankable Project Appraisal
2. IC – SME Guarantee Funding Expert
3. NC – Evaluation of Financing Mechanism
4. Svc Co – Business Capacity Building for Banking and Finance Sector
5. Svc Co – Implementation of Guarantee Funding Mechanism

Component 6 – EC&EE Demonstration Program

1. Svc Co – Provision of Technical Assistance to EC&EE Projects in Brick Making Sector
2. Svc Co – Provision of Technical Assistance to EC&EE Projects in Ceramic s Sector
3. Svc Co – Provision of Technical Assistance to EC&EE Projects in Paper-Pulp Sector
4. Svc Co – Provision of Technical Assistance to EC&EE Projects in Textile s Sector
5. Svc Co – Provision of Technical Assistance to EC&EE Projects in Food-Processing Sector
6. Svc Co – Evaluation of Impact of Demonstration Program

TERMS OF REFERENCE

<u>Title :</u>	National Project Director (NPD)
<u>Duty Station:</u>	Hanoi, Vietnam
<u>Duration of Assignment:</u>	5 years (part-time)

Duties and Responsibilities

The NPD is the focal point for responsibility and accountability in the MOST for PECSME project. The NPD will be the Director of the Department for Science and Technology in All Economic Sectors within MOST. The NPD's function is to supervise the National Project Manager (NPM). Thus the NPD will work on part-time only. The specific tasks of the NPD are as follows:

1. Assumes overall responsibility for the successful execution and implementation of the project toward achieving project objectives, and accountability to UNDP and the Government for the proper and effective use of the project resources;
2. Serves as focal point for coordination of the project with MOST, UNDP and other Government agencies;
3. Ensures that all Government inputs committed to the project are made available;
4. Ensure the compliance of co-financiers with project action plans;
5. Selects and arranges for the appointment of the NPM, in consultation with UNDP;
6. Supervises the work of the NPM and ensure NPM is empowered to effectively manage the project, and the other project staff to perform their duties effectively;
7. Ensures that required project work plans are prepared and updated, in consultation with and with agreement by UNDP, and distributed to MPI and other relevant agencies;
8. Undertakes or arranges using the agreed recruitment system, for the recruitment of project professional and support staff charged against the UNDP budget, if any;
9. Opens and operates as separate project bank account in the name of the MOST, and serve as Approving Officer for recruitment, procurement, training, sub-contracting and financial operations of the project; and
10. Represents the MOST and the project at meetings of the project parties.

TERMS OF REFERENCE

<u>Title:</u>	National Project Manager (NPM)
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of assignment:</u>	60 working months (full-time)
<u>Direct Supervisor:</u>	Project Director

Responsibilities and Duties:

The primary task of the **Project Manager** is to plan, organize and implement PECSME. He/she will be responsible for the management of input mobilization and day-to-day project operations including timely resolution of issues, problems or bottlenecks. He/she will report directly to the Project Director, representing the MOST. He/she will manage the technical and administrative staff under the PMO with multidisciplinary capabilities in EC&EE policy and institutional support development, communication and awareness; technical capacity development; energy efficiency services provision support; financing; and demonstration. The specific tasks of the Project Manager are as follows:

1. Assumes operational management of the project in accordance with the project document and policies and procedures for nationally executed projects;
2. Prepares and updates project work plans, and submits these to NPD and UNDP-Hanoi office for clearance;
3. Ensures that all agreements with other implementing partners are prepared, negotiated and agreed;
4. Initiates and administers the mobilization of the project inputs under the responsibility of the MOST;
5. Assumes direct responsibility for managing the project budget on behalf of the NPD, ensuring that:
 - a. Project funds are made available when needed, and are disbursed properly,
 - b. Accounting records and supporting documents are kept,
 - c. Required financial reports are prepared,
 - d. Financial operations are transparent and financial procedures/regulations for NEX project are applied,
 - e. NPM is ready to stand up audit at any time.
6. Assumes direct responsibility for managing the physical resources (e.g. vehicles, office, equipment, furniture, stationary...) provided to the project by UNDP;
7. Supervises the project staff and local or international experts/consultants working for the project;
8. Prepares the Annual Project Reports, the Project Implementation Report, the Quarterly Progress Reports and the Final Project Reports as scheduled, and organizes the Tripartite Project Review and Terminal Tripartite Review as well as evaluation missions in coordination with UNDP; and

9. Reports regularly to and keeps the NPD up-to-date on progress and problems.

Deliverables

Based on the aforementioned scope of work, the Project Manager has the following specific deliverables, to wit:

1. Regular reporting to MOST and Policy Advisory Board on the status of the project activities;
2. Preparation of project monitoring reports to include: inception report, quarterly and annual project reports, project implementation review, periodic thematic reports, technical reports, project terminal report, and others as required by the UNDP.

Qualifications:

1. Bachelors Degree in Engineering, Business Administration, Development Economics or other relevant field;
2. At least 15-year working experience in the energy sector, especially in research and development management;
3. At least 10-year working experience in energy efficiency project management/ coordination, preferably with international projects;
4. Track record of, or proven, senior management reporting skill;
5. Proven track record of experience in successful contract management;
6. High self-motivated, with good leadership skills, capable of planning, initiating and managing multi-disciplinary activities within the context of a multi-donor international project;
7. Good understanding of Vietnam's energy policies and administrative structures;
8. Good working relationship with energy institutions, government agencies and other organizations related to energy conservation and energy efficiency program and SME development;
9. Good knowledge of the industrial SME sector;
10. Familiar with technical assistance projects and GEF/UNDP projects in Vietnam;
11. High communication as well as interpersonal and team building skills;
12. Good English communication skills, both written and verbal.

TERMS OF REFERENCE

<u>Title :</u>	Administrative Officer
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time)
<u>Direct Supervisor :</u>	Project Manager

Duties and Responsibilities

The Administrative Officer shall be responsible in providing administrative support to the operations of PMO, supervising administrative staff and ensuring the smooth functioning of administrative systems under the project. Specifically, the Administrative Officer shall be responsible for the following tasks:

1. Establishes the administrative system and procedures consistent with UNDP's national execution mode, in the form of a Manual, for the guidance of project staff, consultants and subcontractors;
2. Establishes a record of management system for the project both in paper and electronic;
3. Maintains files of all personnel, consultants and subcontractors actively engaged in the project;
4. Prepares and arranges travel plans and procurement plans for the project;
5. Supervises the procurement of equipment, supplies and sundries as may be needed in the Project, in accordance with UNDP guidelines;
6. Maintains an updated inventory of all supplies and equipment and prepares guidelines for the proper use and maintenance of office equipment and properties;
7. Supervises the overall administrative activities related to project implementation; and
- 8. Prepares annual and quarterly work plan of activities for approval by PMO.**

He/she shall also provide the following:

1. Assistance to the technical operations of PMO;
2. Monitoring of project activities and outputs;
3. Secretariat support to workshops, seminars and trainings; and
4. Other technical inputs in the various project activities as may be applicable to his/her academic background.

Qualification and Experience

1. Bachelors Degree in public administration, business management, social sciences, and economics, preferably with Masters Degree in business management or any other relevant field;
2. At least 5 years experience as business manager or office administrator;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point; and
6. Good interpersonal skills.

TERMS OF REFERENCE

<u>Title :</u>	Project Accountant
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time)
<u>Direct Supervisor :</u>	National Project Manager

Duties and Responsibilities

The Project accountant shall be responsible for the accurate and appropriate recording of disbursements of Project funds; maintaining the set of books required according to UNDP accounting procedures, classifying and summarizing financial transactions of the project and the generation of required financial reports. He/She will also be responsible in updating all other books of accounts such as subsidiary ledgers and special registers. Specifically, he/she will be responsible for the following tasks:

1. Installation and implementation of a GEF financial system that records transactions that utilize GEF Funds in accordance with UNDP's existing guidelines on national execution;
2. Orientation of staff on the use of the project's financial systems and procedures;
3. Proper recording of financial transactions and submit a regular report on the project's financial status;
4. Certifying correctness of journals, vouchers, bills, statement of accounts, trial balance, budget estimates and other financial statement and records;
5. Preparation of certification of the availability of funds and/or allotment of expenses, vouchers and requisition for supplies, materials, etc.;
6. Preparation of annual and quarterly budgets including the necessary budget revisions based on the corresponding line-item-budgets approved by MOST;
7. Establishment of a project account and ensure appropriateness and proper record keeping of transactions;
8. Supervision of the preparation of payroll and general voucher of salaries, and other documentary requirements for disbursements;
9. Preparation of updated reports on disbursements made by the project, and advise the Project Team on the overall financial status of the project;
10. Preparation of a system of accounts that records all the in-cash and in-kind contributions of co-financing entities to the Project.

Qualification and Experience

1. Bachelors Degree in accounting or financing, preferably Masters Degree in the same or any other relevant field;
2. At least 5 years experience as accountant, preferably with UNDP/GEF project;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. Knowledge of the Atlas or any systems similar to PeopleSoft;
6. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point; and
7. Good interpersonal skills.

TERMS OF REFERENCE

<u>Title :</u>	Administrative Assistant
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time)
<u>Direct Supervisor:</u>	Project Administrative Officer

Duties and Responsibilities

The Administrative Assistant shall be responsible for providing administrative support to the operations of the PMO to ensure the smooth functioning of administrative systems under the Project. His/her specific responsibilities are as follows:

1. Assists the Administrative Officer in establishing the administrative systems and procedures consistent with UNDP's national execution mode, in the form of a Manual, for the guidance of project staff, consultants and subcontractors;
2. Assists the Administrative Officer in carrying out various administrative activities; reviews and controls procurement processes;
3. Assists in developing and maintaining a records filing and retrieval system;
4. Maintains an active file of all personnel, consultants and subcontractors under the project;
5. Prepares and consolidates the travel plan, and procurement plan for the project;
6. Prepares procurement requirements of the project, in accordance with UNDP guidelines;
7. Prepares and maintains an updated inventory of all supplies and equipment;
8. Makes arrangements for the logistical requirements in training, workshops, and other Project activities; and
9. Assists the project staff, consultants and other project players in various administrative matters, whenever necessary.

Qualification and Experience

1. Bachelors Degree in business management or any relevant field;
2. At least two years experience as administrative staff in any developmental project;
3. Knowledgeable in modern office administration specifically in management of office documents and papers;
4. Knowledgeable in inventory control and procurement procedures;
5. With satisfactory skills on the use of office software packages such as MS Word and MS Excel; and,
6. Good interpersonal and communication skills.

TERMS OF REFERENCE

<u>Title :</u>	Project Technical Adviser
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time).
<u>Direct Supervisor :</u>	Project Director

Duties and Responsibilities

The **Project Technical Adviser** will be responsible in providing advice to the National Project Director and National Project Manager, on issues related to project execution including participatory design, legal and regulatory frameworks, policy development, technical and institutional capacity development. The Project Technical Adviser will respond to the needs for policy and programming advice related to all PECSME components as follows:

- Component 1: EC&EE Policy and Institutional Support Development Program
- Component 2: EC&EE Communications and Awareness Program
- Component 3: EC&EE Technical Capacity Development Program
- Component 4: Energy Efficiency Services Provision Support Program
- Component 5: EC&EE Financing Support Program
- Component 6: EC&EE Demonstration Program

The specific tasks of the Project Technical Adviser are as follows:

1. Provide strategic policy advice in the areas of programming, technical and financial planning and management;
2. Identify barriers and constraints in project implementation and recommend more effective course of action;
3. Appraise and develop efforts to mainstream PECSME components with other energy efficiency activities in the private and public sector;
4. Identify, assess and provide recommendations on how to integrate international programs/projects on EC&EE and DSM to PECSME;
5. Identify, assess and recommend strategic partnerships with financing institutions, including bilateral and multilateral institutions, as well as centers of excellence in both developing and developed countries bridging the public and private sectors to leverage resources;
6. Finalize job description for PMO staff, national and international consultants as well as subcontractors;
7. Assist NPD/PMO to prepare annual work plans and detailed TOR for all activities; and
8. Assist PMO to prepare all reports of the Monitoring and Evaluation Plan.

Deliverables

Based on the aforementioned scope of work, the Project Adviser has the following specific deliverables, to wit:

1. Review of the quarterly and annual technical, administrative and financial reports and recommend strategies to improve the PECSME implementation. Provide inputs related to:
 - Lessons learned from other EC&EE projects related to SME sector in the world (particularly in developing countries);

- Monitoring and evaluation of project success indicators;
 - Adaptive management;
 - Leveraging of resources for sustainable EC&EE programs;
 - Project risk management.
2. Upon the completion of the assignment, the PMO Project Technical Adviser shall submit a synthesis report highlighting the lessons learned and next steps to sustain widespread utilization of Ec&EE systems in the country.

Qualification and Experience

1. Master Degree in business administration, economics, public administration, engineering; preferably with PhD. Degree in the same or any other relevant field;
2. At least 10 years of experience in the field of energy efficiency including specialized experience in energy efficient lighting, policy development, and institutional capacity building;
3. Excellent communication skills, full proficiency in English both written and verbal. Skilled presenter of ideas in one on one situations and in symposia;
4. Experienced in initiating project development, implementation, monitoring and evaluation;
5. Proven experience in resource mobilization from governments, non-government organizations and the private sector;
6. Multidisciplinary professional experience preferred; and
7. With good appreciation of, and strong links with relevant international organizations.

TERMS OF REFERENCE

<u>Title :</u>	Task Expert on Policy and Institutions
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time)
<u>Direct Supervisor :</u>	National Project Manager

Duties and Responsibilities

The **Policy and Institutional Expert** shall be responsible in providing technical inputs, as well as administrative, to the PMO on various activities of the project specifically on the aspects of policies and institutional support. He/she will coordinate logistics, monitor the conduct of the activities according to specified/agreed timetable, evaluate the outputs and outcomes of the activities, and provide recommendations to address the activity level for the following components of PECSME:

1. EC&EE Policy and Institutional Support Development Program (Component 1) and
2. Development of a Suitable Institutional and Legal Framework for EESP Activities (Component 4).

He/she shall assist the Project Manager in formulating strategies towards the institutionalization and long-term sustainability of the above-mentioned PECSME Project components. He/she shall also be responsible for ensuring adherence to the prescribed management criteria (e.g., approved terms of reference, contractual obligations, quality control, etc) is followed in the execution of the activities under the above-cited project components. He/she will also be responsible in the implementation, monitoring and evaluation of these activities according to prescribed procedures. Specific activities include the following:

1. Regular reporting to Project Manager on the status of project activities vis-à-vis target outputs;
2. Synthesis of the activities and outputs of consultants and subcontractors involved in the said Project Components;
3. Provision of assistance in management of project risks;
4. Provision of technical inputs during the conduct of annual advisory group meetings and the quarterly project meetings and in the preparation of quarterly financial/project progress reports; and,
5. Provision of technical inputs in the preparation of annual project report/project implementation review (APR/PIR) reports and others as required by the UNDP.

The Expert will also undertake various administrative activities that may be deemed necessary in the expedient performance of his/her duties and responsibilities under the PECSME Project.

Deliverables

Based on the aforementioned scope of work, the Policy and Institutional Expert has the following specific deliverables, to wit:

1. Monthly Technical Status Report for all activities of Components 1 and the Activity of Development of a Suitable Institutional and Legal Framework for EESP Activities (Component 4) of PECSME to be submitted to the Project Manager. Said report must also highlight the correlations of the outputs of the said components with respect to the PECSME objectives, goals, and key success indicators.

2. Duly signed Monthly Accomplishment Report to be submitted to Project Manager. The Report must highlight the relevance and contribution of the position to the overall goals and objectives of the PMO as support group to PECSME.

Qualification and Experience

1. Bachelors Degree in engineering, public administration, business management, environmental science and economics, preferably with Masters Degree in the same or any other relevant field;
2. At least 5 years experience in energy policy making and planning (including environmental management) and energy efficient technologies, particularly efficient lighting systems;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. With good appreciation of and strong links with relevant sectors in the energy conservation and SME industrial sector; and
6. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

TERMS OF REFERENCE

<u>Title :</u>	Task Expert on Communication and Awareness
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months
<u>Direct Supervisor :</u>	Project Manager

Duties and Responsibilities

The Communication and Awareness Expert shall be responsible in providing technical inputs as well as administrative to the PMO on various activities of the project specifically on the aspects of information and communications and awareness. He/she will coordinate logistics, monitor the conduct of the activities according to specified/agreed timetable, evaluate the outputs and outcomes of the activities, and provide recommendations to address the activity level for the EC&EE Communication and Awareness Program (Component 2).

He/she shall assist the Project Manager in formulating strategies towards the institutionalization and long-term sustainability of the above-mentioned PECSME Project component. He or she shall also be responsible for adherence to the prescribed management criteria (e.g., approved terms of reference, contractual obligations, quality control, etc) are followed in the execution of the activities under the above-cited project components. He/she will also be responsible in the implementation, monitoring and evaluation of these activities according to the prescribed procedures. Specific activities include the following:

1. Regular reporting to Project Manager on the status of project activities vis-à-vis target outputs;
2. Synthesis of the activities and outputs of consultants and subcontractors involved in the said Project Component;
3. Provision of assistance in managing project risk;
4. Provision of technical inputs during the conduct of annual advisory group meetings and the quarterly PMO meetings and in the preparation of quarterly financial/project progress reports; and,
5. Provision of technical inputs in the preparation of annual project reports (APR) and others as required by the UNDP.
6. Preparation of a system of measuring/tracking impacts of PECSME activities carried out under the project.

The Expert will also undertake various administrative activities that may be deemed necessary in the expedient performance of his/her duties and responsibilities under the PECSME Project.

Deliverables

Based on the aforementioned scope of work, the PMO Expert has the following specific deliverables, to wit:

1. Monthly Technical Status Report for Component 2 of PECSME to be submitted to the Project Manager. Said report must also highlight the correlations of the outputs of the said components with respect to the PECSME objectives, goals, and key success indicators.

2. Duly signed Monthly Accomplishment Report to be submitted to Project Manager. The Report must highlight the relevance and contribution of the position to the overall goals and objectives of the PMO as support group to PECSME.
3. Report on the impacts of component 2's activities carried out under PECSME.

Qualification and Experience

1. Bachelors Degree in social sciences, public administration, communications or engineering; preferably with Masters Degree in the same or any other relevant field;
2. At least 5 years experience in information, education and communication programs preferably in the energy sector;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. With good appreciation of and strong links with government agencies, local government agencies, NGOs, mass organizations, academe and professional organizations involved in the energy sector and SME sector; and
6. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

TERMS OF REFERENCE

<u>Title :</u>	Task Expert on Training
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time)
<u>Direct Supervisor :</u>	National Project Manager

Duties and Responsibilities

The Training Expert shall be responsible in providing technical inputs, as well as administrative, to the PMO on various activities of the project specifically on the aspects of training. He/she will coordinate logistics, monitor the conduct of the activities according to specified/agreed timetable, evaluate the outputs and outcomes of the activities, and provide recommendations to address the activity level for the EC&EE Technical Capacity Development Program (Component 3).

He/She shall assist the Project Manager in formulating strategies towards the institutionalization and long-term sustainability of the above-mentioned PECSME Project component. He/She shall also be responsible for ensuring adherence to the prescribed management criteria (e.g., approved terms of reference, contractual obligations, quality control, etc) is followed in the execution of the activities under the above-cited project components. He/she will also be responsible in the implementation, monitoring and evaluation of these activities according to the prescribed procedures. Specific activities include the following:

1. Regular reporting to Project Manager on the status of project activities vis-à-vis target outputs;
2. Synthesis of the activities and outputs of consultants and subcontractors involved in the said Project Components;
3. Provision of assistance in the management of project risk;
4. Provision of technical inputs during the conduct of annual advisory group meetings and the quarterly project meetings and in the preparation of quarterly financial/project progress reports; and,
5. Provision of technical inputs in the preparation of annual project reports/project implementation review (APR/PIR) reports and others as required by the UNDP.

The Expert will also undertake various administrative activities that may be deemed necessary in the expedient performance of his/her duties and responsibilities under the PECSME Project.

Deliverables

Based on the aforementioned scope of work, the Training Expert has the following specific deliverables, to wit:

1. Monthly Technical Status Report for Component 3 of PECSME to be submitted to the Project Manager. Said report must also highlight the correlations of the outputs of the said component with respect to the PECSME objectives, goals, and key success indicators.
2. Duly signed Monthly Accomplishment Report to be submitted to Project Manager. The Report must highlight the relevance and contribution of the position to the overall goals and objectives of the PMO as support group to PECSME.

Qualification and Experience

1. Bachelors Degree in engineering, public administration, business management, and economics, preferably with Masters Degree in the same or any other relevant field;
2. At least 5 years experience in conducting training courses on EC&EE technology;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. With good appreciation of and strong links with the SMEs and ECCs; and
6. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

TERMS OF REFERENCE

<u>Title :</u>	Task Expert on EESP and Financing
<u>Duty Station:</u>	Hanoi with national travel
<u>Duration of Assignment:</u>	60 working-months (full-time)
<u>Direct Supervisor :</u>	National Project Director

Duties and Responsibilities

The Financing and Business Capacity Building Expert shall be responsible in providing technical inputs as well as administrative to the PMO on various activities of the project specifically on the aspect of EC&EE financing and business capacity building for EESPs. He/she will coordinate logistics, monitor the conduct of the activities according to specified/agreed timetable, evaluate the outputs and outcomes of the activities, and provide recommendations for the EE Services Provision Support Program and EC&EE Financing Support Program (Component 4 and 5).

He/she shall assist the Project Manager in formulating strategies towards the institutionalization and long-term sustainability of the above-mentioned PECSME Project component. He or she shall also be responsible for adherence to the prescribed management criteria (e.g., approved terms of reference, contractual obligations, quality control, etc) are followed in the execution of the activities under the above-cited project components. He/she will also be responsible in the implementation, monitoring and evaluation of these activities according to the prescribed procedures. Specific activities include the following:

1. Regular reporting to Project Manager on the status of project activities vis-à-vis target outputs;
2. Synthesis of the activities and outputs of consultants and subcontractors involved in the said Project Components;
3. Provision of assistance in managing project risk;
4. Provision of technical inputs during the conduct of annual advisory group meetings and the quarterly project meetings and in the preparation of quarterly financial/project progress reports;
5. Provision of technical inputs in the preparation of annual project reports (APR) and others as required by the UNDP;
6. Preparation of a system of measuring/tracking impacts of PECSME activities carried out under the project.

The Expert will also undertake various administrative activities that may be deemed necessary in the expedient performance of his/her duties and responsibilities under the PECSME Project.

Qualification and Experience

1. Bachelors Degree in financing and business, preferably with master's degree in the same or any other relevant fields;
2. At least 5 years experience in the field of energy efficiency with specialized experience in lighting energy audits and energy efficient lighting;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

TERMS OF REFERENCE

<u>Title :</u>	Task Expert on Technology Demonstration
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	60 working months (full-time)
<u>Direct Supervisor :</u>	National Project Manager

Duties and Responsibilities

The EC&EE Technology Demonstration Expert shall be responsible in providing technical inputs as well as administrative to the PMO on various activities of the project specifically on the aspect of technology demonstration. He/she will coordinate logistics, monitor the conduct of the activities according to specified/agreed timetable, evaluate the outputs and outcomes of the activities, and provide recommendations to address the activity level for the EC&EE Demonstration Program (Component 6).

He/she shall assist the Project Manager in formulating strategies towards the institutionalization and long-term sustainability of the above-mentioned PECSME Project component. He or she shall also be responsible for adherence to the prescribed management criteria (e.g., approved terms of reference, contractual obligations, quality control, etc) are followed in the execution of the activities under the above-cited project components. He/she will also be responsible in the implementation, monitoring and evaluation of these activities according to the prescribed procedures. Specific activities include the following:

1. Regular reporting to Project Manager on the status of project activities vis-à-vis target outputs;
2. Synthesis of the activities and outputs of consultants and subcontractors involved in the said Project Components;
3. Provision of assistance in managing project risk;
4. Provision of technical inputs during the conduct of annual advisory group meetings and the quarterly project meetings and in the preparation of quarterly financial/project progress reports; and,
5. Provision of technical inputs in the preparation of annual project reports (APR) and others as required by the UNDP;
6. Preparation of a system of measuring/tracking impacts of PECSME activities carried out under the project.

The Expert will also undertake various administrative activities that may be deemed necessary in the expedient performance of his/her duties and responsibilities under the PECSME Project.

Deliverables

Based on the aforementioned scope of work, the Technology Demonstration Expert has the following specific deliverables, to wit:

1. Monthly Technical Status Report for Component 6 of PECSME to be submitted to the Project Manager. Said report must also highlight the correlations of the outputs of the said components with respect to the PECSME objectives, goals, and key success indicators;

2. Duly signed Monthly Accomplishment Report to be submitted to Project Manager. The Report must highlight the relevance and contribution of the position to the overall goals and objectives of the PMO as support group to PECSME;
3. Report on the impacts of Component 6's activities carried out under PECSME.

Qualification and Experience

1. Master Degree in engineering and business management, preferably with Ph.D degree in the same or any other relevant fields;
2. At least 5 years experience in energy audits or industrial energy efficient program;
3. Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
4. Excellent English communication skills, both written and verbal;
5. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

TERMS OF REFERENCE

<u>Title :</u>	Management Information Expert
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	15 working months spread over a period of 5 years of PECSME implementation
<u>Direct Supervisor :</u>	Task Expert for Communication and Awareness

Duties and Responsibilities

The Management Information Expert shall be responsible for the management and maintenance of Project's Information Management System in connection with other EC&EE coordinating agencies such as ECCs and DOSTs in provinces. He or she will coordinate logistics, monitoring the conduct of the activities according to specified/agreed timetable and provide recommendations to better the collection of information/data/reports from project activities and other project partners. Specifically, he/she will be responsible to undertake the following tasks:

1. Designs and maintains the Project Information Management software in connection with ECCs, DOSTS and other project partners;
2. Assists/train ECCs and DOSTs in designing and maintaining their management information system;
3. Coordinates data management and collection of project information from different PECSME activities;
4. Manages and maintains PECSME database and website and orients staff on their use; and
5. Reports regularly to the Project Manager on the status of project activities vis-à-vis target outputs.
6. Assist in the design of information dissemination network of Component 2 of PECSME.

Qualification and Experience

1. Bachelors Degree in information technology, computer management or computer engineering;
2. At least 5 years experience in information technology and/or computer systems and software management, preferably with good knowledge of any Project Management/Information Systems software;
3. Excellent English communication skills, both written and verbal;
4. With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

TERMS OF REFERENCE

<u>Title :</u>	EC&EE Program Design Expert (2 persons)
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	8 working months (for each) starting from 1 st Quarter of 4 years of PECSME implementation
<u>Direct Supervisor :</u>	Task Expert for Communication and Awareness

Duties and Responsibilities

The EC&EE Program Design Experts will provide technical assistance for SMEPC and SMEDD to incorporate EC&EE program into the National SME Development Support Program. He/she will be responsible to undertake the following tasks:

1. Review the existing programs for supporting SME development in the country and identify the ways to embed the EC&EE elements into the national SME development program;
2. Design a suitable EC&EE program for SME sector;
3. Assist/facilitate SMEPC and SMEDD to incorporate suitable EC&EE elements into the SMEPC and SMEDD and get MPI's approval.

Deliverables

1. Review of existing program supporting SME development program;
2. Documentation of EC&EE program incorporated into National SME Support Program.

Qualification and Experience

3. Advanced Degree in EC&EE, economics or any field related to energy efficiency policy;
4. At least 5 years experience in EC&EE program design related to SME sector; and
5. Excellent English communication skills, both written and verbal.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Development of Tax Incentives and Financial Incentives
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	Twelve (12) months starting 1 st Quarter of Year 2 of PECSME Implementation.
<u>Direct Supervisor</u> :	Task Expert on Policy and Institutions

Purpose of Sub-Contract

The purpose of the **Sub-contract on Development of Tax Incentives and Financial Incentives** is to develop a Circular on Tax Incentives and Financial Incentives to promote EC&EE investment in SMEs. The circular shall be submitted to MOF for approval by the end of Year 2 as guidance of implementation of the EC&EE Decree enacted in September 3, 2003.

Scope of Work

1. Review experiences and lessons learned from supporting SMEs in EC&EE investment in other countries, in particular ASEAN countries;
2. Review and assess all existing tax incentives and financial incentives related to SME and EC&EE in the country to identify gaps;
3. Develop the appropriate tax incentives and financial incentives for promoting EC&EE investments in SMEs;
4. Organize a workshop to gather comments for the drafted circular from relevant state agencies;
5. Finalize the proposal and submit it to MOF for approval.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee;
 - b. Progress report – Two months after submission of Inception Report and every three months thereafter.
2. A report on the review of foreign experiences and the existing tax incentives and financial incentives for promoting EC&EE investments and recommendations on development of a circular on tax incentives and financial incentives for supporting EC&EE investments in industrial sector;
3. The final proposal on tax incentives and financial incentives. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the financial sector and the process of formulating policies and guidelines in the EC&EE issue. The team must also be composed of senior experts with at least a master degree in finance, Bachelor of Laws, or related fields. Must have previous experience(s) in developing financial policies for SME activities

TERMS OF REFERENCE

<u>Subcontract Title:</u>	Development of a Regulation on SME EC&EE Technology Transfer
<u>Duty Station:</u>	Hanoi with national travel as required.
<u>Duration:</u>	Twelve (12) months starting 1 st Quarter of Year 2 of PECSME Implementation.
<u>Direct Supervisor:</u>	Task Expert on Policy and Institutions

Purpose of Sub-Contractor

The purpose of the **Sub-contractor for the Development of a Regulation on SME EC&EE Technology Transfer** is to assist MOST to formulate a regulation for effective implementation and promotion of EC&EE technology transfer in the country.

Scope of Work

1. Review experiences and lessons learned from promoting EC&EE technology transfer in foreign countries;
2. Review of the existing policies for support EC&EE technology transfer in the country;
3. Work with a relevant department under MOST in developing a regulation for promoting EC&EE technology transfer in industrial sector in the country; and
4. Organize a workshop with relevant government agencies.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee;
 - b. Progress report – Two months after submission of Inception Report and every three months thereafter.
2. A report on the review of lessons learned from other countries and the existing policies for support EC&EE technology transfer in Vietnam; and
3. Draft a regulation for support EC&EE technology transfer. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the development of EC&EE technology transfer policy in Vietnam. The team must also be composed of senior experts with at least an education degree in Engineering, Bachelor of Laws, Public Administration, Business Management, or related fields. Must have previous experience(s) in developing policies and institutional frameworks.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Development of Guidelines on EC&EE labeling
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	12 months starting 1 st Quarter of Year 2 of PECSME Implementation.
<u>Direct Supervisor</u> :	Task Expert on Policy and Institutions

Purpose of Sub-Contract

The purpose of this **Sub-contractor** is to assist MOI in the formulation of **Guidelines on EC&EE labeling**.

Scope of Work

1. Review and assess the impacts of EC&EE labeling of EC&EE equipment in other countries to manufacturers and to the consumers. Determine the benefits derived from EC&EE labeling and the barriers/constraints in its implementation;
2. Formulate guidelines on labeling of EC&EE products;
3. Organize workshops with relevant state agencies; and
4. Work with MOI in facilitating the approvals of guidelines through consultations with stakeholders.

Deliverables

1. A report on the review of foreign experiences on EC&EE labeling program
2. Draft Guidelines on EC&EE labeling. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the EC&EE in industry sector and have previous experience(s) in developing policies/guidelines, institutional frameworks and energy efficiency standards. The team must also be composed of individuals with at least a Bachelors Degree in Engineering, Law, Public Administration, Business Management, or any other relevant field.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Development of a Regulation on EE Service Providers’ Accreditation, a Direction on Energy Consumption Reporting
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	24 months starting 1 st Quarter of Year 2 of PECSME Implementation.
<u>Direct Supervisor :</u>	Task Expert on Policy and Institutions

Purpose of Sub-Contract

The purpose of this **Sub-contractor** is to assist MOI in the formulation of a **Regulation on EE Service Providers’ Accreditation and a Direction on Energy Consumption Reporting.**

Scope of Work

1. Review and assess the impact of regulation on EE Service Providers’ Accreditation in other countries;
2. Review lessons learned from the systems of energy consumption reporting in other countries;
3. In close cooperation with MOI formulate a regulation on EE service providers’ accreditation;
4. In close cooperation with MOI formulate a direction on energy consumption reporting;
5. Organize workshops with relevant state agencies; and
6. Work with MOI in facilitating the approvals of the regulation and direction through consultations with stakeholders.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report on the 3rd month and 5th month from issuance of Notice to Proceed.
2. Draft final reports, including the Regulation and Direction. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the EC&EE in industry sector and have previous experience(s) in developing policies/guidelines, institutional frameworks and energy efficiency standards. The team must also be composed of individuals with at least a Bachelors Degree in Engineering, Law, Public Administration, Business Management, or any other relevant field.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Development of Environmental Standards
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	12 months starting 1 st Quarter of Year 4 of PECSME implementation.
<u>Direct Supervisor</u> :	Task Specialist on Policy and Institution

Purpose of Sub-Contract

The purpose of the **Subcontract on Development of Environmental Standards** is to review and make recommendation on modification of existing environmental standards relate to GHG emissions. The subcontractor shall coordinate all its activities with the Directorate of Standard and Measurement Quality (STAMEQ) and the National Environment Agency (NEA).

Scope of Work

1. Review and assess the effectiveness of existing environmental standards to promote energy efficiency in industry sector and identify gaps and provide recommendations to update air environmental standards considering the presently available and applicable industrial technology and products;
2. Organize a workshop with relevant state agencies and environmental experts;
3. Update existing air pollution standards from the industry and formulate new ones if needed in coordination with STAMEQ and NEA;
4. Assist STAMEQ in facilitating the approval of the revised environmental standards related to GHG emission.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report on the 3rd month and 5th month from issuance of Notice to Proceed.
2. Draft final reports, including revised standards. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of experience (at least 5 years) in design environment standards related to air pollution from industry.

TERMS OF REFERENCE

<u>Title :</u>	International Expert on Communication and Awareness
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Three and a Haft man-months output-based contract during 2 nd Quarter of Year 1 and the 3rd Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on Communication and Awareness

Duties and Responsibilities

The **International Expert on Public Relations and Marketing** will provide technical assistance to review the overall communication strategy and to the subcontractor on Assessment of Awareness and the subcontractor on Design and Implementation of Disseminated Information Package. He/she shall be responsible for the following tasks:

1. Review the overall communication strategy done by the subcontractor for Design and Implementation of Disseminated Information Package, particular the identification of relevant organizations participated in the information network;
2. Provide training for participating organizations to carry out communication and awareness activities;
3. Provide technical advice to the Subcontractor for Assessment Awareness to set up the survey planning and methodology;
4. Provide technical advise to the Subcontractor on Design and Implementation of Disseminated Information Package to set up it action plan; and
5. Prepare a system of measuring /tracking impact of activities of component for EC&EE Communication and Awareness Program (Component 2).

Deliverables

The International Expert on Public Relations and Marketing shall deliver the following:

1. Formal technical report reviewing the overall communication strategy;
2. Training module on information dissemination;
3. Report on training courses for participating organizations of information network;
4. Report on methodology on carrying out assessment survey;
5. Reports on the assistance provided to two mentioned above subcontractors; and
6. Design of a system of measuring/tracking impacts of component 2' activities.

All deliverables are subject to acceptance by PMO.

Qualification and Experience

1. University degree in a technical field (architecture, science & technology or design);
2. Adequate training and experience in the fields of technology transfer, advertising, graphic design, public relations and technical writing;
3. At least 10 years track record of experience in the commercial practice of graphic design, public relations and project design;

4. At least 10 years track record of experience in developing communications for energy conservation programs in Asia;
5. Extensive knowledge of the needs of the various energy end-users in developing countries;
6. At least 3 years track record of experience in designing data gathering programs in developing countries;
7. Familiar with the development of energy conservation Centers in developing countries, and possess good working experience with the NGOs involved in the dissemination of energy conservation information and technology transfer;
8. Fluency in spoken and written English.

TERMS OF REFERENCE

<u>Title :</u>	Local Consultant on Development of Communication Strategy (2 Persons)
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Three months starting from the 3rd Quarter of Year 1 of PECSME implementation
<u>Direct Supervisor:</u>	Task Expert on Communication and Awareness

Duties and Responsibilities

The local consultants on **Development of Communication Strategy** will provide technical assistance to review the overall awareness and communication strategy done during PDF-B. He/she shall be responsible for the following tasks:

1. Review experiences and lessons learned from other similar initiatives related to EC&EE in Vietnam namely the Vietnam National Cleaner Production Centre (VCPC) and other International Programs supporting SME sector;
2. Review the overall communication strategy done by the subcontractor for Design of Disseminated Information Program in PDF-B Exercise, particular the identification of relevant organizations participated in the information network;
3. Work closely with the International Expert on Awareness and Communication to finalize the overall communication strategy for PECSME implementation.

Deliverables: Final report on overall communication strategy.

Qualification and Experience

1. University degree in a technical field (architecture, science & technology or design);
2. At least 10 years track record of experience in the commercial practice of graphic design, public relations and project design;
3. At least 10 years track record of experience in developing communications for energy conservation programs in Asia;
4. Extensive knowledge of the needs of the various energy end-users in developing countries;
5. Familiar with the development of energy conservation Centers in developing countries, and possess good working experience with the NGOs involved in the dissemination of energy conservation information and technology transfer;
6. Fluency in spoken and written English.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Development of SME Energy-Use Database
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	18 months starting 1 st Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor</u> :	Task Expert on Communication and Awareness

Purpose of Sub-Contract

The purpose of the **Sub-contract on the Development of SME Energy-Use Database** is to consolidate all information on energy use from the SME industry to facilitate information exchange among the stakeholders and for use by policy makers, regulation and circular developers and enforcement agencies, industry association, SMEs, EESPs, trainers, monitoring and evaluation consultants, suppliers and academic researchers.

Scope of Work

1. Collect and consolidate SME industry data/information from SMEs, government agencies, non-government organizations, professional organizations, and academe as well as project surveys on;
2. Design energy-use database systems to facilitate information exchange on the following: EC&EE technology, energy consumption in SMEs, and results of activities of the PECSME project and all other relevant information;
3. Organize a workshop to consolidate comments from national experts; and
4. Develop database system for SME energy-use: testing and operation of the system.

Deliverables

1. Design of the database system submitted and presented to the PMO and MOI three (3) months after the issuance of the Notice to Proceed. Substantial comments, if there are any, from the national experts must be incorporated in the design.
2. Energy-use database system is ready and used by SMEs, EESPs, suppliers and researchers, subject to acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with energy use and have extensive experience(s) in information technology, database management, and development of promotional materials. The team must also be composed of individuals with at least a Bachelors Degree in Engineering, Information Technology, Business Management, Industrial Engineering, or any other relevant fields.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Survey of Assessment of Awareness of SMEs and Feedback Survey on Communication and Awareness Program
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	Three parts surveys: Four months starting the 2 nd Quarter of Year 1 and three months starting the 3 rd Quarter of Year 3 and 3 rd Quarter of Year 5 of PECSME implementation.
<u>Direct Supervisor:</u>	Task Expert on Communication and Awareness

Purpose of Sub-Contract

The purpose of the **Sub-contract on Surveys of Assessment of EC&EE Awareness and Feedback Survey on Dissemination Information** is to collect information from SMEs and to measure the compliance of PECSME to the key target areas as part of the monitoring and evaluation program.

Scope of Work

1. Develop the design of the initial survey to collect information on knowledge, barriers, attitudes and practices regarding utilization of energy among SMEs;
2. Develop the design of the survey to measure the key target areas and all other key success indicators identified in the Project Framework Design (see PECSME Project Brief);
3. Conduct of initial survey during the 2nd and 3rd Quarter of Year 1 of PECSME implementation;
4. Conduct surveys to measure the key target areas during the 3rd Quarter of Year 3 and 3rd Quarter of Year 5 using the same survey design; and
5. Consolidate and evaluate data/information collected and compare results with the key success indicators of the PECSME Project.

Deliverables

1. Draft survey design and the questionnaires shall be presented to the PECSME a month after the issuance of the Notice to Proceed. Substantial comments, if there are any, from the PMO must be incorporated in the final draft.
2. Draft survey reports shall be presented to the PECSME PMO three months after the start of the survey subject to final acceptance by the PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be familiar with the lighting industry in the country. The team must also be composed of individuals with at least an education degree in Engineering, Statistics, Communications, Business Management, or related fields. Must have previous experience(s) in monitoring and evaluation.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Design and Implementation of Disseminated Information Package
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	36 months starting 2nd Quarter of Year 1 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on Communication and Awareness

Purpose of Sub-Contract

The purpose of the **Sub-contract on Design and Implementation of Disseminated Information Package** is to carry out the establishment and circulation of information on EC&EE strategic issue, technologies, contact point, financial assistance and regulations to key stakeholders in the project information network as well as SMEs.

Scope of Work

1. Develop a Formal Integrated Communications and Dissemination Strategy;
2. In cooperation with ECCs and DOSTs collect needed information on EC&EE consultancy availability and specialization, available EC&EE technologies, contact points, financial assistance and regulations on promoting EC&EE;
3. In coordination with the International Expert on Communication and Awareness set up work plan for dissemination of EC&EE information to SMEs through the network;
4. Conduct training courses for participating organizations in the information network;
5. In coordination with ECCs and DOSTs in provinces design and circulate information dissemination packages comprising advertisements, newsletters, small-sized stickers, posters, training books, radio and TV programs to SMEs in their provinces; and
6. Work with VCCI to design Internet page on EC&EE information based SMEnet.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report on the 3rd month and 5th month from issuance of Notice to Proceed.
2. All materials of information products.
3. Draft final report. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of experience (at least 5 years) in public relations and marketing related to energy conservation and energy efficiency (EC&EE) and good working experience in designing, organizing and producing mass media campaign. The team must also be composed of individuals with at least an education degree in Communication, Advertising Design, or related fields. Must have previous experiences on information collection and classification, specifically information on EC&EE and producing of mass media products and advertisement.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Organization of Two Exhibitions of Energy Efficiency Equipment
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	Two Exhibitions: Three months starting the 3rd Quarter of Year 3 and three months starting the 3 rd Quarter of Year of PECSME implementation
<u>Direct Supervisor</u> :	Task Expert on Communication and Awareness

Purpose of Sub-Contract

The purpose of the **Sub-contract on Organization of Two Exhibitions of Energy Equipment** is to carry out the preparation and conduct of two exhibitions.

Scope of Work

1. In coordination with ECCs and DOSTs in provinces collect and select available EC&EE technologies and EC&EE equipment suppliers;
2. Invite EC&EE equipment suppliers to participate in the exhibitions;
3. Work with the Department for Science and Technology in All Economic Sector to design action plans to conduct exhibitions; and
4. Carry out exhibition activities and monitoring and evaluation of impact of these exhibitions.

Deliverables

1. Action plans of two exhibitions accepted by PMO.
2. Final reports on result of each exhibition. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

1. The sub-contractor must have a proven track record of experience (at least 5 years) in organizing exhibition on equipment and technologies;
2. Good working experience in designing, organizing and producing mass media campaign;
3. Have good relations with technology and equipment suppliers.

TERMS OF REFERENCE

<u>Title :</u>	International Expert on EC&EE Training
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Three man-months output-based contract during the 2 ⁿ ^d Quarter of Year 1 and 3 rd Quarter of Year 4 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on Training

Duties and Responsibilities

The **International Expert on EC&EE Training** will assist the Subcontractor for Conduct of Training Courses for Trainers. The specific tasks of the **International Expert on EC&EE training** are as follows:

1. Work with the subcontractor for Conduct of Training for Trainers to develop teaching materials for the following areas:
 - Awareness of EC&EE benefit for SMEs managers;
 - Technical capacities to identify energy saving opportunities: preliminary energy and management; EC&EE for pump, fan, compressor; EC&EE for heat generating equipment; EC&EE for refrigerating and cooling system; EC&EE for electrical system; effective operation for gas based furnaces; effective operation for vertical shaft kilns; and issues in economic and financial analysis for EC projects;
 - Detail energy audit for energy auditors in five selected sub-sectors.
2. Provide training lectures for trainers conducted by the subcontractor for Conduct of Training for Trainers;
3. Support the subcontractor for Design of a Sustainable EC&EE Training Program for Universities and Colleges and review their works;
4. Work with the subcontractor for Evaluation of Training Program draft methodologies to evaluate the impact of training program to the target areas of PECSME.

Deliverable

The **International Expert on EC&EE Training** shall deliver the following outputs:

1. The final version of training modules material;
2. The report on given lectures in training courses for trainers;
3. The report on evaluation of training program methodologies;
4. Recommendation on the outputs of the Subcontractor for Design of Sustainable EC&EE Training Program for Universities and Colleges.

Qualification and Experience

The candidate should have a PHD. Degree related to energy efficiency, particularly on EC&EE for five SME sub-sectors and five (5) years of professional experience in EC&EE. He/She should also have practical experience of working with EC&EE programs, preferably in the ASEAN Region on EC&EE technical capacity building. The candidate has to be able to function effectively in an international, multi-cultural environment. He/She must be fluent in English, both spoken and written.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Conduct of Training Courses for EC&EE Trainers
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	12 months starting 2 nd Quarter of Year 1 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on Training

Purpose of Sub-Contract

The purpose of the **Sub-contract on Conduct of Training Courses for Trainers** is to prepare teaching materials and conduct training courses for trainers. The contractor shall work closely with the International Experts on EC&EE Training.

Scope of Work

1. In coordination with PMO, select local experts to work with International Expert on EC&EE Technical Training to prepare teaching modules as follows:
 - Awareness of EC&EE benefit for SMEs managers;
 - Technical capacities to identify energy saving opportunities: preliminary energy and management; EC&EE for pump, fan, compressor; EC&EE for heat generating equipment; EC&EE for refrigerating and cooling system; EC&EE for electrical system; effective operation for gas based furnaces; effective operation for vertical shaft kilns; and issues in economic and financial analysis for EC projects;
 - Detail energy audit for energy auditors.
2. In coordination with PMO conduct the preparation of teaching materials and printing;
3. Select the qualified and capable trainers from technology universities as well as ECCs and EC&EE consultant companies;
4. Conduct training courses for trainers who will be the teachers participating in the subsequent training activities of the PECSME project; and, prepare certificates signed by MOST.

Deliverables

1. Inception Report – one month after issuance of Notice to Proceed and Disbursement of Mobilization Fee;
2. Final version of training modules materials and printed materials;
3. Reports on training courses for EC&EE trainers;
4. Documentation of training certifications;
5. Final report for this activity submitted and presented to PMO, subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be familiar with the EC&EE systems and their application, have broad experience in developing school curricula and training modules and have conducted trainings on energy efficiency applications. The team must also be composed of individuals with at least a Master's Degree in Education and Bachelors Degree in Engineering, Communications, Education, or any other relevant fields.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Conduct of Training Courses for SMEs and Energy Auditors
<u>Duty Station:</u>	PECSME
<u>Duration:</u>	30 months spread over a period of 3 years starting 2 nd Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on Training

Purpose of Sub-Contract

The purpose of the **Sub-contract on Conduct of Training Courses for SMEs and Energy Auditors** is to prepare and conduct training courses for SME managers/technicians, energy auditors. The contractor shall work closely with the International Experts on EC&EE Training and ESCO.

Scope of Work

1. In coordination with ECCs and DOSTs in provinces conduct training for SME managers, SME technicians and energy auditors to introduce local SMEs the EC&EE benefit as well as EC&EE techniques and practices. The sub-contractor will also be responsible for the administrative and logistics requirements of the courses and assess the effectiveness of the training courses. The training courses will include the following:
 - a. SME managers: two day-training seminars on EC&EE benefits;
 - b. SME technicians who responsible for energy consumption in SMEs:
 - Preliminary energy audit and energy management;
 - EC&EE for consuming equipment in five selected SME sub-sectors;
 - EC&EE technology operations for five SME sub-sectors; and
 - Bankable EC&EE project design.
2. In coordination with ECCs and DOSTs in provinces conducts training practice on energy auditing in selected SMEs.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and Disbursement of Mobilization Fee.
 - b. Progress report – 1 month after submission of Inception Report and every 3 months thereafter.
2. Reports on training courses for SMEs and energy auditors;
3. Final report for this activity submitted and presented to PMO, subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The subcontractor must be familiar with the EC&EE systems and its application, have broad experience in developing school curricula and training modules and has conducted trainings on energy efficiency applications. The team must also be composed of individuals with at least a Master's Degree in Education and Bachelors Degree in Engineering, Communications, Education, or any other relevant fields.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Evaluation of EC&EE Training Program
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	Two parts surveys: Four months starting the 2 nd Quarter of Year 3 and three months starting the 2 nd Quarter of Year 5 of PECSME implementation.
<u>Direct Supervisor</u> :	Task Expert on Training

Purpose of Sub-Contract

The purpose of the **Sub-contract on Evaluation of EC&EE Training Program** is to measure the impact of training program to the key target areas as part of the monitoring and evaluation program.

Scope of Work

1. Design of questionnaires (guideline for collecting data) to measure impact of training program to the key target areas and all other key success indicators identified in the Project Framework Design (see PECSME Project Brief);
2. Conduct survey during the 2nd Quarter of Year 3 and the 2nd Quarter of Year 5 using the same survey design;
3. Consolidate and evaluate data/information collected and compare results with the key success indicators of the PECSME Project.

Deliverables

1. Draft survey design and the questionnaires shall be presented to the PMO a month after the issuance of the Notice to Proceed. Substantial comments, if there are any, from the national expert must be incorporated in the final draft.
2. Draft survey reports shall be presented to the PMO three months after the start of the survey subject to final acceptance by the PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The Sub-contractor must be familiar with the SME industry and SME policy-maker agencies in the country. The team must also be composed of individuals with at least an education degree in Engineering, Statistics, Communications, Business Management, or related fields. Must have previous experience(s) in monitoring and evaluation.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Design of Sustainable EC&EE Training Programs for Universities and Colleges
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	12 months starting from the 2 nd Quarter of Year 3 of PECSME implementation
<u>Direct Supervisor:</u>	Task Expert on Training

Purpose of Sub-Contract

The purpose of the **Sub-contract on the Design of Sustainable EC&EE Training Programs for Universities and Colleges** is to design 2 subjects in EC&EE for energy economics and 2 subjects for thermal faculty and another 2 for electrical faculty in the technology universities and colleges.

Scope of Work

1. Review and assess training need on EC&EE by university and college students;
2. In cooperation with PMO to select national experts to write the training curriculum;
3. Coordinate the curriculum writing of international and national experts;
4. Organize a workshop for gathering comments from different experts and relevant agencies;
5. Assist/facilitate PMO in preparing agreements with concerned schools (at least 3 universities and colleges) to include EC&EE in their engineering curricula.

Deliverables

1. Draft training curricula for 6 subjects for energy economics, thermal and as electrical faculties to be presented to the workshop.
2. Final version of curricula submitted at the end of the contract, subject to acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be familiar with the EC&EE systems and its applications and have broad experience in developing training modules and in conducting trainings on energy efficiency applications. The team must be composed of individuals with at least a Bachelors Degree in Engineering, Communications, Education, or any other relevant fields.

TERMS OF REFERENCE

<u>Title :</u>	International Expert on EESP
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Three man-month output-based contract spread out during the 3 rd Quarter of Year 1 and 2nd Quarter of Year 3 of PECSME implementation.
<u>Direct Supervisor:</u>	Task Expert on EESP and Financing

Duties and Responsibilities

The **EESP Expert** will assist the subcontractor for EESP Business & Financing Capacity Building and Implementation of Standardized Contract to Deliver EESP Services to provide technical assistance to EESP development in the country.

The specific tasks of the EESP Specialist are as follows:

1. Assess existing capacities of ESCOs in the country and in the ASEAN Region and identify gaps, constraints and barriers to successful operation of ESCOs in Vietnam;
2. Work with the subcontractor for EESP Business & Financing Capacity Building and Implementation of Standardized Contracts to prepare the training materials on developing business plans and designing EC&EE services package for EESPs;
3. Provide training on developing business plans and designing EC&EE services package for EESP's managers;
4. Provide training for 60 consultants on EC&EE engineering and financial arrangements for EC&EE investment projects;
5. Assist the subcontractor for EESP Business & Financing Capacity Building and Implementation of Standardized Contract to prepare EE engineering design tools and model marketing strategy;
6. Assist the above subcontractor on developing guidelines and framework to establish monitoring and verification protocols for future EESP contracts;
7. Design appropriate standardized contracts: a) between the EESPs and SMEs and b) between EESPs and INCOMBANK;
8. Assist the subcontractor to develop the design of a demonstration project to showcase the various aspects of the ESCO process from the conceptualization, development, promotion and negotiation, design, financing, implementation, operation, monitoring and evaluation of standardized contract projects on EC&EE investment.

Deliverables

The EESP Specialist shall deliver the following:

1. Formal technical report describing the results of the assessment of EESPs in the country, the recommendations on how to successfully implement standardized contracting, and other findings and lessons-learned;
2. The training material for EESPs;
3. Report on training courses for EESP consultants;
4. Appropriate standardized contracts between the EESPs and SMEs and between EESPs and INCOMBANK;

5. Guidelines and framework to establish monitoring and verification protocols for EESP Contracts;
6. Identified tools and model marketing strategy to implement the EC&EE service transaction; and
7. Design of the demonstration project.

THE ABOVE OUTPUTS ARE SUBJECT TO ACCEPTANCE BY PMO.

Qualification and Experience

The candidate should have an advanced degree in a field related to energy efficiency and 10-12 years of professional experience in Energy Performance Contracting and project development, implementation, monitoring and evaluation. The candidate should be able to function effectively in an international, multi-cultural environment. He/She must be fluent in English, both spoken and written.

TERMS OF REFERENCE

<u>Title :</u>	International Expert on EE Equipment Production
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Two man-month output-based contract spread out during the 2 nd Quarter of Year 2 and 2nd Quarter of Year 3 of PECSME implementation.
<u>Direct Supervisor:</u>	Task Expert on EESP and Financing

Duties and Responsibilities

The **EESP Expert** will assist the subcontractor for Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equipment Manufacturers to carry out their activities such as assessment of the capabilities of local equipment suppliers and provision of training and technical assistance to local equipment manufacturers to design, produce and make available affordable high-energy efficient equipment in the market.

The specific tasks of the EESP Specialist are as follows:

1. Work with the said subcontractor to draft methodologies to assess the local capabilities for EE equipment provision and evaluation of energy performance of local industrial equipment;
2. Review/assess the subcontractor's report on the assessment of the capabilities of local equipment manufacturers and the evaluation of energy performance of local industrial equipment. It will also include an assessment of production facilities to identify processes and equipment that have to be improved and upgraded to allow better design and production technologies of EE;
3. Provide training for local equipment manufacturers to introduce high efficiency equipment design and production technologies.

Deliverables

The EE Equipment Production Expert shall deliver the following:

1. The report on the draft methodologies on assessment of local capabilities for EE equipment provision and evaluation of energy performance of local industrial equipment;
2. Review of the subcontractor's report on assessment of local capabilities for EE equipment provision and evaluation of energy performance of local industrial equipment; and
3. Report on training courses.

THE ABOVE OUTPUTS ARE SUBJECT TO ACCEPTANCE BY PMO.

Qualification and Experience

The candidate should have an advance degree in a field related to energy efficiency equipment in the industry and 10-12 years of professional experience in EE equipment manufacturing sector. The candidate should be able to function effectively in an international, multi-cultural environment. He/She must be fluent in English, both spoken and written.

TERMS OF REFERENCE

<u>Title :</u>	National Expert on EESP Business and Financing
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	24 man-months output-based contract spread out over the 3 year period starting the 2 nd Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor:</u>	Task Expert on EESP and Financing

Duties and Responsibilities

The role of the **National Expert on EESP Business and Financing** is to provide technical assistance to EESP in making bankable project proposals, business plans and in securing financing for SME clients and providing recommendations on appropriate standardized contracts. PECSME PMO will support the implementation of 50 EESP contracts for providing EE services with SMEs.

The specific tasks of the National Expert on EESP Business and Financing are as follows:

1. Provide technical inputs to training materials on making bankable project proposals, business plans prepared by the subcontractor on Conduct of EC&EE Training;
2. Assist the subcontractor on EESP Business & Financing Capacity Building and Subcontractors for Implementation of Demonstration Program in arranging and securing financing for EC&EE investment projects;
3. Review of technical reports of international experts on EESP operation; and
4. Assist the subcontractor for Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equipment Manufacturers and manufacturers to prepare the business plan and investment project proposals for financing.

Deliverables

1. Progress reports by the end of each working periods.
2. Final report, subject to PMO acceptance.

Qualification and Experience

The candidate should have a master degree in engineering, business management and economics or any field related to energy efficiency, preferably with PhD degree in the same or any other relevant field. He/She should have five (5) to ten (10) years of professional and practical experience in business capacity building in energy sector and energy project financing. He/She should have an extended experience in initiating project development, implementation, monitoring and evaluation. He/She must be fluent in English, both spoken and written.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Development of a Suitable Institutional and Legal Framework for EESPs
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	Eight (8) months starting 3rd Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor:</u>	Task Expert on Policy and Institutional Development

Purpose of Sub-Contract

The purpose of the **Sub-contract on Development of a Suitable Institutional and Legal Framework for EESPs** is to assist MOI in the formulation of appropriate institutional and legal framework that support the development of sustainable market for EESPs for SME-dominated sectors in the country.

Scope of Work

1. Review and assess the institutional and legal framework for EESPs in other countries;
2. Develop a suitable institutional and legal framework for promoting EESP's development including the legal establishment for new EESP business;
3. Design an incentive and market structure for EESPs;
4. Assist PMO and MOI in facilitating the approval of these documents through consultations workshop with stakeholders.

Deliverables

1. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee;
2. Draft final report, including the above mentioned document, submitted and presented to the PMO subject to final acceptance by the PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the EESP industry and have previous experience(s) in developing policies/guidelines, institutional frameworks and energy efficiency policies, preferably EC&EE policy for the industry. The team must also be composed of individuals with at least a Bachelors Degree in Engineering, Law, Public Administration, Business Management, or any other relevant field.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	EESP Business & Financing Capacity Building and Implementation of Standardized Contracts to Deliver EESP Services
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	48 months with output based contract starting the 4 th Qtr of Year 1
<u>Direct Supervisor :</u>	Task Specialist on Capacity Building and Financing

Purpose of Sub-contract

The purpose of the **Sub-contract on EESP Business & Financing Capacity Building and Implementation of Standardized Contracts to Deliver EESP Services** is to conduct of EESPs Training Program and to provide TA to local EESPs.

Scope of Work

1. Work with the International Expert on EESPs to prepare training materials for EESPs;
2. Conduct training courses on developing business plan and designing EESP packages, EC&EE engineering and financial arrangements for investment project for EESPs & EC&EE consultants;
3. Work with the International Expert on EESP to develop standardized contracts;
4. Design of demonstration of 50 EESP contracts;
5. Test and assess the applicability of monitoring and verification protocols in each demonstration projects and recommend refinements to improve its implementation;
6. Assist EESPs in accessing commercial loans by utilizing project's loan guarantee mechanism for standardized contracting;
7. Work with the International Expert for EESPs in designing of standardized contracts between SMEs and the EESPs in selected demonstration sites;
8. Document lessons-learned from various aspects of EESP process in the demonstration projects.

Deliverables

1. Submit the following reports:
 - Inception Report – one (1) month after issuance of Notice to Proceed and Disbursement of Mobilization Fee.
 - Progress reports – Two months after submission of the Inception Report and every three months thereafter.
2. Submit a formal technical report describing the implementation process, the constraints and barriers encountered, the lessons-learned and recommendations on how to better the implementation of EESPs at the end of the project, subject to acceptance by PMO.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the EESP industry as well as the commercial and industrial sector and have 5 to 10 years experience in project development, implementation, monitoring and evaluation. The team must be composed of individuals with at least a Bachelors Degree in Engineering, business management, or any other relevant fields with practical experience in project development with subcontractors for Demonstration Program and familiar with financing institutions and their lending programs.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equipment Manufacturers
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	24 months with output based contract starting the 3rdQuarter of Year 2
<u>Direct Supervisor:</u>	Task Expert on Business Capacity Building and Financing

Purpose of Sub-Contract

The purpose of the **Sub-contract on Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equipment Manufacturers** is to assess the capabilities of local equipment suppliers and provide training and technical assistance to local equipment manufacturers to design, produce and make available affordable high-energy efficient equipment in the market. The contractor shall work closely with the International Experts on EE Equipment Production.

Scope of Work

1. Carry out a survey of assessment of local capabilities for EE equipment provision including local equipment manufacturers, fabricators, importers and spares suppliers and maintenance providers;
2. Carry out a survey of evaluation of energy performance of industrial equipment;
3. Develop the local equipment manufacturing capacity:
 - a. Select interested local equipment manufacturers/fabricators that will be provided with technical assistance in converting to high-energy efficient equipment system production;
 - b. Assist the International Experts on EE Equipment Production in the assessment of the capabilities of local lighting manufacturers. It will also include an assessment of production facilities to identify processes and equipment that have to be improved and upgraded to allow better design and production technologies of EE;
 - c. Prepare business plans and project proposals for financing;
 - d. Link manufacturers with funding institutions, banks and other financial intermediaries for sourcing of funds for facility and production improvements to accommodate EE equipment manufacturing; and
 - e. Conduct training for local equipment manufacturers (with the International Expert) to introduce local manufacturers to more efficient equipment production processes. The sub-contractor will also be responsible for the administrative and logistics requirements of the course and assess the effectiveness of the training course.
 - f. Provide inputs to the international experts during the preparation of the Technical Reports on assessment of local equipment manufacturing.

Deliverables

1. Submit the following progress reports to the PMO:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and Disbursement of Mobilization Fee.
 - b. Progress report – Two months after submission of Inception Report and every three months thereafter.

2. Conduct of training for local equipment manufacturers/fabricators.
3. Draft terminal report for this activity submitted and presented to PMO, subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Intellectual Property Rights

A provision for copyright, patents, confidentiality and proprietary rights in favour of MOST and UNDP shall be part of the consultancy agreement.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the EE equipment in the industry, specifically the manufacturing sector. The team must be composed of individuals with at least a Bachelors Degree in Engineering, Communications, Economics or related field, preferably with practical experience in working with energy efficient equipment manufacturing plants. The sub-contractor must have substantial experience in assessment of manufacturing facilities, training capabilities, and knowledgeable on quality control/assurance procedures/methodologies in manufacturing industries.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Design of a Sustainable EC&EE R&D Program
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	6 months with output based contract starting the 1st Quarter of Year 4
<u>Direct Supervisor :</u>	Task Expert on EESP and Financing

Purpose of Sub-Contract

The purpose of the **Sub-contract on Design of a Sustainable EC&EE R&D Program** is to design an appropriate sustainable EC&EE R&D program and facilitate the support for implementation of the R&D program by local equipment manufacturers/fabricators.

Scope of Work

1. Assess and identify R&D needs of local equipment manufacturing;
2. Review and assess capacity of participated local manufacturers and relevant R&D institutes to carry out R&D work;
3. Formulate a Sustainable EC&EE Research & Development program; and
4. Assist MOST in facilitating the approval of the R&D program through consultation with stakeholders.

Deliverables

1. Progress report – Two months after issuance of Notice to Proceed and disbursement of mobilization fee;
2. Drafted version of the R&D program;
3. Final version of the R&D program, subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be knowledgeable and familiar with the EE equipment in the industry, specifically the manufacturing sector. The team must be composed of individuals with at least a Bachelors Degree in Engineering, Communications, Economics or related field, preferably with practical experience in working with energy efficient equipment manufacturing plants. The sub-contractor must have substantial experience in assessment of manufacturing facilities, training capabilities, and knowledgeable on quality control/assurance procedures/methodologies in manufacturing industries.

TERMS OF REFERENCE

<u>Title :</u>	International Expert on Bankable Project Appraisal
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Two man-month output-based contract spread out during the 1 st and 3 rd Quarter of Year 3 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on EESP and Financing

Duties and Responsibilities

The **International Expert on Bankable Project Appraisal** will assist the subcontractor for Business Capacity Building for Banking and Financial Sector to carry out its assignments.

The specific tasks of the expert are as follows:

1. Work with the subcontractor for Business Capacity Building for Banking and Financing Sector to draft training module on evaluation of EC&EE projects (technical and economic feasibility, including risk and benefit analysis) for banks and financing institution;
2. Provide training on evaluation of EC&EE projects for banking and financing institutions conducted by the said subcontractor.

Deliverables

The International Expert on Bankable Project appraisal shall deliver the following:

1. Training materials for module on evaluation of EC&EE projects; and
2. Report on training courses;

THE ABOVE OUTPUTS ARE SUBJECT TO ACCEPTANCE BY PMO.

Qualification and Experience

The candidate should have an advance degree in a business and financing and 10-12 years of professional experience in guarantee funding mechanism and project development, implementation, monitoring and evaluation. The candidate should be able to function effectively in an international, multi-cultural environment. He/She must be fluent in English, both spoken and written.

TERMS OF REFERENCE

<u>Title :</u>	International Expert on SME Guarantee Funding
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	One man-month in 3 rd Quarter of Year 1
<u>Direct Supervisor :</u>	Task Expert on EESP and Financing

Duties and Responsibilities

The **International Expert on SME Guarantee Funding** will assist the subcontractor for Implementation of Guarantee Funding Mechanism to carry out its assignments.

The specific tasks of the expert are as follows:

1. Review experiences and lessons learned from SME guarantee funds in other countries, in particular ASEAN countries;
2. Assist the subcontractor for Implementation of Guarantee Funding to formulate the guarantee operation regulation as well as criteria for guarantee fund;
3. Develop guidelines and methodology to establish monitoring and evaluate the results of loan guarantee contracts.

Deliverables

The International Expert on SME Guarantee Funding shall deliver the following:

3. The draft of guarantee operation regulation and the draft of criteria for guarantee fund;
4. Training materials for module on evaluation of EC&EE projects;
5. Report on training courses;
6. Guidelines and methodology on monitoring and evaluation of the results of loan guarantee contracts.

THE ABOVE OUTPUTS ARE SUBJECT TO ACCEPTANCE BY PMO.

Qualification and Experience

The candidate should have an advance degree in a business and financing and 10-12 years of professional experience in guarantee funding mechanism and project development, implementation, monitoring and evaluation. The candidate should be able to function effectively in an international, multi-cultural environment. He/She must be fluent in English, both spoken and written.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Business Capacity Building for Banking and Financing Sector
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	36 months starting 1st Quarter of Year 2 of PECSME implementation
<u>Direct Supervisor:</u>	Task Expert on EESP and Financing

Purpose of Sub-Contract

The purpose of the **Sub-contract on Business Capacity Building for Banking and Financing** is to enable the local financing institutions to provide financing assistance program on EC&EE investment projects and improve their understanding and appreciation of the economic and financial benefits of EC&EE initiative.

Scope of Work

1. Assess capacities of the various financing institutions/banks in the country, including their lending portfolios, in financing EC&EE investment projects;
2. Develop a training module and conduct training seminars (with International Expert) to improve their understanding and appreciation of the economic and financial benefits of EC&EE project, strengthen their capacity on EC&EE loan appraisals (technical and economic feasibility, including risk analysis) and help them develop EC&EE project portfolio;
3. In coordination with ECCs and DOSTs organize 5 roundtable discussions between banks and SMEs during Year 2 to 4 of PECSME implementation;
4. Work with PMO to establish the technical service network;
5. In cooperation with the subcontractor for Design and Implementation of Dissemination Information Package produce and circulate 10,000 copies of brochures/guides on sources of financing, loan guarantee, and bank requirements for EC&EE investments.

Deliverables

1. Inception Report – one month after issuance of Notice to Proceed and Disbursement of Mobilization Fee;
2. Progress reports – Two months after submission of Inception Report and every three months thereafter;
3. A draft Training Module on EC&EE loan appraisal;
4. A final project report for this activity prior to the end of the contract and a presentation to the PMO. All communications and reporting must be in the Vietnamese and English languages.

All deliverables are subject to acceptance by PMO.

Qualification and Experience

The sub-contractor must be familiar with the Vietnamese SME industry and the banking institutions. The team must be composed of individuals with a Bachelors Degree in Engineering, Business Management, Banking and Finance Communications, Education, or related fields with practical experience in banking and finance and capacity building/training.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Implementation of Guarantee Funding Mechanism
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	48 months starting 3 rd Quarter of Year 1 of PECSME implementation.
<u>Direct Supervisor :</u>	Task Expert on EESP and Financing

Purpose of Sub-Contract

The purpose of the **Sub-contract on the Implementation of Guarantee Funding Mechanism** is to facilitate the efficient operation of existing guarantee funding in INCOMBANK to enable commercial banks and financial institutions to provide credits or financial assistance to EC&EE investment of SMEs and EESPs.

Scope of Work

1. Establish Action Plan to mobilize the existing Guarantee Funding Mechanism in INCOMBANK;
2. Assist/facilitate the signing of agreement between MOST and INCOMBANK;
3. Work with the International Expert on SME Guarantee Funding to formulate the new guarantee operation regulation;
4. Work with the International Expert on SME Guarantee Funding to develop enforcement criteria for the guarantee fund;
5. Conduct negotiations on financing arrangements between SMEs and existing Development and Environmental Funds;
6. Conduct negotiations on financing arrangements between SMEs and commercial banks as well as between EESPs and commercial banks through guarantee mechanism;
7. Develop a M&E system to track the progress of operation of Guarantee Funding Mechanism;
8. Monitor and evaluate the performance of operation of Guarantee Fund including recommendation on sustainable EC&EE financing program for future.

Deliverables

1. An inception report submitted one month after the issuance of Notice to Proceed and progress reports prepared and submitted every 2 months thereafter up to the end of the contract period;
2. The new guarantee operation regulation and documentation of performance criteria;
3. Report on monitoring and evaluation system;
4. The evaluation report on the effectiveness and viability of established financing mechanism;
5. A formal technical report describing the implementation process, the constraints and barriers encountered, the lessons-learned and recommendations on how to better the implementation of the Guarantee Funding Mechanism submitted at the end of the contract period, subject to acceptance by PMO; and,
6. Final report on all implemented activities. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be familiar with the Vietnamese SME industry and the banking & financing institutions. The team must be composed of individuals with a Bachelors Degree in Engineering, Business Management, Banking and Finance Communications, Education, or related fields with practical experience in banking and finance and capacity building/training.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Provision of Technical Assistance to 200 EC&EE Projects in Brick Sector
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	54 months starting 2 nd Quarter of Year 1 of PECSME implementation.
<u>Direct Supervisor</u> :	Task Expert on Technology Demonstration

Purpose of Sub-Contract

The purpose of the **Sub-contract on Provision of TA to 200 EC&EE Projects in Brick Sector** is to conduct the implementation of two DEMO projects and to provide technical assistance to implementation of other EC&EE investment projects in brick sector. The Contractor shall coordinate all its activities with ECCs and DOSTs in 10 provinces.

Scope of Work

1. Conduct of comprehensive techno-economic feasibility analyses of potential EC&EE investment projects in brick sector including: review of previous feasibility studies, as well as those during the PDF-B exercise and conduct of new ones if needed;
2. Carry out reviewing, establishing and documenting appropriate criteria for selection and evaluation of demonstration project requirements;
3. Select 2 investment projects and sign implementation agreements with these SMEs;
4. Conduct implementation activities of two demonstration projects in the sector as following:
 - a. Establish baseline data for demonstration sites;
 - b. Securing and arranging risk-sharing loan guarantee financing assistances for demonstration investment proposal implementation;
 - c. Conduct the completion of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning, training for operating personnel;
5. Provide technical assistance to 198 EC&EE investments in the sector:
 - a. In coordination with ECCs and DOSTs in 10 provinces select 198 SMEs in brick sector based on the selection criteria;
 - b. Assist SMEs to draft the bankable project proposals;
 - c. Assist SMEs in arranging risk-sharing loan guarantee financing assistance for investment proposals implementation;
 - d. Assist SMEs in implementing of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning;
6. Monitor and evaluate the performance of 200 projects (e.g., in terms of energy saved, payback period, etc.). This includes conduct of energy audit before and after the implementation of EC&EE investment and evaluation, and reporting on energy and GHG reduction impacts demonstration project sites.

Deliverables

1. Submit the following progress report to the PMO:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report –Two months after submission of Inception Report and every three months thereafter.
2. Final two DEMO project designs, total budget and work plans to be submitted to the selected SME and PMO for approval before project implementation that is, four months after issuance of the notice to proceed;
3. Report on appropriate criteria for selection and evaluation of demonstration project requirements;
4. Documentation of baseline data for demonstration sites;
5. Report on the technical assistance provided to SME sites presented and submitted to the PMO.
6. Final report for presentation subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of engineering experience (at least 5 years) in carrying out design, procurement, installation, financial and servicing of shaft vertical brick kilns.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Provision of Technical Assistance to 150 Projects in Ceramics Sector
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	54 months starting 2 nd Quarter of Year 1 of PECSME implementation
<u>Direct Supervisor :</u>	Task Expert on Technology Demonstration

Purpose of Sub-Contract

The purpose of the **Sub-contract on Provision of Technical Assistance to 150 EC&EE Projects in Ceramic Sector** is to provide technical assistance to implementation of 150 EC&EE investment projects in ceramics. The subcontractor shall coordinate all its activities with ECCs and DOSTs in 10 provinces.

Scope of Work

1. Conduct of comprehensive techno-economic feasibility analyses of potential EC&EE investment projects in Ceramics sector including: review of previous feasibility studies, as well as those during the PDF-B exercise and conduct of new ones if needed;
2. Carry out reviewing, establishing and documenting appropriate criteria for selection and evaluation of demonstration project requirements;
3. Select 2 investment projects in the sector and sign implementation agreements with these SMEs;
4. Conduct implementation activities of two demonstration projects in the sector as following:
 - a. Establish baseline data for demonstration sites;
 - b. Securing and arranging risk-sharing loan guarantee financing assistances for demonstration investment proposal implementation;
 - c. Conduct the completion of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning, training for operating personnel;
5. Provide technical assistance to 148 EC&EE investments in the sector:
 - a. In coordination with ECCs and DOSTs in 10 provinces select 148 SMEs in ceramic sector based on the selection criteria;
 - b. Assist SMEs to draft the bankable project proposals;
 - c. Assist SMEs in arranging risk-sharing loan guarantee financing assistance for investment proposals implementation;
 - d. Assist SMEs in implementing of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning;
6. Monitor and evaluate the performance of 150 projects (e.g., in terms of energy saved, payback period, etc.). This includes conduct of energy audit before and after the implementation of EC&EE investment and evaluation, and reporting on energy and GHG reduction impacts demonstration project sites.

Deliverables

1. Submit the following progress report to the PMO:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report – Two months after submission of Inception Report and every three months thereafter.
2. Final two DEMO project designs, total budget and work plans to be submitted to the selected SME and PMO for approval before project implementation that is, four months after issuance of the notice to proceed;
3. Report on appropriate criteria for selection and evaluation of demonstration project requirements;
4. Documentation of baseline data for demonstration sites;
5. Report on the technical assistance provided to SME sites presented and submitted to the PMO.
6. Final report for presentation subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of engineering experience (at least 5 years) in carrying out design, procurement, installation, financial and servicing of gas fired ceramic kilns.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Provision of Technical Assistance to 50 EC&EE Projects in Food-Processing Sector
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	54 months starting 2 nd Quarter of Year 1 of PECSME implementation
<u>Direct Supervisor :</u>	Task Expert on Technology Demonstration

Purpose of Sub-Contract

The purpose of the **Sub-contract on Provision of Technical Assistance to 50 EC&EE Projects in Food-Processing Sector** is to provide technical assistance to implementation of 50 EC&EE investment projects in food processing. The subcontractor shall coordinate all its activities with ECCs and DOSTs in 10 provinces.

Scope of Work

1. Conduct of comprehensive techno-economic feasibility analyses of potential EC&EE investment projects in food-processing sector including: review of previous feasibility studies, as well as those during the PDF-B exercise and conduct of new ones if needed;
2. Carry out reviewing, establishing and documenting appropriate criteria for selection and evaluation of demonstration project requirements;
3. Select 2 investment projects in the sector and sign implementation agreements with these SMEs;
4. Conduct implementation activities of two demonstration projects in the sector as following:
 - a. Establish baseline data for demonstration sites;
 - b. Securing and arranging risk-sharing loan guarantee financing assistances for demonstration investment proposal implementation;
 - c. Conduct the completion of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning, training for operating personnel;
5. Provide technical assistance to 48 EC&EE investments in the sector:
 - a. In coordination with ECCs and DOSTs in 10 provinces select 48 SMEs in food-processing sector based on the selection criteria;
 - b. Assist SMEs to draft the bankable project proposals;
 - c. Assist SMEs in arranging risk-sharing loan guarantee financing assistance for investment proposals implementation;
 - d. Assist SMEs in implementing of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning;
6. Monitor and evaluate the performance of 50 projects (e.g., in terms of energy saved, payback period, etc.). This includes conduct of energy audit before and after the Implementation of EC&EE investment and evaluation, and reporting on energy and GHG reduction impacts demonstration project sites.

Deliverables

1. Submit the following progress report to the PMO:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report –Two months after submission of Inception Report and every three months thereafter.
2. Final two DEMO project designs, total budget and work plans to be submitted to the selected SME and PMO for approval before project implementation that is, four months after issuance of the notice to proceed;
3. Report on appropriate criteria for selection and evaluation of demonstration project requirements;
4. Documentation of baseline data for demonstration sites;
5. Report on the technical assistance provided to SME sites presented and submitted to the PMO;
6. Final report for presentation subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of engineering experience (at least 5 years) in carrying out energy audit design, procurement, installation, financial and servicing of EC&EE projects in food-processing sector.

TERMS OF REFERENCE

<u>Subcontract Title :</u>	Provision of Technical Assistance to 50 EC&EE Projects in Textile Sector
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration:</u>	54 months starting 2 nd Quarter of Year 1 of PECSME implementation
<u>Direct Supervisor :</u>	Task Expert on Technology Demonstration

Purpose of Sub-Contract

The purpose of the **Sub-contract on Provision of Technical Assistance to 50 EC&EE Projects Textile Sector** is to provide technical assistance to implementation of 50 EC&EE investment projects in textile sector. The subcontractor shall coordinate all its activities with ECCs and DOSTs in 10 provinces.

Scope of Work

1. Conduct of comprehensive techno-economic feasibility analyses of potential EC&EE investment projects in textile sector including: review of previous feasibility studies, as well as those during the PDF-B exercise and conduct of new ones if needed;
2. Carry out reviewing, establishing and documenting appropriate criteria for selection and evaluation of demonstration project requirements;
3. Select 2 investment projects in the sector and sign implementation agreements with these SMEs;
4. Conduct implementation activities of two demonstration projects in the sector as following:
 - a. Establish baseline data for demonstration sites;
 - b. Securing and arranging risk-sharing loan guarantee financing assistances for demonstration investment proposal implementation;
 - c. Conduct the completion of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning, training for operating personnel;
5. Provide technical assistance to 48 EC&EE investments in the sector:
 - a. In coordination with ECCs and DOSTs in 10 provinces select 48 SMEs in textile sector based on the selection criteria;
 - b. Assist SMEs to draft the bankable project proposals;
 - c. Assist SMEs in arranging risk-sharing loan guarantee financing assistance for investment proposals implementation;
 - d. Assist SMEs in implementing of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning;
6. Monitor and evaluate the performance of 50 projects (e.g., in terms of energy saved, payback period, etc.). This includes conduct of energy audit before and after the Implementation of EC&EE investment and evaluation, and reporting on energy and GHG reduction impacts demonstration project sites.

Deliverables

1. Submit the following progress report to the PMO:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress report –Two months after submission of Inception Report and every three months thereafter.
2. Final two DEMO project designs, total budget and work plans to be submitted to the selected SME and PMO for approval before project implementation that is, four months after issuance of the notice to proceed;
3. Report on appropriate criteria for selection and evaluation of demonstration project requirements;
4. Documentation of baseline data for demonstration sites;
5. Report on the technical assistance provided to SME sites presented and submitted to the PMO;
6. Final report for presentation subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of engineering experience (at least 5 years) in carrying out energy audit design, procurement, installation, financial and servicing of EC&EE projects in textile sector.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Provision of Technical Assistance to 50 EC&EE Projects in Paper-Pulp Sector
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	54 months starting 2 nd Quarter of Year 1 of PECSME implementation
<u>Direct Supervisor</u> :	Task Expert on Technology Demonstration

Purpose of Sub-Contract

The purpose of the **Sub-contract on Provision of Technical Assistance to 50 EC&EE Projects in Paper & Pulp Sector** is to provide technical assistance to implementation of 50 EC&EE investment projects in food processing. The subcontractor shall coordinate all its activities with ECCs and DOSTs in 10 provinces.

Scope of Work

1. Conduct of comprehensive techno-economic feasibility analyses of potential EC&EE investment projects in paper & pulp sector including: review of previous feasibility studies, as well as those during the PDF-B exercise and conduct of new ones if needed;
2. Carry out reviewing, establishing and documenting appropriate criteria for selection and evaluation of demonstration project requirements;
3. Select 2 investment projects in the sector and sign implementation agreements with these SMEs;
4. Conduct implementation activities of two demonstration projects in the sector as following:
 - a. Establish baseline data for demonstration sites;
 - b. Securing and arranging risk-sharing loan guarantee financing assistances for demonstration investment proposal implementation;
 - c. Conduct the completion of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning, training for operating personnel;
5. Provide technical assistance to 48 EC&EE investments in the sector:
 - d. In coordination with ECCs and DOSTs in 10 provinces select 48 SMEs in paper & pulp sector based on the selection criteria;
 - e. Assist SMEs to draft the bankable project proposals;
 - f. Assist SMEs in arranging risk-sharing loan guarantee financing assistance for investment proposals implementation;
 - g. Assist SMEs in implementing of design, bidding, equipment procurement and delivery, equipment installation support, facilities construction, installation and commissioning;
6. Monitor and evaluate the performance of 50 projects (e.g., in terms of energy saved, payback period, etc.). This includes conduct of energy audit before and after the Implementation of EC&EE investment and evaluation, and reporting on energy and GHG reduction impacts demonstration project sites.

Deliverables

1. Submit the following progress report to the PMO:
 - c. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - d. Progress report –Two months after submission of Inception Report and every three months thereafter.
2. Final two DEMO project designs, total budget and work plans to be submitted to the selected SME and PMO for approval before project implementation that is, four months after issuance of the notice to proceed;
3. Report on appropriate criteria for selection and evaluation of demonstration project requirements;
4. Documentation of baseline data for demonstration sites;
5. Report on the technical assistance provided to SME sites presented and submitted to the PMO;
6. Final report for presentation subject to final acceptance by PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must have a proven track record of engineering experience (at least 5 years) in carrying out energy audit design, procurement, installation, financial and servicing of EC&EE projects in paper & pulp sector.

TERMS OF REFERENCE

<u>Subcontract Title</u> :	Evaluation of Impact of Demonstration Program
<u>Duty Station</u> :	Hanoi with national travel as required
<u>Duration</u> :	Two parts surveys: Four months starting the 2 nd Quarter of Year 3 and three months starting the 2 nd Quarter of Year 5 of PECSME implementation.
<u>Direct Supervisor</u> :	Task Expert on Technology Demonstration

Purpose of Sub-Contract

The purpose of the **Sub-contract on Evaluation of Impact of Demonstration Program** is to measure the results in terms of CO2 emission reduction and energy saving from PECSME demonstration program.

Scope of Work

1. Design of methodology (guideline for collecting data) to measure impact of demonstration program to the key target areas and all other key success indicators identified in the Project Framework Design (see PECSME Project Brief);
2. Develop a monitoring and evaluation system to track the performance and results of Project Demonstration Program.
3. Conduct survey during the 2nd Quarter of Year 3 and the 3^d Quarter of Year 5 using the same survey design;
4. Consolidate and evaluate data/information collected and compare results with the key success indicators of the PECSME Project.
5. Organize 3 national workshops presenting demonstration program results at Northern, Central and Southern areas; and

Deliverables

3. Draft methodology and the questionnaires shall be presented to the PMO a month after the issuance of the Notice to Proceed. Substantial comments, if there are any, from the national expert must be incorporated in the final draft.
4. Draft survey reports shall be presented to the PMO three months after the start of the survey subject to final acceptance by the PMO. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be familiar with the SME industry and SME policy-maker agencies in the country. The team must also be composed of individuals with at least an education degree in Engineering, Statistics, Communications, Business Management, or related fields. Must have previous experience(s) in monitoring and evaluation.

TERMS OF REFERENCE

Project Inception

Introduction

The Inception Phase of the PECSME provides an opportunity for the Project Team to become acquainted with the Project – its agreed strategy, expected outputs and outcomes, the stakeholders, the risks etc. It also provides an opportunity to finalize any outstanding implementation details and present them to UNDP and MOST for clearance and then the Project Advisory Board for approval. The Inception Phase also brings new momentum to the project after the relatively quiet period during the project approval process.

In the project budget, there is a total of US\$ 15,000 for the inception meeting from GEF and governmental financing. UNDP will provide an initial cash advance for the GEF grant part for the Inception Phase upon receipt of the standard Cash Advance Request form from MOST, for the costs of the deliverables listed below. No additional work plan will be required.

Inception Deliverables

The expected output of the Inception Phase is an Inception Report. The Report should address the following issues:

1. Finalize project institutional arrangements, including to:
 - Finalize level of representation and individual membership of the Project Advisory Board and receive confirmation of willingness to participate.
 - Develop rules of procedure for the Advisory Board
 - Clarify relationship between the Advisory Board and the Tripartite Review
 - Revise existing TORs in the Project Document if necessary
2. Clarify the role and responsibility of various participants for achieving the project outcomes.
 - Identify links and coordination between participants and activities
 - Link each participant to the work plan and delivery of project outcomes
 - Strengthen links to project stakeholders
3. Provide an organizational chart of the project (donors, government, MOST, PMO, project staff, contractors), including reporting lines. This should include:
 - Location of all staff and PMO
 - Relationship of key project stakeholders (including name, title and contact details of all government counterparts)
4. Develop an M & E framework for the implementation of the project, including:
 - Annual work planning process, linked to the rolling work plans. This will include the setting of yearly targets/milestones that are understood and agreed/endorsed by all stakeholders

- Ongoing work plan of monitoring programs
 - Links to project outcome indicators (impact indicators), progress indicators and the Logical Framework
 - Practical, activity-level links to the national energy efficiency plan
 - Clarification of roles and responsibilities of all participants (NPD, NPM, CTA, MOST, PMO, execution service provider, UNDP, and other involved government agencies and donors.)
 - Monitoring of progress of parallel activities of co-financing institutions (and the delivery of their committed co-financing)
 - Evaluation of the achievement of the target milestones/benchmarks (as per Logical Framework), which will be used as bases for the succeeding phase of the PECSME.
5. Detail and finalize the TORs for all project sub-contracts, with more details and focus for those to be started in the first year, in-line with the information provided in the Project Document.
 6. Coordinate all co-financing sources with the project work plan. This should include arrangements of government and private co-financing, and ways of monitoring, evaluation, and reporting for the co-financing.
 7. With assistance from UNDP (including UNDP-Vietnam and UNDP-GEF's Regional Office in Kuala Lumpur), review the capacity of MOST and the PMO in providing and/or obtaining project execution services and day-to-day project management. Provide training on required UNDP reporting and project management requirements, as well as general GEF expectations.
 8. Prepare a Project Operations Manual (POM) as supplement to the Vietnam NEX Manual. Share with all participants and provide necessary training on the POM.
 9. Review the project's Monitoring and Evaluation Plan and expand if necessary. Ensure there are measurable indicators and milestones of impact at the Output, Purpose and Goal levels of the Log Frame. Ensure baseline data are in place for all indicators. Review the progress indicators set out in the Log Frame and improve as necessary.
 10. Identify significant Project Risks (possible barriers to successful project implementation and identified externalities that may reduce project effectiveness). Prepare a detailed risk management strategy for project implementation.
 11. Prepare a detailed work plan for the first quarter of implementation. Prepare a project budget revision if necessary.

Inception Process

The NPM is expected to meet with all stakeholders during the Inception Phase. This may be a mix of individual appointments and group meetings and/or workshops.

In the spirit of cooperation underpinning this project, all parties shall be invited to participate in and contribute to the Inception Phase.

The Inception Phase shall include formal and informal training for the participants by MOST. This will cover an induction into the organization, its procedures and arrangements, as well as a sharing of

project-specific knowledge from existing MOST initiatives. The NPM and PMO will also receive training from UNDP. This will include an overview of UNDP rules and procedures from UNDP-Vietnam, introduction to the office, as well as a briefing on GEF matters from the UNDP-GEF Regional Coordinator.

The NPM leads the Inception Phase (with assistance from CTA) and shall refer to all previous project comments, including those of the STAP Roster Expert, GEF Secretariat, UNDP-GEF, and GEF Council members. MOST and UNDP will provide copies of all relevant correspondence.

The Inception Phase is expected to take approx. 2-3 weeks. However flexibility exists to take account of the local situation and seasonal conditions. Monthly updates of the progress shall be provided to the UNDP Resident Representative, through meetings at the UNDP office. More regular and informal contact should be maintained with responsible UNDP Program Officers.

The draft Inception Report will be shared with UNDP and MOST as soon as available and before being circulated to other stakeholders. Preparatory meetings between MOST and UNDP-Vietnam and UNDP-GEF will be held well in advance of the Advisory Board in order to reach agreement on key issues before seeking the Advisory Board's approval. This will also be an opportunity to clarify UNDP's role in annual work plan reviews, measurement of progress indicators and impact indicators, TPRs and annual work planning exercises.

The agreed draft Inception Report shall then be circulated for comments to all stakeholders before a revised final draft Inception Report is sent to Advisory Board members. The final draft will be sent to Advisory Board members no later than 2 weeks in advance of the Inception Meeting.

Annex 2b

Summary of Duration of Assignment and Budget Allocation for PMO Personnel and Subcontracts

Title	Duration (months)	Budget Allocation (US\$)
Project Management Office		
1. Project Manager	60	84,000
2. Project Technical Adviser	60	84,000
3. Administrative Officer	60	36,000
4. Accountant	60	36,000
5. Administrative Assistant	60	25,200
6. Task Expert – Policy and Institutional Development	57	62,700
7. Task Expert – Communication and Awareness	57	62,700
8. Task Expert – Training	57	62,700
9. Task Expert – EESP and Financing	57	62,700
10. Task Expert – Technology Demonstration	57	62,700
Component 1 – EC&EE Policy and Institutional Support Development Program		
1. NCs – EC Program Design Experts (2)	8	22,400
2. NC – Management Information Expert	15	15,000
3. Svc Co – Devt. of Circular on Tax Incentives and Financial Incentives	12	15,000
4. Svc Co – Devt. of Regulation on SME EC&EE Technology Transfer	12	15,000
5. Svc Co – Devt. of Circular on EC&EE Labeling	12	10,000
6. Svc Co – Devt. of EE Service Provider’s Accreditation and Direction on Energy Consumption Reporting	24	15,000
7. Svc. Development of Environmental Standards	12	20,000
Component 2 – EC&EE Communication and Awareness Program		
1. IC – Communication and Awareness Expert	3.5	49,000
2. NCs – Communication Strategy Experts (2)	3	8,400
3. Svc Co – Assessment of EC&EE Awareness and Feedback Survey	9	30,000
4. Svc Co – Development of SME Energy-Use Database	18	20,000
5. Svc Co Design and Implementation of Disseminated Information Package	36	150,000
6. Svc Co – Organization of two Exhibition of EE Equipment	6	80,000
Component 3 – EC&EE Technical Capacity Development Program		
1. IC – EC&EE Training Expert	3	42,000
2. Svc Co – Conduct of Training Courses for EC&EE Trainers	12	60,000
3. Svc Co – Conduct of Training Courses for SMEs and Energy Auditors	30	310,000

Title	Duration (months)	Budget Allocation (US\$)
4. Svc Co – Design of Sustainable EC&EE Training Program for Universities and Colleges	6	15,000
5. Svc Co – Evaluation of Training Program	6	19,500
Component 4 – EE Service Provision Support Program		
1. IC – EESP Expert	3	42,000
2. IC – EE Equipment Production Expert	2	28,000
3. NC – EESP Business and Financing Expert	24	33,600
4. Svc Co – Development of a Suitable Institutional and Legal Framework for EESP Activities	8	15,000
5. Svc Co – EESP Business and Financing Capacity Building and Impl. of standardized Contracts to Delivers EESP services	48	64,600
6. Svc Co – Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equip. Manufacturers	24	56,000
7. Svc Co – Design of a Sustainable EC&EE R&D Program	6	15,000
Component 5 – EC&EE Financing Program		
1. IC – Training Expert on Bankable Project Appraisal	2	28,000
2. SME Guarantee Funding Expert	1.5	21,000
3. NCs – Experts on Evaluation of Established Financing Mechanism (2)	3	8,400
4. Svc Co – Business Capacity Building for Banking and Financing Sector	36	45,000
5. Implementation of Guarantee Funding Mechanism	48	30,000
Component 6 – EC&EE Demonstration Program		
1. Svc – Provision of Technical assistance to EC&EE in Brick Making Sector	54	75,000
2. Svc – Provision of Technical assistance to EC&EE in Ceramics Sector	54	60,000
3. Svc – Provision of Technical assistance to EC&EE in Paper & Pulp Sector	54	30,000
4. Svc – Provision of Technical assistance to EC&EE in Textile Sector	54	30,000
5. Svc – Provision of Technical assistance to EC&EE in Food-Processing Sector	54	30,000
6. Svc – Evaluation of Impact of Demonstration Program	7	15,000

Annex 3 - List of Equipment

A. PECSME Project Management Office

Type	No. of Units	Unit Cost	Total
1. Desktop Computer	9	1,000	9,000
2. Laptop	2	1,500	3,000
3. Laser Printer	2	2,000	4,000
4. Laser Shot	3	500	1,500
5. Scanner	2	100	200
6. Digital Camera	2	800	1,600
7. Fax Machine	1	200	200
8. Mobile Phone	2	600	1,200
9. Office Desk and Chair	10	70	700
10. Photocopier	1	3,000	3,000
11. Project Vehicle	1	35,000	35,000
Sub-total			59,400

B. Measuring Equipment for Energy Auditing Training

ID	Type	Cost US\$
	Flue gas analysis	
1	Sampling system, filter, primary cooler	2,400
2	Flue gas pump	3,500
3	Flue gas refrigerator	5,500
4	O ₂ meter (portable) with spare parts	2,000
5	Tube type gas detector (CO, CO ₂)	1,500
	Temperature meter	
6	Surface temperature meter (laser type, portable)	1,000
7	Thermocouple temperature meter (portable)	300
	Flow meter	
8	Supersonic flow meter (portable)	7,700
	Electric measurement	
9	Clamp-on meter (for high voltage) kWh, kW, V, A Power factor	2,300
10	Clamp-on meter (for low voltage) kWh, kW, V, A Power factor	2,300
11	Multi-tester	100
12	Illuminate meter	800
	Total (one set of equipment)	29,400
	Total (two sets of equipment)	58,800

Annex 4

Indicative Monitoring and Evaluation Work plan and corresponding Budget

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
Inception Workshop	<ul style="list-style-type: none"> ▪ Project Director ▪ Project Manager ▪ UNDP-Vietnam ▪ UNDP-GEF 	\$ 14,000	Within first two months of project start up
Inception Report	<ul style="list-style-type: none"> ▪ PECSME PMO ▪ UNDP-Vietnam 	\$ 1,000	Immediately following IW
Measurement of Means of Verification for Project Purpose Indicators	<ul style="list-style-type: none"> ▪ Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members 	To be finalized in Inception Phase and Workshop. Indicative cost \$ 34,000	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	<ul style="list-style-type: none"> ▪ Oversight by Project GEF Technical Advisor and Project Manager ▪ Measurements by regional field officers and local IAs 	To be determined as part of the Annual Work Plan's preparation. Indicative cost \$25,000	Annually prior to APR/PIR and to the definition of annual work plans
APR and PIR	<ul style="list-style-type: none"> ▪ PECSME PMO ▪ UNDP-Vietnam ▪ UNDP-GEF 	None	Annually
TPR and TPR report	<ul style="list-style-type: none"> ▪ Government Counterparts ▪ UNDP-Vietnam ▪ PECSME PMO ▪ UNDP-GEF Regional Coordinating Unit 	None	Every year, upon receipt of APR
Advisory Board Meetings	<ul style="list-style-type: none"> ▪ Project Manager ▪ UNDP-Vietnam 	\$ 2,000	Following Project IW and subsequently at least once a year
Periodic status reports	<ul style="list-style-type: none"> ▪ PECSME PMO 	None	To be determined by Project team and UNDP-Vietnam
Technical reports	<ul style="list-style-type: none"> ▪ PECSME PMO ▪ Hired consultants as needed 	\$ 15,000	To be determined by Project Team and UNDP-Vietnam
Mid-term External Evaluation	<ul style="list-style-type: none"> ▪ PECSME PMO ▪ UNDP- Hanoi 	\$ 20,000	At the mid-point of project

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
	<ul style="list-style-type: none"> ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team) 		implementation.
Final External Evaluation	<ul style="list-style-type: none"> ▪ PECSME PMO, ▪ UNDP-Vietnam ▪ UNDP-GEF Regional Coordinating Unit ▪ External Consultants (i.e. evaluation team) 	\$ 30,000	At the end of project implementation
Terminal Report	<ul style="list-style-type: none"> ▪ PECSME PMO ▪ UNDP-Vietnam ▪ External Consultant 	\$ 5,000	At least one month before the end of the project
Lessons learned	<ul style="list-style-type: none"> ▪ PECSME PMO ▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc) 	\$ 10,000 (average 2,000 per year)	Yearly
Audit	<ul style="list-style-type: none"> ▪ UNDP-Vietnam ▪ PECSME PMO 	\$ 10,000 (average \$2000 per year)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	<ul style="list-style-type: none"> ▪ UNDP Country Office ▪ UNDP-GEF Regional Coordinating Unit (as appropriate) ▪ Government representatives 	\$ 15,000 (average one visit per year)	Yearly
TOTAL INDICATIVE COST <i>Excluding project team staff time and UNDP staff and travel expenses</i>		US\$ 181,000	

Annex 5

PECSME Baseline Data and Annual Targets

A. Baseline Data

The following are the baseline data corresponding to the success indicators for the project goal, purpose and project outputs/outcomes:

Project Strategy & Indicators	Baseline (Value in Year 0)
Project Goal: The annual growth rate of GHG emissions from SMEs is reduced through the removal of major barriers to adoption of more energy efficient technologies and energy management practices	The annual growth rate of GHG emissions from SME' activities is reduced by 0.23%
Project Purpose: Energy utilization efficiency in SME sector is significantly improved	No annual energy savings of in the SME sector
	Negligible reduction in energy cost per unit production in the SME sector
Project Outputs/Outcomes	
1. EC&EE Policy and Institutional Support Development Program: Increased impact of existing policies as well as from the recently enacted EC&EE decree through strengthened capacity of relevant Govt. Ministries, Departments and Agencies in effective policy and institutional design, guidance, implementation and enforcement of energy conservation measures.	One EC&EE policy recommendation
	No established regulations
	No survey on impact of incentives conducted
	EC&EE aspects not included in national SME development program.
	No EC&EE professional association
	Non-EC&EE-related environmental standards enforced by NEA
2. EC&EE Communications and Awareness Program: Enhanced SME and public awareness of EC&EE through increased effectiveness and regular updating of an integrated information collection, dissemination and reporting system.	No Communications Strategy
	2 training courses conducted annually
	No website
	Very limited EC&EE awareness campaigns.
	No SME energy-use database
	Limited published leaflets and booklets on EC&EE
3. EC&EE Technical Capacity Development Program: Improved skills in EC&EE implementation through enhanced training and evaluation	No integrated and sustainable SME EC&EE training system for trainers, energy consultants, managers and technicians
	No EC&EE training materials for SMEs
	No Surveys of SMEs
	No SME energy use reports
	No Energy audit reports
4. Energy Efficiency Services Provision Support Program: Fostering of a growing, competitive and sustainable energy efficiency services provision industry through enhanced	No EESP training courses
	No EESP institutional and legal framework
	7 EESPs operating in Vietnam
	No technical assistance provided to EESPs

Project Strategy & Indicators	Baseline (Value in Year 0)
business, engineering and financial skills.	Very few number of EESP contracts and projects No assessment of local equipment supply capability reports
5. EC&EE Financing Support Program: Increased financial system willingness to lend to SMEs for EC&EE projects through enhanced knowledge of EC&EE and greater skills in preparing and evaluating loan applications	No financing scheme for SME EC&EE investments
	Limited information on financing schemes and loan guarantee funds
	Very few number of EC&EE SME loans made.
	No financial institutions providing SME EC&EE financing assistance
6. EC&EE Demonstration Program: Increased credibility of EC&EE through successfully implemented and evaluated demonstration projects	2 demonstrations of EC&EE management, operational and technology improvements in credible, monitored and evaluated projects
	Few number of SME EC&EE investment projects presented to banks for loans

B. Annual Targets

The following are the annual targets for the key impact indicators of the PECSME project:

Key Impact Indicator	Targets					
	Year 1	Year 2	Year 3	Year 4	Year 5	
1. CO2 Emissions Reduction (ktonnes)	0.0	13.2	109.4	397.9	961.9	
2. Energy Saving (KTOE)	0.0	2.0	15.6	56.5	136.1	
3. Each Sector						
Brick	CO2 reduction	0.0	4.7	51.4	191.5	467.1
	Energy Saving	0.0	1.2	12.9	48.2	117.7
Ceramics	CO2 reduction	0.0	5.6	47.8	174.4	422.0
	Energy Saving	0.0	0.0	-0.4	-1.5	-3.6
Textile	CO2 reduction	0.0	1.4	5.0	15.7	35.6
	Energy Saving	0.0	0.4	1.4	4.3	9.8
Food-processing	CO2 reduction	0.0	0.4	1.4	4.5	10.4
	Energy Saving	0.0	0.1	0.5	1.5	3.5
Pulp & Paper	CO2 reduction	0.0	1.1	3.8	11.9	26.9
	Energy Saving	0.0	0.3	1.2	3.8	8.7

(1) 0% of replacement of Traditional Kilns with Vertical Shaft Brick Kilns in Year 0.

(2) 2% of SME applied LPG-Fired Kiln in Year 0 (resulting in 0% of energy reduction and 1.3% of CO₂ emission reduction) in Ceramics sector.

(3) 0% of EC&EE measures implemented in Textile, Food-Processing and Paper

C. Schedule of Impact Measurement

Key Impact Indicator	Target	Means of Verification	Sampling Frequency	Location
CO2 emission reductions	Year 3: 109.4 ktonnes Year 5: 962.0 ktonnes	- Inventory conducted by MONRE - Project M&E reports	Start, mid and the end of PECSME Projects	All PAs
Energy savings	Year 3: 15.6 ktoe Year 5: 136.1 ktoe	- Investment loan made by financial institutions - Project M&E reports	Start, mid and the end of PECSME Projects	All PAs

Annex 6

Energy Consumption and CO₂ Emission Calculation Methodology

1. Energy Consumption and CO₂ Emissions in 5 Major SME Sub-Sectors (Year 2002)

Due to non-availability of data on energy consumption in the 5 SME sub-sector in Year 2002, the quoted energy consumption figures in the table below (see also Table E-1 in Annex E of the Project Brief) were derived from the following sources and estimations:

Sector	Energy Consumption 2002 (ktoe)	Sources
Brick	848.0	Estimates based on statistical data of brick units by SMEs in 2002 and energy consumption per unit surveyed by IHER.
Ceramics	322.6	According to data of energy consumption by SMEs in ceramic sector.
Textile	177.0	Estimates based on two set of information: (1) Energy consumption of three case studies representing three SME's size categories: having legal capital from VND 0.5 – 1 million, from VND 1 - 5 million, and from VND 5 – 10 million; (2) Number of SMEs in the three size categories according to the Results of the Enterprise Census in 2001 undertaken by the General Statistical Office (see Table E-7 of Annex E of the Project Brief).
Food Processing	343.0	Estimates based on two set of information: (1) Energy consumption of three case studies representing three SME's scales having legal capital from VND 0.5 – 1 million, from VND 1 - 5 million, and from VND 5 – 10 million; (2) Number of SMEs of three size categories according to the Results of the Enterprise Census in 2001 undertaken by the General Statistical Office ¹ (see Table E-7 of Annex E of the Project Brief).
Pulp & Paper	403.4	Estimates based on two set of information: (1) Energy consumption of three case studies representing three SME's scales having legal capital from VND 0.5 – 1 million, from VND 1 - 5 million, and from VND 5 – 10 million; (2) Number of SMEs of three size categories according to the Results of the Enterprise Census in 2001 undertaken by the General Statistical Office (see Table E-7 of Annex E of the Project Brief).

1. The Results of the Enterprise Census at 1st April 2001, General Statistical Office, Statistical Publishing House – Hanoi 2002.

2. Projected Energy Consumption and CO₂ Emissions in 5 Major SME Sub-sector (2005–2009) (Table E-2 and E-3)

2.1 Annual Energy Consumption (Baseline Scenario)

Estimates of energy usages of the 5 SME sub-sectors during 2005 – 2009 were determined based on data of energy consumption of each sector in year 2002 and two assumptions as follows: (1)

From 2002-2005, the annual growth rate of energy consumption in each SME sub-sector is estimated to be roughly equal to the annual growth rate of output of each sector; (2) From 2006-2009, the annual growth rate of energy consumption in each SME sub-sector will be equal to the projected annual growth rate of output of each sector (see Table E-1 of Annex E of the Project Brief). The following table presents the identified energy conservation opportunities in each SME sub-sector. Based on the findings in the energy audits that were carried out during the PDF-B exercise, only the SMEs in the ceramic sub-sector (about 2% of the sub-sector) are doing something to realize such opportunities.

SECTOR	ENERGY CONSERVATION OPPORTUNITIES
Brick	Replacement of traditional Kilns with Vertical Shaft Brick Kilns
Ceramics	Replacement of traditional coal-fired Kilns with LPG-Fired Kilns
Textiles	Insulation of heating pipes and valves; Condensate recovery; Installation of VSD; Replacement of old motors with new high efficiency motors; Improvement of lighting systems and Improvement of boiler operation.
Food Processing	Overhaul of cooling machines; Application of cooling accumulation at off-peak hours; Installation of VSD for motors of chilled water pumps, fans and compressors; Insulation for cool stores; Improvement of lighting systems.
Pulp & Paper	Installation of VSD for motors; Insulation for dryers; Improvement of steam distribution systems; Process waste water recycling; Improvement of boilers

The baseline annual energy consumptions in each sector in Years 2002 to 2005 are calculated using the following equation:

$$BEC_O = BEC_{O-1} \times [(1 + GR_A)/100]$$

Where: $BEC_O = EC_{2002} =$ Energy consumption in Year 2002, ktoe

O = 2003, 2004, 2005

$GR_A =$ Average annual energy use growth rate (2002-2005), %

The annual energy consumptions in Years 2006 to 2009 are calculated using the following equation:

$$BEC_N = BEC_{N-1} \times [(1 + GR_B)/100]$$

Where: $BEC_N = BEC_{2005} =$ Energy consumption in Year 2005

N = 2006, 2007, 2008, 2009

$GR_B =$ Average annual energy use growth rate (2006-2009), %

2.2 Energy Consumption with PECSME (Alternative Scenario)

Under PECSME, EC&EE demonstration projects will be carried out each year. The expected annual energy savings in each sector starting Year 2006 are computed using the following equation:

$$ES_N = NS_N \times AES$$

Where: *ES* = annual energy savings, ktoe

N = 2006, 2007, 2008, 2009

NS = Number of sites

AES = Average energy savings per site, ktoe

The annual energy consumptions in the alternative scenario are computed as follows:

$$AEC_N = BEC_N - ES_N$$

Where: *AEC* = Annual energy consumption, ktoe

N = 2006, 2007, 2008, 2009

BEC = Annual energy consumption (baseline), ktoe

ES = Annual energy savings, ktoe

The average energy savings and CO₂ emissions reduction per site are based on the results of the energy audit reports that were conducted during the PDF-B exercise in 5 SME sub-sectors. The implementation schedule of the demonstration projects under PECSME assumes that the energy conservation measures proven in the PECSME will be replicated in 500 SMEs in the 5 sub-sectors during the 5 years of project implementation. The 500 replication projects will be implemented as follows:

SECTOR	2006	2007	2008	2009	TOTAL
Brick	2	20	60	118	200
Ceramics	2	15	45	88	150
Textiles	2	5	15	28	50
Food Processing	2	5	15	28	50
Pulp & Paper	2	5	15	28	50

Table.1 shows the annual energy consumptions in the brick sub-sector under the baseline and alternative scenarios as calculated using the above equations. The same equations apply for estimating the annual energy consumptions (baseline and alternative) in the other sub-sectors.

Table 1: Projected Energy Consumption in the Brick Sector (2005-2009)

Year	Annual Energy Consumption		Annual Energy Savings
	Baseline	Alternative	
2005	1,095.2	1,095.2	0.0
2006	1,166.4	1,165.2	1.2
2007	1,242.2	1,230.4	11.8
2008	1,322.9	1,287.6	35.3
2009	1,408.9	1,339.5	69.4

2.3 CO2 Emissions Reduction

Estimates of CO₂ emissions of the 5 SME sub-sectors were determined based on the calculated energy consumptions in the baseline and alternative scenarios. The CO₂ emission in each sub-sector is calculated using the average CO₂ emission factor of the sub-sector. The CO₂ emission factor is based on the average energy consumption mix of the sub-sector. The annual CO₂ emissions (in either scenario) are estimated using the following equation:

$$\text{CO}_2\text{E} = \text{EC} \times \text{CO}_2\text{EF}$$

Where: CO_2E = CO₂ emissions, ktonnes
 EC = energy consumption, ktoe
 CO_2EF = CO₂ emissions factor, tonnes/toe

The CO₂ emissions reduction is calculated using the following equation:

$$\text{CO}_2\text{R} = \text{CO}_2\text{E}_{\text{baseline}} - \text{CO}_2\text{E}_{\text{alternative}}$$

Where: CO_2R = CO₂ emissions reduction, ktonnes
 CO_2E = CO₂ emissions, ktonnes

Table 2 shows the annual CO₂ emissions from the brick sub-sector under the baseline and alternative scenarios, as well as the annual CO₂ emissions reductions as calculated using the above equations. The same equations apply for estimating the annual CO₂ emissions (baseline and alternative) in the other sub-sectors.

The energy consumptions and CO₂ emissions in the alternative scenario are presented in Tables E-3 and E-4 of Annex E and Tables E-9 & E-10 of Annex E of the Project Brief, respectively. Note that the average CO₂ emission factor based on the average energy mix in the brick sub-sector is 3.9694 ktonnes/ktoe.

Table C.2: Projected CO₂ Emissions (ktonnes) in the Brick Sub-Sector (2005-2009)

Year	Annual CO ₂ Emissions		Annual CO ₂ Emissions Reduction
	Baseline	Alternative	
2005	4,347.3	4,347.3	0.0
2006	4,629.9	4,625.2	4.7
2007	4,930.8	4,884.1	46.7
2008	5,251.1	5,111.0	140.1
2009	5,592.5	5,316.9	275.6

ANNEX 7: INCREMENTAL COST ANALYSIS

PECSME is made up of six components addressing in an integrated fashion the barriers to the widespread improvement in SME energy use in the country. The contributions by the Vietnam public and private sector partners were discussed at the PDF-B LFA workshop and have been confirmed in the formal letters of commitment attached to this proposal. Each project component will address the shortfall of the past and current efforts by the government and the private sector in promoting EC&EE in the SME sector in Vietnam, as follows:

Component 1: EC&EE Policy and Institutional Support Development Program. This involves capacity building for government policymakers to develop policies, circulars, standards and enforcement mechanisms; strengthening the capacity of coordinating agencies and support for local technical support networks; and enhanced EC&EE impact of environmental standards. These additional capacity building and support activities will cost US\$ 489,000 to implement. The total cost of the baseline activities is US\$ 750,000. This component will cost US\$ 1,239,000 to implement.

Component 2: EC&EE Communications and Awareness Program. This involves capacity building and support for the development of an overarching communications strategy and under this strategy an integrated set of awareness and information gathering, dissemination, and updating activities, and capacity building activities in energy consumption monitoring systems. These additional capacity building and support activities will cost US\$ 746,000 to implement. The total cost of the baseline activities is US\$ 720,000. This component will cost a total amount of US\$ 1,466,000 to implement.

Component 3: EC&EE Technical Capacity Development Program. This involves capacity building in the training of managers, technical staff, workers and trainers in EC&EE; and establishes suitable training courses and their evaluation and sustainable operation beyond the program's life. These additional capacity building, establishment and support activities will cost US\$ 902,000 to implement. The total cost of the baseline activities is US\$ 600,000. This component will cost a total amount of US\$ 1,502,000 to implement.

Component 4: Energy Efficiency Services Provision Support Program. This involves capacity building and support for a credible high quality energy-efficiency services provision industry, including the enhanced supply of energy efficient equipment, with support from public energy conservation centers, universities, polytechnics and technician training providers. These additional capacity building and support activities will cost US\$ 422,000 to implement. The total cost of the baseline activities is US\$ 1,740,000. This component will cost US\$ 2,162,000 to implement.

Component 5: EC&EE Financing Support Program. This involves capacity building and support for enhanced EC&EE project investment through a risk-sharing loan guarantee funding mechanism utilizing existing environmental, donor and commercial bank funds. These additional capacity building and support activities will cost US\$ 2,395,000 to implement. The total cost of the baseline activities is US\$ 1,150,000. This component will cost a total amount of US\$ 3,545,000 to implement.

Component 6: EC&EE Demonstration Program. This involves technical support for the demonstration of the cost effectiveness and technical performance of new EC&EE technologies for replication in 500 SME EC&EE projects. These additional technical support activities will cost US\$ 515,000 to implement. The total cost of the baseline activities is US\$ 18,340,000. This component will cost a total amount of US\$ 18,855,000 to implement.

ANNEX 8: PROJECT LOGICAL FRAMEWORK

The table below shows the objectively verifiable indicators, sources of verification and critical assumptions for the PECSME goal, purpose and outputs/results. The detailed project framework design or project-planning matrix is shown in Annex B of the PECSME Brief. This was developed from the logical framework analysis workshop that was carried out during the PECSME preparatory activities (the PDF-B exercise).

Project Strategy	Objectively Verifiable Indicators	Sources of Verification	Critical Assumption
A. Project Goal			
Annual growth rate of GHG emissions from SMEs reduced through the removal of major barriers	SMEs' GHG emissions reduced by an average of 1,004.2 ktonnes of CO ₂ p.a. during 2005-2015.	<ul style="list-style-type: none"> - Sectoral energy use data. - Inventory conducted by MONRE. 	Monitoring activities under the project on fossil fuel consumption are fully supported.
B. Project Purpose			
Energy utilization efficiency in SME sector is significantly improved	Average fossil fuel savings of 189.5 KTOE (Tonnes Oil equivalent)/year is achieved in the SME sector during 2005-2015.	<ul style="list-style-type: none"> - Documentation of the number of EC&EE investments implemented. - Project M&E reports. 	<ul style="list-style-type: none"> - EC&EE policies enforced. - Private sector's interest to collaborate is sustained.
	Average unit energy cost in SME sector reduced by 10-15% by Year 5.	Project surveys in 5 sectors and evaluation reports.	Reliable data on energy savings available from SME records.
C. Project Outputs/Results			
1. EC&EE Policy and Institutional Support Development Program	Timely development and implementation of necessary regulations, circulars, support and control mechanisms and enforcement giving practical effect to existing policies; and better utilization of environmental standards to reduce GHG emissions by year 3.	<ul style="list-style-type: none"> - EC&EE policy recommendations. - Relevant circulars and regulations. - Survey on impact of incentives. - Documentation of national SME development program. - EC&EE Expert Assoc. Reports. - New standards enforced by NEA. 	<ul style="list-style-type: none"> - Related ministries assist in circulars/regulations development. - Strict enforcement of circulars and regulations on incentives. - MOST and ECCs support capacity building activities. - SMEPC and SMEDD consider EC&EE in SME development.
2. EC&EE Communications and Awareness Program	Establishment and operation of comprehensive communications strategy and a subsequent integrated information system gathering information from SMEs, development of information, dissemination of information through appropriate range of channels, and working with and through a range of information	<ul style="list-style-type: none"> - Progress reports. - Documentation of strategy - Documentation of training materials. - Lists of training participants. - Website hits on VCCI EC&EE info. - Awareness campaigns' evaluation. 	<ul style="list-style-type: none"> - Strategy is acceptable to, and "bought into" by stakeholders - Participating organizations join & participate in information network. - SMEs are willing to provide energy use and other information.

Project Strategy	Objectively Verifiable Indicators	Sources of Verification	Critical Assumption
	providers by end year 3.	<ul style="list-style-type: none"> - Report on SME EC&EE projects. - SME energy-use database. - Published leaflets and booklets. - Documentation of info packages. - Assessment of info packages. 	<ul style="list-style-type: none"> - Government continues info program after project end. - SMEs participate in courses. - EC&EE Champions, EESPs, and ECCs actively participate.
3. EC&EE Technical Capacity Development Program	Establishment and operation of integrated and sustainable SME EC&EE training system for trainers, energy consultants, managers and technicians.	<ul style="list-style-type: none"> - Lists of certified trainers. - Training material documentation. - Training course evaluations. - Surveys of SMEs. - SME energy use reports. - Energy audit reports. 	<ul style="list-style-type: none"> - Trained trainers participate. - SMEs report energy use. - Technical universities and colleges include EC&EE in engineering curricula.
4. Energy Efficiency Services Provision Support Program	Enhanced commercial energy efficiency services provision (EESP) industry effectively marketing services to SMEs and leading to wider use of energy audits, increased uptake of energy audit recommendations, and delivery of specialist services such as plant design and process integration, energy monitoring and plant commissioning, establishment and implementation of planned preventive maintenance regimes by year 4, training in, and R&D support for, local EC&EE equipment supply capabilities by year 3	<ul style="list-style-type: none"> - EESP training evaluation reports. - Establishment of EESP institutional and legal framework. - Establishment of new EESPs. - Documentation of technical assistance provided to EESPs. - Evaluation of EESP contracts and projects. - Evaluation of EESP service delivery. - Local equipment supplier and supporter reports. - Documentation of R&D program. 	<ul style="list-style-type: none"> - Existing EESPs interested in receiving technical assistance. - Energy consultants, financiers, and entrepreneurs interested in forming new EESPs. - EESPs provide reliable and quality energy services. - SMEs aware of EC&EE benefits of using EESPs. - Local equipment suppliers interested in industrial equipment energy performance improvement.
5. EC&EE Financing Support Program	Mobilization of necessary finance for SME EC&EE investments through loan guarantee fund by year 2 and development of a sustainable financing system for future SME EC&EE projects by year 5.	<ul style="list-style-type: none"> - Seminar materials developed. - Training courses' evaluation. - Information page on VCCI website. - Publication of brochures/guides. - EC&EE SME loans made 	<ul style="list-style-type: none"> - Financial institutions interested in, send capable staff to training, and extend credit to SME sector. - VCCI supports activities. - Existing environmental funds provide EC&EE loans.
6. EC&EE Demonstration Program	Demonstration of new EC&EE technologies in credible, monitored and evaluated projects completed by mid-Year 3 leading to 500 sound EC&EE investment projects presented to banks for loans by	<ul style="list-style-type: none"> - Demo project evaluation reports. - Documentation of SMEs' implemented EC&EE projects. - Project progress reports. 	<ul style="list-style-type: none"> - Supportive DEMO sites. - Financial institutions ready to provide EC&EE financing. - 500 replication SMEs

Project Strategy	Objectively Verifiable Indicators	Sources of Verification	Critical Assumption
	SMEs starting mid-3 rd year.	- Final project report.	commit to implement EC&EE investments.