

**GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM
UNITED NATIONS DEVELOPMENT PROGRAMME**

**VIETNAM: PROMOTING ENERGY CONSERVATION IN SMALL AND MEDIUM-
SCALE 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.

SIGNATURE PAGE

Country: Vietnam

UNDAF Outcome: Outcome # 1: Government economic policies support growth that is more equitable, inclusive and sustainable

Expected Outcome/Indicator (s) of CP 2006-2010: Outcome # 3: Economic growth takes into account environmental protection and rational use of natural resources for poverty reduction.

Expected CP Output(s): Local initiatives identified to promote systematic approaches to efficient use of energy sources

Implementing partner: Ministry of Science and Technology (MOST)

Other Partners: Ministry of Industry (MOI); Ministry of Investment and Planning (MPI); People's Committee of Ho Chi Minh city (HCM DOST, HCM Pollution Mitigation Fund), Industrial and Commercial Bank (INCOMBANK), Vietnam Ceramic and Glass Corporation (VINACEGLASS), Hanoi University of Technology (HUT), Vietnam Women Union (VWU), and Energy Conservation Centres of Hai Phong, HCMC, and Da Nang (EECs).

Programme Period: 2005-2010
Programme Component: (MYFF goal #3)
Energy and Environment for Sustainable Development

Project Title: Vietnam: Promoting Energy Conservation in Small and Medium Enterprises
Project Code: : 00045088
Project Duration: 5 years
Management Arrangement: NEX

Budget: US\$ 28,769,000	
GMS fee: N/A	
Total Budget: US\$ 28,769,000	
Allocated resources: US\$ 28,769,000	
Allocated resource managed by UNDP	Allocated resources managed by other partners (Co-financing)
<ul style="list-style-type: none"> • Regular: N/A • GEF: 5,469,000 	<ul style="list-style-type: none"> • Total Co-Financing 23,300,000 - Central Government Agencies: 1,100,000 <ul style="list-style-type: none"> MOST: 1,000,000 MOI 50,000 MPI 50,000 - Local Government Agencies 2,600,000 <ul style="list-style-type: none"> ECCs 600,000 HCMC DOST 1,000,000 PM Fund 1,000,000 - Business Sector 19,100,000 <ul style="list-style-type: none"> INCOMBANK 14,100,000 VINACEGLASS 5,000,000 Others 500,000

Agreed by Government/
 Implementing Partner: _____ Date: _____

Agreed by UNDP: _____ Date: _____

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LIST OF ACRONYMS

Acronym	Meaning
ADB	Asian Development Bank
APEC	Asia Pacific Economic Cooperation forum
APR	Annual Project Review
ASMED	Agency for SME Development
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
DOE	Department of Environment, MONRE
DOIs	Departments of Industry in Provinces
DOSTs	Departments of Science and Technology in Provinces
DSM	Demand Side Management
EC&EE	Energy Conservation and Energy Efficiency
ECCs	Energy Conservation Centers
EDP	Foundation for Energy Development Planning (Netherlands)
EESPs	Energy Efficiency Service Provision/Providers
ELI	Efficient Lighting Initiative
GACA	Government Aid Coordinating Agencies
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
MONRE	Ministry of Natural Resources and Environment
MOST	Ministry of Science and Technology (since 2003)
MOSTE	Ministry of Science, Technology and Environment (pre-2003)
MPI	Ministry of Planning and Investment
NCs	National Consultants
NEA	National Environmental Agency

Acronym	Meaning
NEDCEN	Non-State Economic Development Center
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
PMU	Project Management Unit
PSC	Project Steering Committee
SDC	Swiss Agency for Development Cooperation
SIDA	Swedish International Development Agency
SMEPC	SME Promotion Council
SMEs	Small and Medium Enterprises
SOEs	State Owned Enterprises
Svc Co	Service Company
TOE	Tonnes of Oil Equivalent
TOR	Terms of Reference
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
VEEPL	Vietnam Energy Efficient Public Lighting
VGCP	Vietnam-Germany Credit Program
VICOOPSME	Vietnam Central Council for Cooperative Union and Small and Medium Enterprises
VINACEGLASS	Vietnam Ceramic and Glass Corporation
VN DSM &EE	Vietnam Demand Side Management and Energy Efficiency
VNCPC	Vietnam Cleaner Production Centre
VSBK	Vertical Shaft Brick Kiln
WB	World Bank
VWU	Vietnam Women Union

SECTION I. ELABORATION OF THE NARRATIVE

Part 1. 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 V; 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 V; 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, ASMED, SMEPC, MOI, MOF, local government agencies (DOSTs, DOI, ECCs), banking institutions, environment protection funding institutions, NGOs and technical universities and colleges will benefit through capacity building and technical assistance.

Part 2. 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 2006-2010 that "Government

economic policies support growth that is more equitable, inclusive, and sustainable”, and the MYFF 2004-2007 goal, namely ‘energy and environment for sustainable development’ and the service line 3.3: access to sustainable energy services.

PECSME Program Components

Each of the components of the PECSME project is comprised of a range of defined activities (*See Section V; 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 outcomes and MYFF goals and service line as mentioned above, 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 3. Management Arrangements¹

The Project will be implemented in accordance with UNDP's National Execution (NEX) modality. The following sections describe the project management arrangement in details.

Counterpart capacity assessment

Ministry of Science and Technology (MOST) is the government agency responsible for technical and scientific management and development in Vietnam. In 1995, the Vietnam Energy Conservation Programme (VECP) was established by MOST to serve as coordinating unit for promoting energy conservation among different stakeholder. Since then, VECP has initiated a number of energy conservation projects with assistance from different international donors. Practically, the successful implementation of the PDF-B showed MOST's capacity in mobilizing participation and resources from different stakeholders to implement the PECSME project. In addition, MOST has vast experience in managing many international projects. Thus, the selection of MOST as the focal point of the project is appropriate.

It is expected that MOST's will designate the Department of Science and Technology Management in all Economic Sectors (DOST) to carry out its implementation functions. DOST has gained important experience in managing NEX project during PDF-B period of the PECSME project.

¹ Notes: This sub-section describes the final management arrangement agreed upon by all signatories and is replacement for the same section proposed in the Project Brief included in Section V. In order to preserve the origin of the Project Brief approved by GEF in the mid 2004, no change has been made to it.

It is also expected that the director of DOST will be appointed as the National Project Director (NPD), who will be responsible for managing the project.

Management arrangement

Implementing partner

Ministry of Science and Technology (MOST) will assume all duties assigned to the implementing partner, which is referred to as “National Executing Agency” in the NEX Manual. MOST is accountable to the Government of Vietnam and UNDP CO for ensuring:

- 1) The effective use of both international and national resources allocated to the project;
- 2) The production of the results expected from it as well as their substantive quality;
- 3) The availability and timeliness of national contribution to support project implementation; and
- 4) The proper coordination among all project stakeholders, particularly national parties.

As the implementing partner, MOST will ensure the delivery of the project outputs and the judicious use of project resources. MOST will coordinate with UNDP CO in the implementation of the project activities and project monitoring and evaluation.

The Department of Scientific and Technological Management in all Economic Sectors (DOST) is designated by MOST to assume the day-to-day implementer of project activities. DOST is responsible for mobilizing national and international inputs to support project implementation, organizing activities in accordance with the work plan, and reporting on the progress as well as financial status.

The director of DOST will be appointed by MOST as the National Project Director (NPD), who embodies the MOST’s responsibility for achieving project objectives and its accountability to UNDP and Government for the use of the project resources. The NPD holds the ultimate authority to expend funds from the *UNDP managed* project budget and acts as the approving officer for the project. The salary cost of the NPD will be borne by the government as in-kind contribution. The job description of NPD is included in Annex 2a.

Project Management Unit

MOST will establish a Project Management Unit (PMU) to assist DOST to implement project components and activities, including management of day-to-day operations of the project, and the overall operational and financial management and reporting of the UNDP funds in accordance with NEX Modality.

The PMU 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 Steering Committee (PSC) as needed. The PMU is headed by the NPD. A list of PMU staff and detailed Terms of Reference and Job Descriptions are provided in Annex 2a. According to the requirements of the project work, PMU may hire short-term contracted personnel, in addition to its full time staff, as and when needed to accomplish the designated work.

Other partners

There are a number of other agencies that will be involved in the promotion, development and implementation of PECSME. These are also co-financiers of the project (see Work Plan and Budget), namely:

- Ministry of Industry (MOI);
- Ministry of Investment and Planning (MPI);
- People's Committee of Ho Chi Minh city (HCM DOST, HCM Pollution Mitigation Fund);
- Energy Conservation Centers in HCM city, Hai Phong and Da Nang;
- Industrial and Commercial Bank (INCOMBANK);
- Vietnam Ceramic and Glass Corporation (VINACEGLASS);
- Hanoi University of Technology;
- The Institute of Energy, MOI; and
- Viet Nam Women Union.

The principles for cooperation and coordination among partners and MOST have been set out in the bilateral agreements between MOST and each partner shown in *Section IV*. The collaborative work plan and communication mechanism will be detailed in the Inception Report and annual work plan.

Project Steering Committee (PSC)

As the nature of the project involved various government agencies, local authorities and business sectors, it is essential that project outputs meet the requirement of both beneficiaries and government. Thus, a Project Steering Committee (PSC) will be created to ensure unified guidance of project implementation and effective coordination among the participating agencies. Ideally, PSC will be chaired by Vice Minister of MOST and consists of senior representatives from MPI, MOST, UNDP, GEF Vietnam, other partners of the project. Proposed functions and modality of work of PSC is shown in TOR 8, Annex 2a. However, the membership and specific responsibility of PSC will be identified based on the consultation with all partners during the Inception Phase.

The PSC 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. PSC will also provide a formal forum for key stakeholders to discuss the progress of the project. The December meeting will be the Annual Project Review (APR).

Public Information and Advocacy

In accordance with the provisions in the Standard Basic Assistance Agreement (SBAA) signed by the two parties in 1978, UNDP has the obligation to inform its stakeholders of the benefits and impacts of UNDP-funded projects and to play an advocacy role for the cause of development cooperation and related social, technical or institutional issues. UNDP will undertake this task through enabling public information and advocacy activities. This includes: prepare and disseminate additional reports, papers and other publications on the activities and achievements of the project and, where appropriate, address wider audiences through national or international mass media.

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, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identification and analyses of lessons learned is an ongoing 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 is allocated for these activities.

UNDP Country Office Support

Upon the designation of the UNDP Resident Representative, the UNDP Programme officer acts as a focal point of UNDP CO in facilitating and monitoring the project implementation. He/she maintains a continuous partnership with the project team and participates in all project reviews, work/budget planning meetings, monitoring visits and evaluations.

She/he will appraise and clear, prior to UNDP Resident Representative's approval, the TORs/specifications, annual and quarterly workplan/budgets/progress reports, as well as proposed use of unspecified budget within the annual budget already approved for the project.

In addition, UNDP CO also provides a range of Implementation Support Services (ISS) to the Project in undertaking specific project activities, (e.g. recruitment of the project personnel, overseas travel, procurement of equipments...). When need arises, the Project should state request for support services (see Annex II.3.5, Vol. 2, NEX), together with specific TORs, specifications and/or other instructions. UNDP will recover the costs for its ISS to these activities as well as other routine project support transactions (e.g. processing contracts, payments, visas, reserving hotels, air-tickets,..) based on actual costs or on a Universal Pricing List (UPL) established by its Headquarters in consultation with Country Offices worldwide. These costs will be charged to the same charts of account as the project inputs themselves, therefore, no separate activities need to be created in the project budget payment.

Part 4. Monitoring and Evaluation

PECSME will be monitored and evaluated in accordance with established UNDP/GEF procedures and UNDP NEX modality. The Logical Framework Matrix in Section V 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

a. Project Inception Phase

A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP CO and representation from the UNDP-GEF Regional Coordinating Unit.

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 UNDP CO and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP CO 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 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-phasing.

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.

b. 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 APR meeting, PSC meetings, and (ii) project related Monitoring and Evaluation activities.

Continuous self-monitoring of implementation progress will be the responsibility of the PMU based on the project's AWP and its indicators. The PMU will inform the UNDP CO 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 (PM) 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 CO and assisted by the UNDP-GEF RCU. 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 AWP. 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 CO through quarterly meetings with MOST and PMU, 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 CO and UNDP-GEF RCU 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 CO and circulated no less than one month after the visit to the project team, all PSC members and UNDP-GEF.

Annual Monitoring will occur through the *Annual Project Review (APR)*, which is conducted during the fourth quarter each year. This is a policy level meeting of the parties directly involved in the project and all key stakeholders, who come together to review the project progress during the past year and agree on the next year's work plan and budget, and any other actions that need to be taken. The PMU will prepare an Annual Project Report and submit it to the UNDP CO and the UNDP-GEF regional office at least two weeks prior to the APR meeting for review and comments.

The Annual Project Report will be used as one of the basic documents for discussions in the APR meeting. The PMU will present the Report that highlights policy issues and recommendations for the decision of the APR participants. The PMU also informs the participants of any agreement reached by stakeholders during the preparation for APR meeting on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

The terminal Project review (TPR) is held in the last month of project operations. The PMU is responsible for preparing the Terminal Project Report and submitting it to UNDP CO and UNDP-GEF Regional Coordinating Unit (Asia-Pacific). It shall be prepared in draft at least two months in advance of the TPR in order to allow review, and will serve as the basis for discussions in the TPR meeting. The TPR 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 or formulation.

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

c. 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.

a. Inception Report (IR)

A Project Inception Report will be finalized immediately following the Inception Workshop, at which agreement on key issues is reached. 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 CO or the UNDP-GEF 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 CO and UNDP-GEF RCU will review the document.

b. Annual Project Report

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

The format of the Annual Project Report 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

c. 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 UNDP 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 APR meeting. The PIR should then be discussed in the APR meeting so that the result would be a PIR that has been agreed upon by the project, the implementing partner, UNDP CO and the concerned RCU.

The individual PIRs are collected, reviewed and analyzed by the RCUs 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 Annual Project Report and PIR, UNDP/GEF has prepared a harmonized format for reference.

d. Quarterly Progress Reports

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

e. Periodic Thematic Reports

As and when called for by UNDP CO, 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 CO 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 CO 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.

f. 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.

g. 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 APR meetings. 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.

h. 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 CO, 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 CO 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 project 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 CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

3. Audit Clause

The Government Aid Coordinating Agencies (GACA) and UNDP CO will provide the overall guidance on project evaluation and audits in accordance with NEX manual. The audit is normally carried out at the level where the original documentation is held. UNDP CO, in consultation with GACA, will draw up the annual audit plan by November. The UNDP CO, thereafter, arranges for a professional auditing firm to undertake an external audit of the project. For this purpose, it is authorized upon signature of the Project Document to incur expenditures on the budget lines dedicated to the project audit.

Part 5. Legal Context

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

Project Revisions

The following types of revisions of this project document may be made 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 outputs or activities of the project, but are caused by the rearrangements 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 Nations system.

OTHER AGREEMENTS

(Attached as separate document)

SECTION V. UNDP-GEF PROJECT BRIEF

(Attached as separate document)

NOTE: These documents are required by GEF and approved at the GEF Inter-sessional Council Meeting in July 2004 and serve as basis for formulating the full size project document was formulated.

ANNEXES

Annex 1: PECSME Implementation Arrangement

Figure 1: PECSME Project Implementation Arrangements

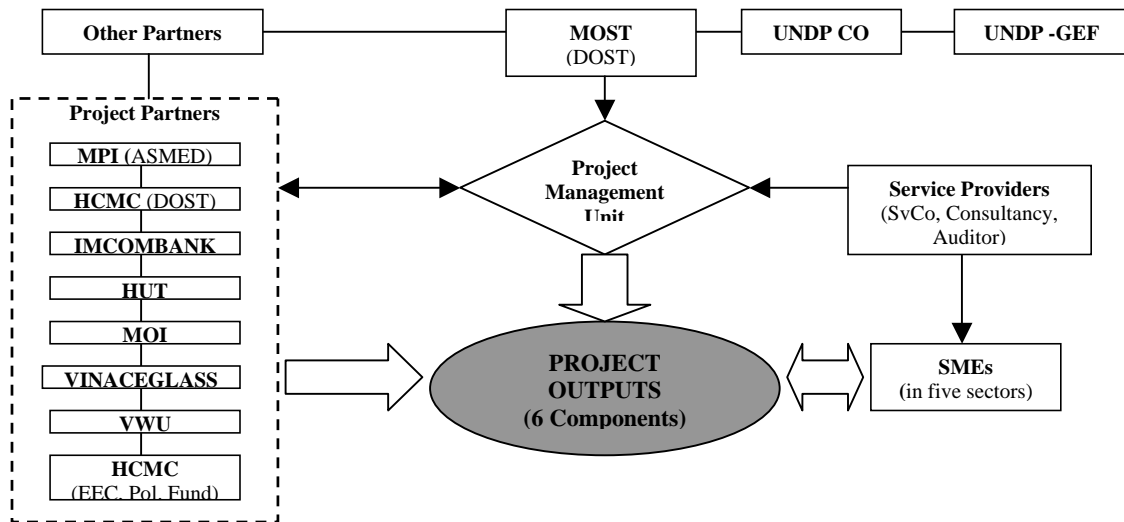
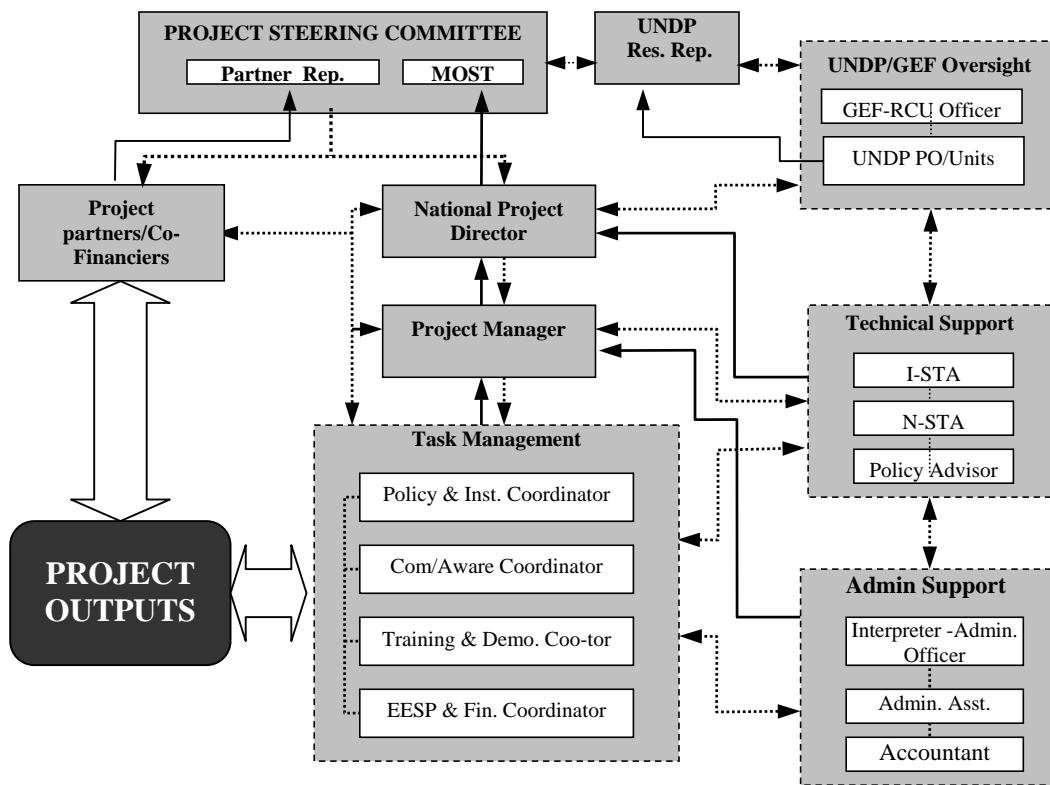


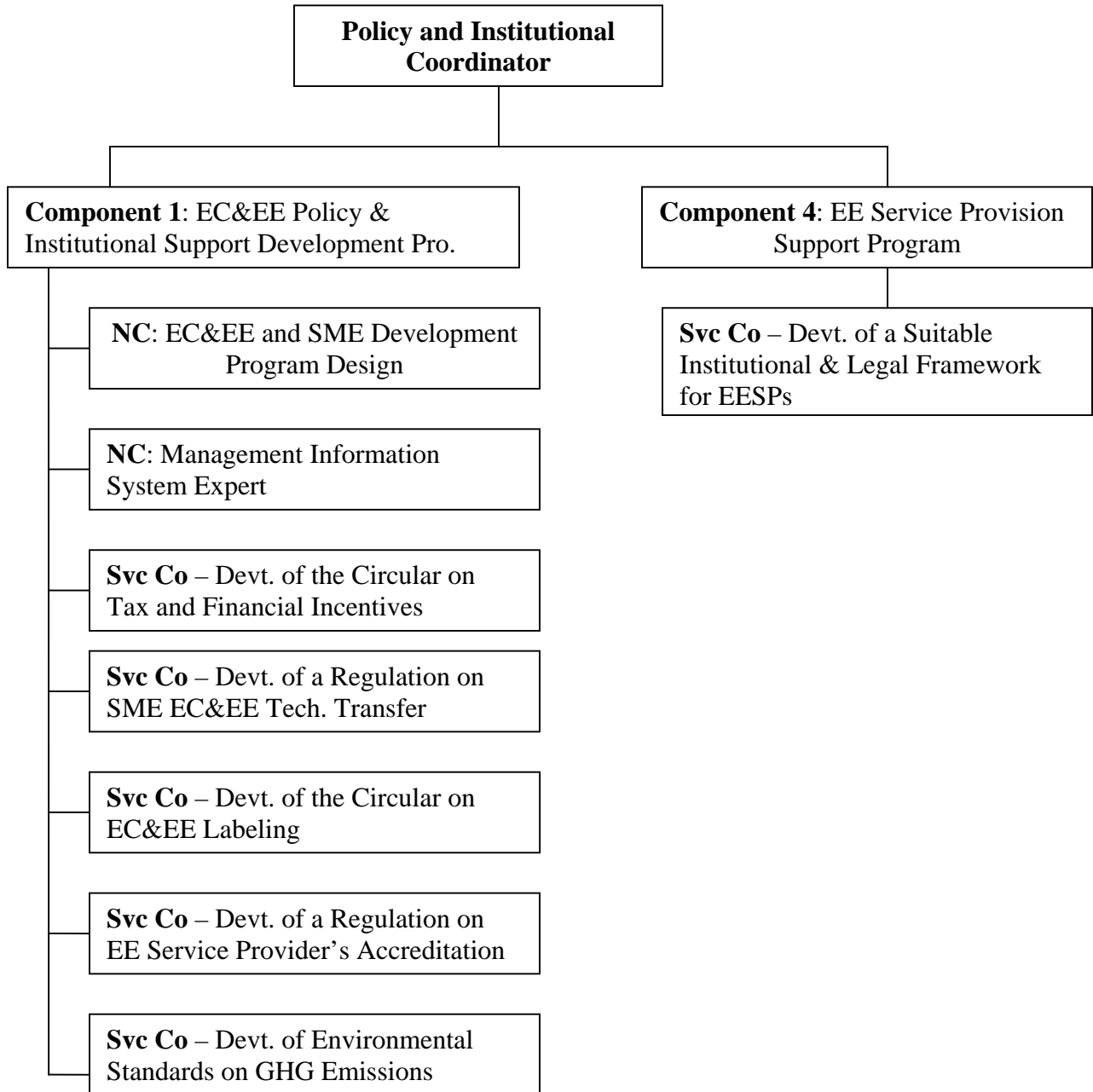
Figure 2: PECSME Project Organisational Chart



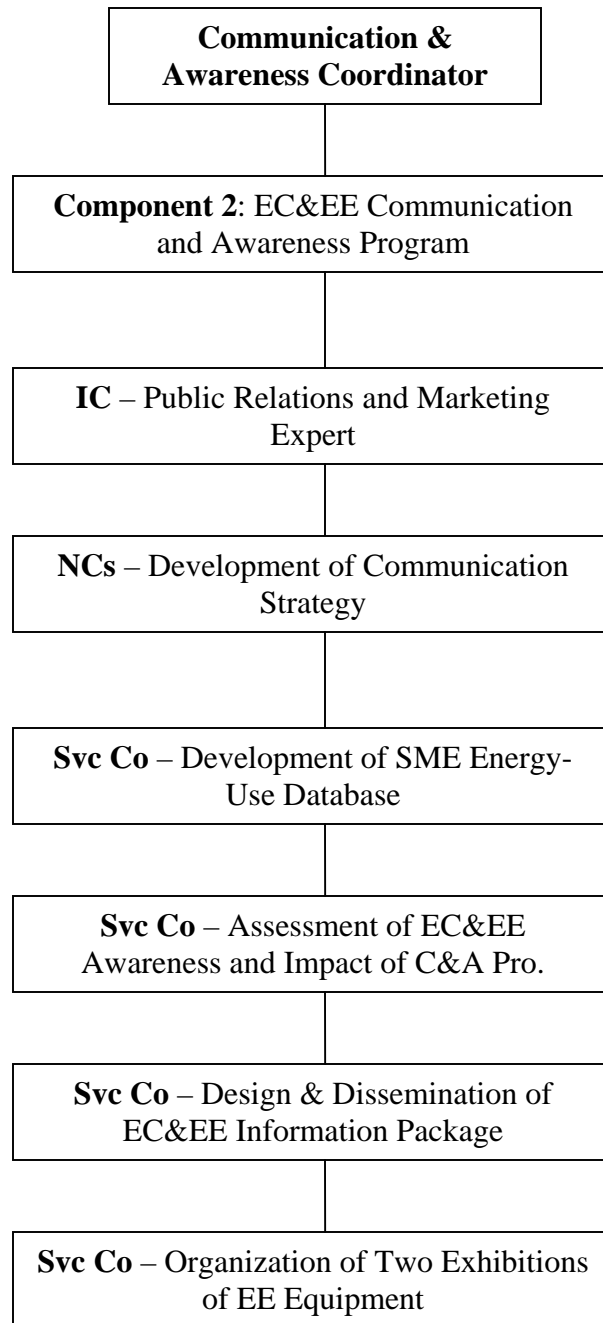
Legends:

- (Reporting line)
- ↔ (Work flow)

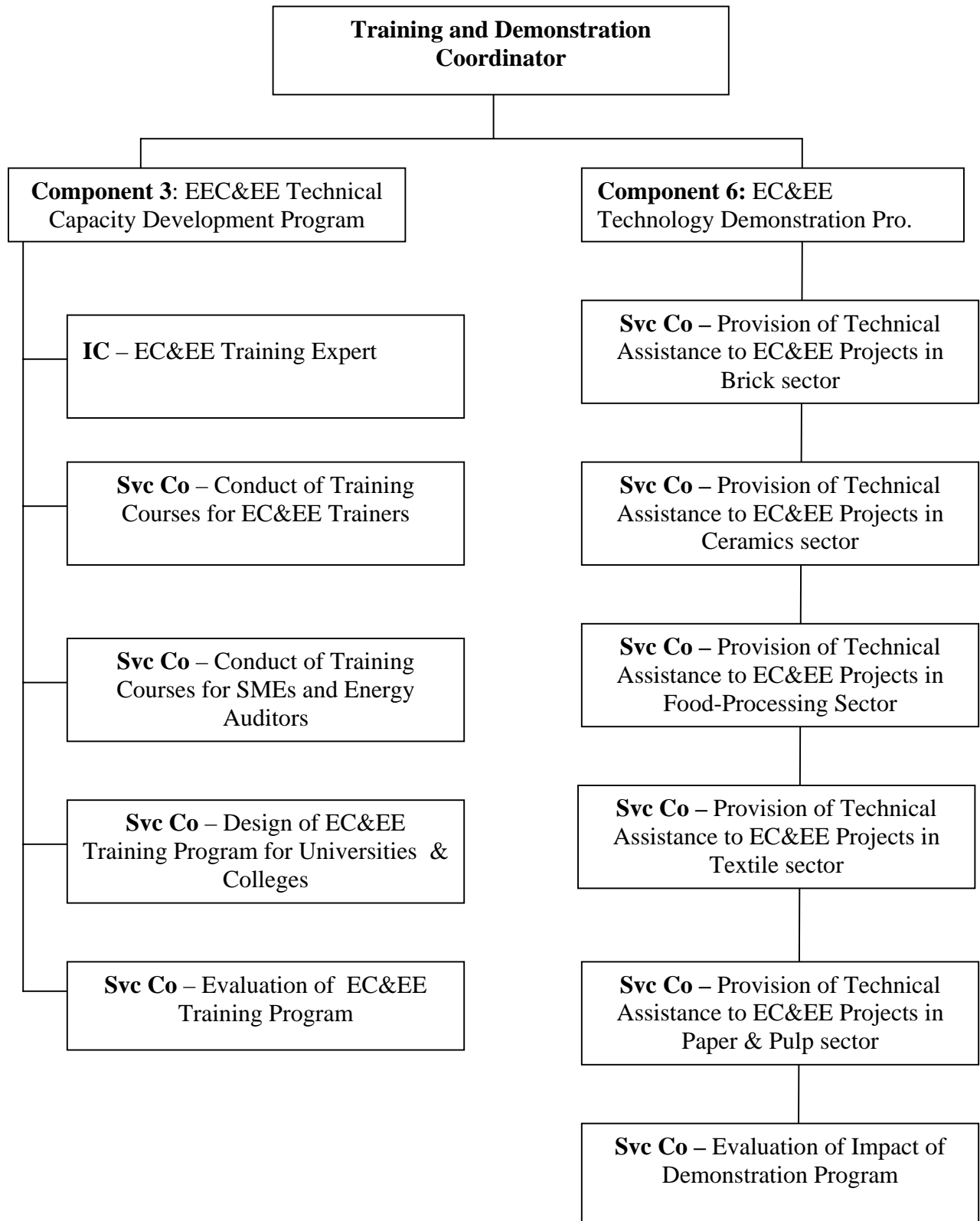
Management Arrangements for Component 1



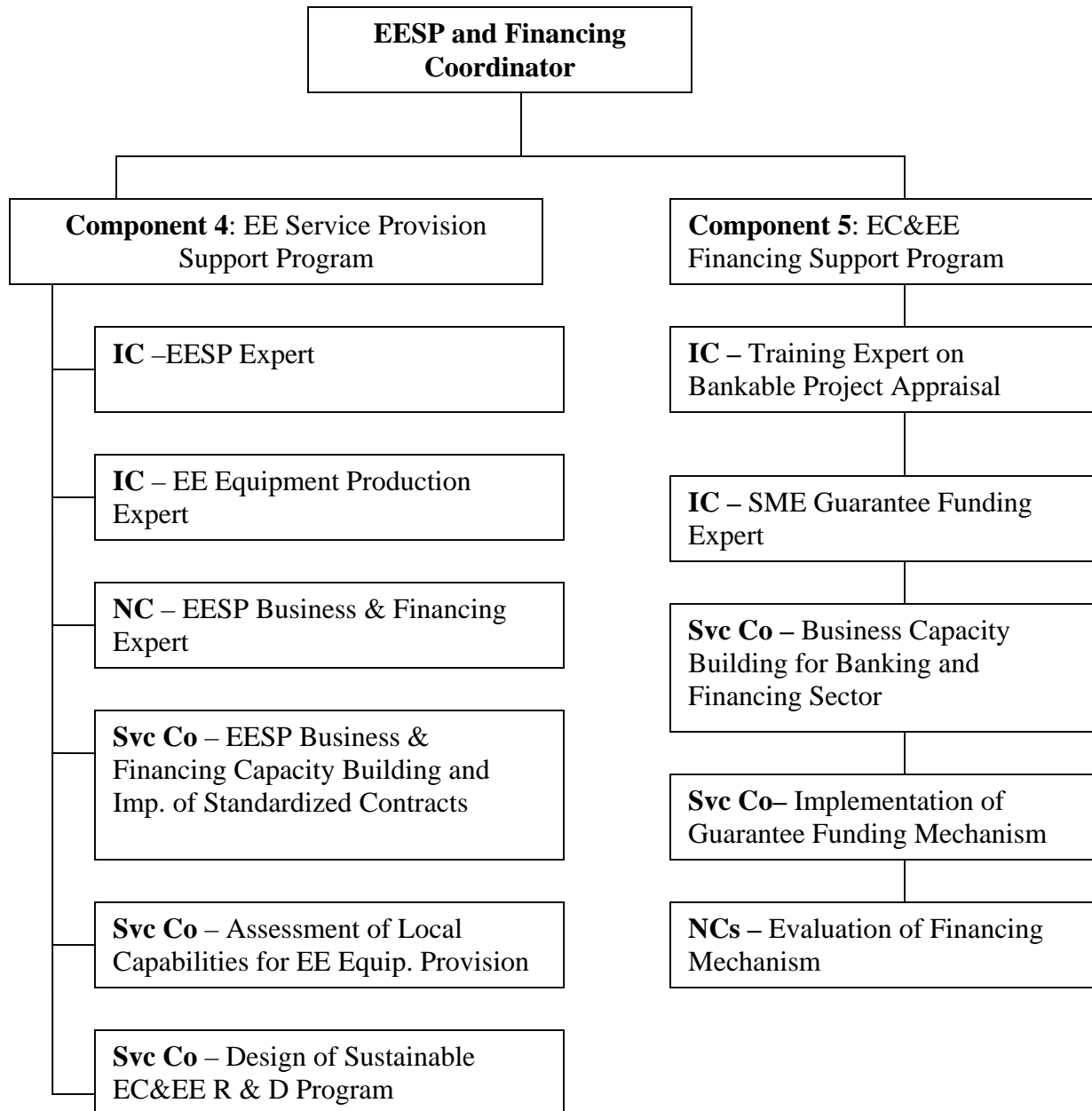
Management Arrangements for Component 2



Management Arrangements for Component 3 and 6



Management Arrangements for Component 4 and 5



Annex 2a: Job description of PMU Staff, Terms of References of International and National Experts and Sub-Contractors

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

- 1.1. NC – Management Information System Expert
- 1.2. NCs – EC&EE and SME Development Program Design
- 1.3. Svc Co – Technical support to Development of the Circular on Tax and Financial Incentives
- 1.4. Svc Co – Technical Support to Development of a Regulation on SME EC&EE Technology Transfer
- 1.5. Svc Co – Technical Support to Development of the Circular on EC&EE Labeling
- 1.6. Svc Co – Technical Support to Development of a Regulation on EE Service Providers’ Accreditation and a Direction on Energy Consumption Reporting
- 1.7. Svc Co – Technical Support to Development of Environmental Standards on GHG emissions

Component 2: EC&EE Communication and Awareness Program

- 2.1. IC – Public Relations and Marketing Expert
- 2.2. NCs – Communication Strategy Development Expert
- 2.3. Svc Co – Development of SME Energy-Use Database
- 2.4. Svc Co – Assessment of EC&EE Awareness and Impact of Communication and Awareness Programme
- 2.5. Svc Co – Design and Dissemination of EC&EE Information Package
- 2.6. Svc Co – Organization of 2 Exhibitions of EE Equipment

Component 3: EC&EE Technical Capacity Development Program

- 3.1. IC – EC&EE Training Expert
- 3.2. Svc Co – Conduct of Training Courses for EC&EE Trainers
- 3.3. Svc Co – Conduct of Training Courses for SMEs and Energy Auditors
- 3.4. Svc Co - Design of Sustainable EC&EE Training Program for Universities and Colleges
- 3.5. Svc Co – Evaluation of EC&EE Training Program

Component 4 – EE Services Provision Support Program

- 4.1. IC - EESP Expert
- 4.2. IC – EE Equipment Production Expert
- 4.3. NC – EESP Business and Financing Expert
- 4.4. Svc Co – Development of a Suitable Institutional and Legal Framework for EESP Activities
- 4.5. Svc Co - EESP Business & Financing Capacity Building and Implementation of Standardized Contracts to Deliver EESP Services
- 4.6. Svc Co – Assessment of Local Capabilities for EE Equipment Provision and Technical Capacity Building for Local Equipment Manufacturers
- 4.7. Svc Co – Design of a Sustainable EC&EE Research and Development Program

Component 5 – EC&EE Financing Program

- 5.1. IC – Training Expert on Bankable Project Appraisal
- 5.2. IC – SME Guarantee Funding Expert
- 5.3. NC – Financing Mechanism Evaluation
- 5.4. Svc Co – Business Capacity Building for Banking and Finance Sector
- 5.5. Svc Co – Implementation of Guarantee Funding Mechanism

Component 6 – EC&EE Demonstration Program

- 6.1. Svc Co – Provision of Technical Assistance to 200 EC&EE Projects in Brick Making Sector
- 6.2. Svc Co – Provision of Technical Assistance to 150 Projects in Ceramics Sector
- 6.3. Svc Co – Provision of Technical Assistance to 50 EC&EE Projects in Food-Processing Sector
- 6.4. Svc Co – Provision of Technical Assistance to 50 EC&EE Projects in Textiles Sector
- 6.5. Svc Co – Provision of Technical Assistance to 50 EC&EE Projects in Paper-Pulp Sector
- 6.6. Svc Co – Evaluation of Impact of Demonstration Program

Component 7 - Project Management Unit (7)

- 7.1. National Project Director
- 7.2. Project Manager
- 7.3. International Expert for Inception Phase
- 7.4. International Senior Technical Adviser (I-STA)
- 7.5. National Senior Technical Adviser (N-STA)
- 7.6. National Policy Adviser (NPA)
- 7.7. Administrative Officer cum Interpreter
- 7.8. Accountant
- 7.9. Administrative Assistant
- 7.10. Policy and Institutional Coordinator
- 7.11. Communication and Awareness Coordinator
- 7.12. Training and Demonstration Coordinator
- 7.13. EESP and Financing Coordinator

8. Project Steering Committee (8)

TERMS OF REFERENCE (1.1)

<u>Title:</u>	Management Information System 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>	Policy and Institutional Coordinator

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;
5. Reports regularly to the Project Manager on the status of project activities vis-à-vis target outputs; and
6. Assist in the design of information dissemination network of Component 2 of PECSME.

Qualification and Experience

- Bachelors Degree in information technology, computer management or computer engineering;
- 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;
- Excellent English communication skills, both written and verbal;
- With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

JOB DESCRIPTION (1.2)

<u>Title:</u>	EC&EE and SME Development 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 Year 4 of PECSME implementation
<u>Direct Supervisor:</u>	Policy and Institutional Coordinator

Duties and Responsibilities

The EC&EE Program Design Experts will provide technical assistance for SMEPC and ASMED to incorporate EC&EE program into the National SME Development Plan. 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 Plan;
2. Design a suitable EC&EE program for SME sector;
3. Assist/facilitate SMEPC and ASMED to incorporate suitable EC&EE elements into the National SME Development Plan and get MPI's approval;
4. Organize a consultation workshop on draft document.

Deliverables

1. Review of existing programs supporting SME development;
2. Documentation of EC&EE program incorporated into the National SME Development Plan.

Qualification and Experience

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

TERMS OF REFERENCE (1.3)

<u>Subcontract Title:</u>	Technical Support to Development of the Circular on Tax 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>	Policy and Institutional Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on Technical support to Development of the Circular 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 SMEs 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 PMU:
 - 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 (1.4)

<u>Subcontract Title:</u>	Technical Support to 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>	Policy and Institutional Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on Technical Support to 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 PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee;
 - b. Progress reports – 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 (1.5)

<u>Subcontract Title:</u>	Technical Support to Development of the Circular 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>	Policy and Institutional Coordinator

Purpose of Sub-Contract

The purpose of this **Sub-contract** is to assist MOI in the formulation of the **Circular 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 a Circular on Labeling of EC&EE products;
3. Organize a consultation workshop with relevant state agencies; and
4. Work with MOI in facilitating the approvals of the Circular through consultations with stakeholders.

Deliverables

1. Submit the following progress reports to the PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee;
 - b. Progress reports – Two months after submission of Inception Report and every three months thereafter.
2. A report on the review of foreign experiences on EC&EE labeling program.
3. Draft the Circular 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 (1.6)

<u>Subcontract Title:</u>	Technical Support to 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>	Policy and Institutional Coordinator

Purpose of Sub-Contract

The purpose of this **Sub-contract** 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 PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee;
 - b. Progress reports – Two months after submission of Inception Report and every three months thereafter.
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 (1.7)

<u>Subcontract Title:</u>	Technical Support to Development of Environmental Standards on GHG emission
<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>	Policy and Institutional Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on Technical Support to Development of Environmental Standards on GHG emission** 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 Department of Environment (DOE) under MONRE.

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 the DOE under MONRE;
4. Assist DOE in facilitating the approval of the revised environmental standards related to GHG emission.

Deliverables

1. Submit the following progress reports to the PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress reports – Two months after submission of Inception Report and every three months thereafter.
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 (2.1)

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

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 EC&EE Awareness and the subcontractor on Design and Dissemination of Information Package. He/she shall be responsible for the following tasks:

1. Review the overall communication strategy done by the subcontractor for Design and Dissemination of 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 on Assessment of EC&EE Awareness to set up the survey planning and methodology;
4. Provide technical advice to the Subcontractor on Design and Dissemination of Information Package to set up its action plan; and
5. Prepare a system of measuring /tracking impact of activities of the 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 surveys;
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 PMU.

Qualification and Experience

- University degree in a technical field (architecture, science & technology or design);
- Adequate training and experience in the fields of technology transfer, advertising, graphic design, public relations and technical writing;
- At least 10 years track record of experience in the commercial practice of graphic design, public relations and project design;
- At least 10 years track record of experience in developing communications for energy conservation programs in Asia;

- Extensive knowledge of the needs of the various energy end-users in developing countries;
- At least 3 years track record of experience in designing data gathering programs in developing countries;
- 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;
- Fluency in spoken and written English.

TERMS OF REFERENCE (2.2)

<u>Title:</u>	Local Consultant for 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 3 rd Quarter of Year 1 of PECSME implementation
<u>Direct Supervisor:</u>	Communication and Awareness Coordinator

Duties and Responsibilities

The local consultants 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 (VNCPC) and other International Programs supporting SME sector;
2. Review the overall communication strategy done by the subcontractor for Design of Information Program during the PDF-B Exercise, particular the identification of relevant organizations participated in the information network;
3. Work closely with the International Expert on Public Relations and Marketing to finalize the overall communication strategy for PECSME implementation.

Deliverables: Finalized communication strategy.

Qualification and Experience

- University degree in a technical field (architecture, science & technology or design);
- At least 10 years track record of experience in the commercial practice of graphic design, public relations and project design;
- At least 10 years track record of experience in developing communications for energy conservation programs in Vietnam;
- Extensive knowledge of the needs of the various energy end-users in developing countries;
- 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;
- Fluency in spoken and written English.

TERMS OF REFERENCE (2.3)

<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>	Communication and Awareness Coordinator

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 industrial SME sector to facilitate information exchange among the stakeholders and for use by policy makers, regulation and circular developers and enforcement agencies, industrial associations, 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 PMU 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 PMU. 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 (2.4)

<u>Subcontract Title:</u>	Assessment of EC&EE awareness and Impact of 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>	Communication and Awareness Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract** 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 PMU must be incorporated in the final draft.
2. Draft survey reports shall be presented to the PECSME PMU three months after the start of the survey subject to final acceptance by the PMU. All communications and reporting must be in the Vietnamese and English languages.

Qualification and Experience

The sub-contractor must be familiar with the energy conservation and efficiency in 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 (2.5)

<u>Subcontract Title:</u>	Design and Dissemination of EC&EE 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>	Communication and Awareness Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on Design and Dissemination of EC&EE 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 Public Relations and Marketing 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, newspapers, magazines, 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 PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress reports – Two months after submission of Inception Report and every three months thereafter.
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 (2.6)

<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 3 rd Quarter of Year 3 and three months starting the 3 rd Quarter of Year 5 of PECSME implementation
<u>Direct Supervisor:</u>	Communication and Awareness Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on Organization of Two Exhibitions of EE 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 PMU.
2. Final reports on result of each exhibition. 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 organizing exhibition on equipment and technologies;
- Good working experience in designing, organizing and producing mass media campaign;
- Have good relations with technology and equipment suppliers.

TERMS OF REFERENCE (3.1)

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

Duties and Responsibilities

The **International Expert on EC&EE Training** will assist the Subcontractor on 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 on 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 on Conduct of Training for Trainers.

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.

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 (3.2)

<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>	Training and Demonstration Coordinator

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 sub-contractor shall work closely with the International Experts on EC&EE Training.

Scope of Work

1. In coordination with PMU, 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 PMU 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 PMU, subject to final acceptance by PMU. 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 (3.3)

<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>	Training and Demonstration Coordinator

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 subcontractor 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 conduct training practice on energy auditing in selected SMEs.

Deliverables

1. Submit the following progress reports to the PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and Disbursement of Mobilization Fee.
 - b. Progress reports – 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 PMU, subject to final acceptance by PMU. 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 (3.4)

<u>Subcontract Title:</u>	Design of Sustainable EC&EE Training Program 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>	Training and Demonstration Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on the Design of Sustainable EC&EE Training Program 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 PMU 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 PMU 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 electrical faculties to be presented to the workshop.
2. Final version of curricula submitted at the end of the contract, subject to acceptance by PMU. 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 (3.5)

<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 2 nd Quarter of Year 3 and three months starting 2 nd Quarter of Year 5 of PECSME implementation.
<u>Direct Supervisor:</u>	Training and Demonstration Coordinator

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;
4. Make recommendations for improvement of the training program.

Deliverables

1. Draft survey design and the questionnaires shall be presented to the PMU a month after the issuance of the Notice to Proceed. Substantial comments, if there are any, from the national experts must be incorporated in the final draft.
2. Draft survey reports shall be presented to the PMU three months after the start of the survey subject to final acceptance by the PMU. 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 (4.1)

<u>Title:</u>	International Expert on Energy Efficiency Service Providers (EESP)
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	One and half man-month output-based contract spread out during the 3 rd Quarter of Year 1 of PECSME implementation.
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

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. Design appropriate standardized contracts: a) between the EESPs and SMEs and b) between EESPs and INCOMBANK.

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.

The above outputs are subject to acceptance by PMU.

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 (4.2)

<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-months output-based contract spread out during the 2 nd Quarter of Year 2 and the 2 nd Quarter of Year 3 of PECSME implementation.
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

Duties and Responsibilities

The **EE Equipment Production 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 EE Equipment Production 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 PMU.

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.

JOB DESCRIPTION (4.3)

<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>	15 man-months output-based contract spread out over 3 years period starting the 2 nd Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

Duties and Responsibilities

The role of the **National Expert on EESP Business and Financing** is to provide technical assistance to EESPs in making bankable project proposals, business plans and in securing financing for SME clients and providing recommendations on appropriate standardized contracts. PECSME PMU 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, Subcontractors for Implementation of Demonstration Program and Departments for Science and Technology in provinces (DOSTs) as well as Energy Conservation Centers (ECCs) in arranging and securing financing for EC&EE investment projects;
3. 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 PMU 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 (4.4)

<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 3 rd Quarter of Year 2 of PECSME implementation.
<u>Direct Supervisor:</u>	Policy and Institutional Coordinator

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 PMU 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 PMU subject to final acceptance by the PMU. 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 (4.5)

<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>	EESP and Financing Coordinator

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 EESPs 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 on 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 PMU. 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 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 (4.6)

<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 3rd Quarter of Year 2
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

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 subcontractor 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 Expert on EE Equipment Production in the assessment of the capabilities of local EE equipment 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;
 - e. Conduct training for local equipment manufacturers (with the International Expert) to introduce local manufacturers to more efficient equipment production processes. The subcontractor will also be responsible for the administrative and logistics requirements of the course and assess the effectiveness of the training course; and
 - 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 PMU:
 - a. Inception Report – one (1) month after issuance of Notice to Proceed and Disbursement of Mobilization Fee.
 - b. Progress reports – 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 PMU, subject to final acceptance by PMU. 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 (4.7)

<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>	EESP and Financing Coordinator

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 PMU. 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 (5.1)

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

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 banking and financing institutions;
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. Reports on training courses.

The above outputs are subject to acceptance by PMU.

Qualification and Experience

The candidate should have an advance degree in a business and financing and 10-12 years of professional experience in bankable project appraisal 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 (5.2)

<u>Title:</u>	International Expert on SME Guarantee Funding
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	Two man-months in 2 nd Quarter of Year 1 and 2 nd Quarter of Year 5
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

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 the establishment and operation of SME guarantee funds in other countries, in particular ASEAN countries;
2. Assist the subcontractor for Implementation of Guarantee Funding to formulate the operation mechanism for Loan Guarantee Fund;
3. Assist the subcontractor for Implementation of Guarantee Funding to formulate the guarantee operation regulation as well as criteria for guarantee fund;
4. Assist the Subcontractor for Implementation of Guarantee Funding to draft the Signing Agreement on Management of Loan Guarantee Fund between MOST and INCOMBANK;
5. 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:

1. The draft of guarantee operation regulations and the draft of criteria for guarantee fund;
2. Guidelines and methodology on monitoring and evaluation of the results of loan guarantee contracts.

The above outputs are subject to acceptance by PMU.

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 (5.3)

<u>Title:</u>	Financing Mechanism Evaluation Experts (2 persons)
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	4 working months, starting from the 2 nd Quarter of 5 years of PECSME implementation
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

Duties and Responsibilities

The Financing Mechanism Evaluation Expert will be responsible for the evaluation of effectiveness and viability of financing mechanism and developing recommendations on a sustainable financing program to follow up beyond the project implementation. Specifically, he/she will be responsible to undertake the following tasks:

1. Design of questionnaires to measure effectiveness and impacts of the established financing mechanism to the key target and all other key success indicators identified in the Project Framework Design (see PECSME Project Brief);
2. Conduct a preliminary survey on investment loans given by financing institutions based on the project guarantee fund mechanism;
3. Conduct in-depth interviews with the selected cases to find out the successful stories and failure cases;
4. Make recommendations on establishment of a sustainable financing mechanism to support EC&EE investments beyond the PECSME implementation.

Deliverables:

1. Draft the survey design and questionnaires;
2. Report on the findings from the conducted survey;
3. Recommendations on a sustainable financing program for EC&EE investment project.

Qualification and Experience

- Advance Degree in financing and banking system;
- At least 10 years experience in guarantee funding mechanism and bankable project appraisal, project development, monitoring and evaluation;
- Excellent English communication skills, both written and verbal.

TERMS OF REFERENCE (5.4)

<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 1 st Quarter of Year 2 of PECSME implementation
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on Business Capacity Building for Banking and Financing Sector** 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 the 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 PMU to establish the technical service network;
5. In cooperation with the subcontractor for Design and Dissemination of EC&EE 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 PMU. All communications and reporting must be in the Vietnamese and English languages.

All deliverables are subject to acceptance by PMU.

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 (5.5)

<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 2 nd Quarter of Year 1 of PECSME implementation.
<u>Direct Supervisor:</u>	EESP and Financing Coordinator

Purpose of Sub-Contract

The purpose of the **Sub-contract on 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 Loan Guarantee Fund Mechanism, the new guarantee operation regulation for EC&EE investments;
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 3 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 PMU; 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 (6.1)

<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>	Training and Demonstration Coordinator

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 reports to the PMU:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress reports –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 PMU 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 PMU.
6. Final report for presentation subject to final acceptance by PMU. 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, financing and servicing of shaft vertical brick kilns.

TERMS OF REFERENCE (6.2)

<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>	Training and Demonstration Coordinator

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 reports to the PMU:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress reports –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 PMU 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 PMU.
6. Final report for presentation subject to final acceptance by PMU. 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, financing and servicing of gas fired ceramic kilns.

TERMS OF REFERENCE (6.3)

<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>	Training and Demonstration Coordinator

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 reports to the PMU:

- a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress reports –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 PMU 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 PMU;
 6. Final report for presentation subject to final acceptance by PMU. 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, financing and servicing of EC&EE projects in food-processing sector.

TERMS OF REFERENCE (6.4)

<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>	Training and Demonstration Coordinator

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 reports to the PMU:
 - a. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - b. Progress reports –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 PMU 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 PMU;
6. Final report for presentation subject to final acceptance by PMU. 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, financing and servicing of EC&EE projects in textile sector.

TERMS OF REFERENCE (6.5)

<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>	Training and Demonstration Coordinator

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 Paper and Pulp 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 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:
 - a. In coordination with ECCs and DOSTs in 10 provinces select 48 SMEs in paper & pulp 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 reports to the PMU:
 - c. Inception report – one month after Issuance of Notice to Proceed and disbursement of mobilization fee.
 - d. Progress reports –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 PMU 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 PMU;
6. Final report for presentation subject to final acceptance by PMU. 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, financing and servicing of EC&EE projects in paper & pulp sector.

TERMS OF REFERENCE (6.6)

<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>	Training and Demonstration Coordinator

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 3rd 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.

Deliverables

1. Draft methodology and the questionnaires shall be presented to the PMU 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 PMU three months after the start of the survey subject to final acceptance by the PMU. 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.

JOB DESCRIPTION (7.1)

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

Background

The National Project Director is the focal point for responsibility and accountability in the national Implementing Partner for UNDP-funded project. The NPD should be an officer of the Implementing Partner at the director or deputy director level for most projects and may be at a higher level for large or cross-sectoral projects. The NPD 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. NPD is expected to serve as a focal point for coordination of the project with MOST, UNDP and other Government agencies.

The NPD position will usually require only a part of his/her regular work time and cost of salary and his/her time is regarded as government contribution to the Project resources.

Duties and Responsibilities

Specific responsibilities and tasks of NPD include:

1. Ensures that the expected results of the project are of satisfactory substantive quality and that they contribute to the achievement of the intended outcome identified in the CCF/SRF and their successor from 2006 on. This will be discharged through the (i) approval of project workplans, TORs, reports, (ii) follow-up on the implementation of recommendations made by regular project reviews and external evaluations, and (iii) conduct of internal reviews and evaluations as/if needed;
2. Ensures that project resources, national as well as international, are effectively utilized for their intended purposes through the (i) verification of project budgets and payments, (ii) approval of budget revisions within the agency flexibility limit, (iii) follow-up on the implementation of recommendations made by external audits and (iv) conduct of internal audits as/if needed;
3. Ensures that all Government inputs committed to the project are made available in sufficient quantities and in a timely manner to support project implementation;
4. Ensures that project parties, particularly national parties (including the Implementing Partner and other Parties) fully participate in project implementation, effectively collaborate in project activities and duly benefit from project results;
5. Selects and arranges for the appointment of the Senior Technical Advisor, in consultation with UNDP, to make sure that the STA and other international project personnel contribute expert inputs with the highest quality to the expected outputs of the project;
6. Supervises the work of the PM and national project staff and ensure PM 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. Represents the MOST and the project at major project reviews, evaluations, audits and other important events.

JOB DESCRIPTION (7.2)

<u>Title:</u>	(National) Project Manager (PM)
<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 Director

Responsibilities and Duties:

The primary task of the **Project Manager** is to plan, organize and implement the PECSME project under the direction of the NPD. He/she will be responsible for 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 PMU 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.

To assume this overall responsibility, the specific tasks of the Project Manager are as follows:

1. Prepares, updates, and submits the required workplan and reports to NPD and UNDP CO office for clearance timely and with satisfactory quality, including: annual workplan, quarterly workplan, Annual Project Reports, GEF Project Implementation Review Report, the Quarterly Progress Reports, and the Final Project Reports as scheduled;
2. Finalize detailed TORs for key outputs (i.e. personnel, sub-contractors, training, and procurements), within assistance from the International Senior Technical Adviser and other Project Advisers, and submit to NPD and UNDP CO for clearance and approval;
3. Take responsibility for monitoring the overall progress and use of the resources of all outputs and initiative corrective actions if necessary;
4. Assumes direct responsibility for managing the project budget on behalf of the NPD, ensuring that:
 - Project funds are made available when needed, and are disbursed properly;
 - Accounting records and supporting documents are kept;
 - Required financial reports are prepared;
 - Financial operations are transparent and financial procedures/regulations for NEX project are applied;
 - NPM is ready to stand up audit at any time.
5. Assumes direct responsibility for managing the physical resources (e.g. vehicles, office, equipment, furniture, stationary...) provided to the project by UNDP;
6. Keep record and update the Project issues and risks and recommend necessary actions to NPD to effectively cope with identified risks, and coordinate the implementation of the approved risk mitigation actions;
7. Liaison and coordinate the implementation of all project partnership agreements to ensure that partners implement the project components in a collaborative manner with the Project quarterly and annual workplan;
8. Liaison with UNDP CO or designated quality assurance personnel on the project quality management issues;
9. Supervises the project staff and local or international experts/consultants working for the project;

10. Provide back-stopping support for administrative work of the Project Management Unit if necessary;
11. Organizes the Inception Workshop, APR and PSC meetings as well as evaluation missions in coordination with UNDP.

Qualifications

- Bachelors Degree (as minimum) in Business Administration, Development Economics, Engineering or other relevant field;
- At least 10-year working experience in energy efficiency project management/ coordination, preferably with international projects;
- Track record of, or proven, senior management reporting skill;
- Proven track record of experience in successful contract management;
- 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;
- Good working relationship with energy institutions, government agencies and other organizations related to energy conservation and energy efficiency program and SME development;
- Familiar with technical assistance projects and GEF/UNDP projects in Vietnam;
- High communication as well as interpersonal and team building skills;
- Good English communication skills, both written and verbal.

TERM OF REFERENCE (7.3)

<u>Title:</u>	International Expert for Inception Phase
<u>Duty Station:</u>	Hanoi
<u>Duration of Assignment:</u>	0.5 month full-time during the first quarter of Year 1
<u>Direct Supervisor:</u>	National Project Director/Project Manager

Duties and Responsibilities

The **International Expert on Inception Phase** will provide technical assistance to PMU in implementing all activities of the Inception Phase presented in the Terms of Reference for Inception Phase of the Project Document. He/she has specific responsibilities and tasks are as follows:

1. Finalize project institutional arrangements, including to:
 - Revise existing TORs and Job descriptions of all project personnel and consultants in the Project Document if necessary;
 - Develop rules of procedure for the Project Steering Committee; and assist PMU to finalize level of representation and individual membership of the Project Steering;
 - Clarify relationship between the Project Steering Committee and the Annual Project Review.
2. Clarify the role and responsibility of partners for achieving the project outcomes by:
 - Identifying links and means of coordination between partners and project activities;
 - Linking each partner to the project work plan and delivery of project outcomes; and
 - Identifying key stakeholders potentially influencing the project outcomes.
3. Review and finalize the project management arrangement diagram (donors, government, MOST, PMU, project staff, contractors), including reporting lines.
4. 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.
5. Develop the evaluation plan of the achievement of the target milestones/benchmarks (as per Logical Framework), which will be used as bases for the project.
6. Review the Project Logical Framework to ensure that measurable indicators and milestones of impact at the Output, Purpose and Goal levels are updated and assumptions are verified.
7. Review the M & E framework for the implementation of the project, including:
 - Setting of yearly targets/milestones that must be linked to project outcome indicators (impact indicators), progress indicators, and the Project Logical Framework and will be endorsed by all partners;
 - Detailed monitoring and evaluation plan that detail the roles and responsibilities of PMU personnel, UNDP/GEF staff, and auditor, and other involved government agencies with deliverable outputs;
 - A mechanism for monitoring the progress of parallel activities of co-financing institutions (and the delivery of their committed co-financing).

8. With assistance from UNDP (including UNDP-Vietnam and UNDP-GEF's Regional Office in Kuala Lumpur), review the capacity of MOST and the PMU 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.
9. Prepare a detailed work plan for the first year of implementation. Prepare a project budget revision if necessary.
10. 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.
11. Detail and finalize the TORs for all project sub-contracts, with more details and focus those to be started in the first year, in-line with the information provided in the Project Document.
12. Assist PM to prepare a Project Operations Manual (POM) as supplement to the Vietnam NEX Manual. Share with all participants and provide necessary training on the POM.
13. Prepare the Inception Report that take into account all analysis and update in tasks 1-12.
14. Participate in the Inception Workshop.
15. Finalize the Inception Report.

Deliverables

The International Expert for Inception Phase shall deliver the following:

1. Final Project Inception Report done and agreed upon by all project stakeholders that have the following key elements:
 - Detailed first year work plans finalized and accepted by all project stakeholders;
 - Detailed annual co financing plans finalized and accepted by all project co financers;
 - Detailed annual monitoring and evaluation plan with means and verification indicators of the project completed and agreed upon by all project stakeholders;
 - All detailed project implementation arrangements completed and agreed upon by all project stakeholders;
 - Roles and responsibilities of and links between MOST, PSC, PMU, and project stakeholders detailed and clarified;
 - TORs of all subcontracts and consultants qualitatively detailed and updated;
 - A Project Operations Manual (POM) qualitatively completed and a training course on it conducted to the PMU staffs;
 - List of project risks and measures for management of the risks completed;
2. Minutes of all consultation meetings with the project partners completed; and
3. Minutes of the Inception Workshop completed.

Qualification and Experience

- Master Degree in business administration, economics, public administration, engineering;
- At least 10 years of experience in the field of energy efficiency including specialized experience in industrial energy efficiency, policy development, and institutional capacity building;
- Excellent communication skills, full proficiency in English both written and verbal. Skilled presenter of ideas in one on one situations and in symposia;
- Experienced in initiating project development, implementation, monitoring and evaluation;
- Proven experience in resource mobilization from governments, non-government organizations and the private sector;
- With good appreciation of, and strong links with relevant international organizations.

JOB DESCRIPTION (7.4)

<u>Title:</u>	International Senior Technical Adviser (I-STA)
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	2 years full time with potential extension of 6 months from the third year
<u>Direct Supervisor:</u>	National Project Director/UNDP ARR

Duties and Responsibilities

The overall responsibility of the International Senior Technical Advisor (I-STA) is to provide technical advice and substantive support to the National Project Director and Project Manager, on overall implementation and in particular on the project quality issues. The ISTA is accountable to UNDP CO for the quality of the project deliverables.

Specific responsibilities and tasks of I-STA are as follows:

A. Overall Project management

1. Provide strategic advice on the overall implementation of the projects by i) facilitating the project annual and quarterly planning ii) advising the PM on integrating risk management, quality management plan, and monitoring and evaluation plan in the annual workplan, iii) providing advice on development of the collaborative workplan with other partners.
2. Assist PM in preparing all major Project reports (quarterly report, annual report, Project Implementation Review report, and other technical reports).
3. Identify opportunities to multiplying the impacts of the projects, to be integrated in the project overall implementation.
4. Preparation of a system of measuring/tracking impacts of PECSME activities carried out under the project.

B. Provision of technical inputs for key project outputs

5. Assist PM in the implementation of all international sub-contractors and consultancy by i) drafting detailed TORs ii) attending the selection and appraisal panel for sub-contractors and consultancy, iii) assist PM to supervise other consultancy and sub-contracts as directed by NPD, iv) assist PM to verify and provide technical comments on reports prepared by consultants and subcontractors.
6. Provide technical advice to the implementation of all six components of the project based on international and regional lessons learnt and best practices and models in the fields of EC&EE policy development and enforcement, technical support programming, and monitoring and evaluation.
7. Identify need for international expertise within the project and advise on means of efficient use of the project resource on international expertise.

C. Project Monitoring and Evaluation

The I-STA, in collaboration with the National Senior Technical Adviser and National Policy Adviser, and UNDP programme officer, ensures that the effective implementation of the quality management plan throughout the project period by undertaking the following tasks:

8. Formulate and facilitate the implementation of the Project Monitoring and Evaluation Plan that links to project outcome indicators, progress indicators and the Logical Framework.
9. Formulate a quality management plan for key outputs, in consultation with PMU, UNDP CO, for approval of NPD. Essentially, the quality plan should include output quality criteria, guidelines and procedures for quality control, responsibility of PMU personnel, and schedules.
10. Assist NPD and PM to supervise the implementation of the project quality management plan.
11. Review the products of sub-contracts and consultancy as directed by NPD, and provide advice to NPD and PM on the quality of the final products.
12. Facilitate Project quality control, M&E meeting involving other component coordinators.

D. Risk management

13. Assist PM in implementing risk management plan by i) identifying critical issues, barriers, or risks (external risks in particular) ii) advise NPD and UNDP CO on solutions to effectively manage risks and other emerging barrier iii) facilitating the implementation of risk management plan approved by NPD.

E. Other tasks

14. 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.
15. Attend/facilitate key events of the project including consultation workshops, formulation of collaborative workplan with partners, APR meetings.
16. Communicate with UNDP CO on quality and substantive issues.

Qualification and Experience

- Master Degree in business administration, economics, public administration, engineering;
- At least 10 years of extensive international experience in the field of energy efficiency including specialized experience in industrial energy efficiency, policy development, and institutional capacity building;
- Excellent communication skills, full proficiency in English both written and verbal;
- Experienced in initiating project development, implementation, monitoring and evaluation;
- Proven experience in resource mobilization from governments, non-government organizations and the private sector;
- With good appreciation of, and strong links with relevant international organizations;
- Knowledge of Vietnamese would be an advantage.

JOB DESCRIPTION (7.5)

<u>Title:</u>	National Senior Technical Adviser (N-STA)
<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 Director

Duties and Responsibilities

The **National Senior Technical Adviser** will work in close collaboration with I-STA in providing advice to the National Project Director and Project Manager, on issues related to project execution including participatory design, legal and regulatory frameworks, policy development, technical and institutional capacity development. The National Senior Technical Adviser will ensure the effective transfer and adaptability of the international expertise, lessons and best practices to production of the quality project outputs.

The specific tasks of the National Senior Technical Adviser are as follows:

A. Overall Project Management

1. Provide strategic policy advice in the areas of programming, technical and financial planning and management in collaboration with I-STA;
2. Assist PM to take the responsibility of communication and coordination with other project partners to ensure their participation and co-financing for implementing all project activities as scheduled in the Project Work Plan;
3. Assist NPD/PM to lead the PMU in the EC&EE Project Appraisal Committee of the Loan Guarantee Fund;

B. Provision of technical inputs to key project outputs

4. Provide technical guidance to component coordinators and sub-contractors of component 4 and 5
5. Review all project reports, specially technical reports related to policy and institutional, business and financial areas;
6. Assist PM to maintain the collaboration with ECCs and DOSTs in selected provinces to develop their local policy on EC and promote the EC activities in their areas;
7. Work with ECCs, DOSTs and subcontractors on selection of EC&EE investment projects in the follow up demonstration program;
8. Appraise and develop efforts to mainstream PECSME components with other energy efficiency activities in the private and public sector in the country, particularly the National Energy Conservation Program;
9. Promote the high level coordination between the PECSME project and the SME promotion projects being undertaken by the Department for SME Development under MPI and others;
10. Identify, assess and provide recommendations on how to integrate international programs/projects on EC&EE and DSM into the PECSME Project;
11. In collaboration with I-STA to 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;
12. Provide technical inputs and facilitate project workshops, seminars, fora as directed by NPD.

Qualification and Experience

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

JOB DESCRIPTION (7.6)

<u>Title:</u>	National Policy Adviser
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	30 working months over 5 years (part-time).
<u>Direct Supervisor:</u>	National Project Director

Duties and Responsibilities

The **National Policy Adviser** shall be responsible in providing advice to the National Project Director and Project Manager, on issues related to the coordination and mobilization of the participations and financing resources from key stakeholders. In addition, he/she will also be responsible for providing advice to subcontractors and consultants, who will be involved in carrying out activities under Component 1 and 2. The specific tasks of the Project Policy Adviser are as follows:

1. Provide strategic policy advice in the mobilization of participations and financing resources from key stakeholders for the project implementation;
2. Evaluate existing energy conservation policies and the planned national programs on EC&EE in the country;
3. Assist PMU to take the responsibility of the communication and coordination with all agencies working on Component 1 and 2 of the Project;
4. Provide technical advice/guidance to the subcontractors and consultants carrying out activities under Component 1 and 2, and evaluate their works;
5. Provide technical advice/guidance to the subcontractor for Development of a Suitable Institutional and Legal Framework under Project Component 4 and evaluate its work;
6. Verify and provide technical comments on reports prepared by the International Experts, the National Experts and Subcontractors under Component 1 & 2 and other related activities;
7. Facilitate the approvals of Regulation, Circular, Guidelines and Environmental standards developed by the project;
8. Assist PMU to carry out the EC&EE Advocacy and Awareness Campaigns under Component 2 of the project;
9. Identify, assess and provide recommendations on how to integrate the PECSME activities related to technical capacity building into National Programs on Research & Development and Technology Transfer managed by MOST;
10. Provide technical advice/guidance to the subcontractor for Design a Sustainable EC&EE Training Program for Universities and Colleges under Project Component 3 and evaluate its work;
11. Attend/Facilitate workshops, seminars under Component 1 & 2 and others as required by NPD/PM.

Qualification and Experience

- Master Degree in business administration, economics, public administration, engineering; preferably with PhD. Degree in the same or any other relevant field;
- At least 10 years of experience in the field of energy efficiency including specialized experience in industrial energy efficiency, policy development, and institutional capacity building;
- Excellent communication skills, full proficiency in English both written and verbal. Skilled presenter of ideas in one on one situations and in symposia;

- Proven experience in resource mobilization from governments, non-government organizations and the private sector;
- Multidisciplinary professional experience preferred.

JOB DESCRIPTION (7.7)

<u>Title:</u>	Administrative Officer cum Interpreter
<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 PMU, 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;
8. Prepares annual and quarterly work plan of activities for approval by PM;
9. Undertake necessary translation/interpretation tasks assigned by the PM;
10. Assistance to the technical operations of PMU; and
11. Secretariat support to workshops, seminars and trainings.

Qualification and Experience

- Bachelors Degree in public administration, business management, social sciences, and economics, preferably with Masters Degree in business management or any other relevant field;
- Good command of both written and spoken English and at least 3 years of working experience as a interpreter/secretary or administrative officer;
- Strongly skilled in communication and diplomacy;
- Good organizational capacity;
- Good secretarial skills, knowledge in administrative procedures of the Government and other foreign organizations and at least 3 year experience related to project and administrative support activities; and
- With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

JOB DESCRIPTION (7.8)

<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>	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 those records all the in-cash and in-kind contributions of co-financing entities to the Project.

Qualification and Experience

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

JOB DESCRIPTION (7.9)

<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 Manager

Duties and Responsibilities

The Administrative Assistant shall be responsible for providing administrative support to the operations of the PMU 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, arranging visas for project staff and international experts;
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;
9. Act as back-up interpreter; and
10. Assists the project staff, consultants and other project players in various administrative matters, whenever necessary.

Qualification and Experience

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

JOB DESCRIPTION (7.10)

<u>Title:</u>	Policy and Institutional Coordinator
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	12 months full-time with possibility for extension up to 40 months
<u>Direct Supervisor:</u>	Project Manager

Duties and Responsibilities

The major role of the Policy and Institutional Coordinator is to ensure the delivery of the project outputs specified under the following components of the Project:

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

S/he is accountable to NPD and PM for the completion of project activities to an appropriate quality, in a timescale and budget specified in the approved workplan and quality procedures of the project. The Policy and Institutional Coordinator report to and take direction from the PM. He/she shall be responsible in coordinating the provision of technical inputs, as well as administrative, to the PMU on various activities of the project specifically on the aspects of policies and institutional support specified under the two components.

Specific responsibilities of the Policy and Institutional Coordinator include:

A. Managing the works under the two components

1. Facilitate the completion of the detailed TORs of subcontractors and consultancy and submit results to PM for approval;
2. Participate in the recruitment/procurement of the consultants and subcontractors;
3. Take responsibilities for the progress of the work under the respective components through planning, directing, and monitoring the progress of the implementation of the work assigned under the respective components;
4. Coordinate the appraisal of the deliverables submitted by subcontractors and consultants;
5. Organize meeting to review the progress of the work of subcontractors and consultants and produce to review reports;
6. Assist PM to organize 3 national seminars and 4 study tours for relevant government officers with assistance from I-STA and the National Policy Adviser;
7. Prepare the periodical progress reports and submit to PM;

B. Assisting PM in overall project management

8. Collaborate with technical staff of PMU to develop annually and quarterly workplan, as directed by PM;
9. Inform PM of any deviation from approved plan, recommend corrective actions to PM;
10. Identify and advise the PM of any risks or issues associated with the component's outputs;
11. Manage specific risks as directed by the PM;
12. Assist PM in collaborating the Project workplan and the partners workplan;
13. Attend the meetings of the Project Steering Committee as directed by PM;
14. Monitoring the progress of the collaborative workplan with project partners, as directed by PM;

15. Attend project's annual and quarterly planning meetings as directed by the PM.

Qualification and Experience

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

JOB DESCRIPTION (7.11)

<u>Title:</u>	Communication and Awareness Coordinator
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	12 months full-time with possibility for extension up to 40 months
<u>Direct Supervisor:</u>	Project Manager

Duties and Responsibilities

The major role of the Communication and Awareness Coordinator is to assist NPD and PM to effectively formulate and implement of the Project communication strategy and other project outputs specified under Component 2 “EC&EE Communication and Awareness Program”.

S/he is accountable to NPD and PM for the completion of project activities to an appropriate quality, in a timescale and budget specified in the approved workplan of the project. The Communication and Awareness Coordinator report to and take direction from the PM.

He/she shall be responsible in coordinating the provision of technical inputs, as well as administrative, to the PMU on various activities of the project specifically on the aspects of information, communication and awareness specified under the component.

Specific responsibilities of the Communication and Awareness Coordinator include:

A. Manage the works under the component

1. Facilitate the completion of the detailed TORs of subcontractors and consultancy under the component and submit results to PM for approval;
2. Participate in the recruitment/procurement of the consultants and subcontractors;
3. Take responsibilities for the progress of the work under the component through planning, directing, and monitoring the progress of the implementation of the work assigned under the component;
4. Coordinate the appraisal of the deliverables submitted by subcontractors and consultants;
5. Organize meeting to review the progress of the work of subcontractors and consultants and produce to review reports;
6. Take responsibility for the implementation of the Project Communication Strategy;
7. Prepare the periodical progress reports and submit to PM;
8. Coordinate Energy Conservation Centers to organize EC&EE Advocacy and Awareness Campaigns in selected provinces with assistance from I-STA and the National Policy Adviser;

B. Assist PM in overall project management:

9. Assist PM in integrating the Project Communicate Strategy and Workplan into project annual and quarterly workplan;
10. Inform the PM of any deviation from plan, recommend corrective actions to PM;
11. Identify and advise the PM of any risks or issues associated with the component’s outputs;
12. Manage specific risks as directed by the PM;
13. Attend project’s annual and quarterly planning meetings as directed by the PM;
14. Assist PM in collaborating the project workplan and the project partners workplan;
15. Attend the meetings of the Project Technical Working Groups and Project Steering Committee as directed by PM;
16. Monitoring the progress of the collaborative workplan with project partners, as directed by PM.

Qualification and Experience

- Bachelors Degree in social sciences, public administration, communications or engineering; preferably with Masters Degree in the same or any other relevant field;
- At least 5 years experience in information, education and communication programs, preferably in the energy sector;
- Proven track record in project management such as in meeting deadlines, timely submission of acceptable deliverables, etc.;
- Excellent English communication skills, both written and verbal;
- 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
- With satisfactory skills on the use of office software packages such as MS Word, Excel and Power Point.

JOB DESCRIPTION (7.12)

<u>Title:</u>	Training and Demonstration Coordinator
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	12 months full-time with possibility for extension of 40 months
<u>Direct Supervisor:</u>	Project Manager

Duties and Responsibilities

The major role of the Training and Demonstration Coordinator is to assist NPD and PM to effectively deliver the project outputs specified under the following components of the Project:

Component 3: EC&EE Technical Capacity Development Program.

Component 6: EC&EE Demonstration Program

S/he is accountable to NPD and PM for the production of component outputs to an appropriate quality, in a timescale and budget specified in the approved workplan of the project. He/she shall be responsible in coordinating the provision of technical inputs, as well as administrative, to the PMU on various activities of the project specifically on the aspects of training and demonstration specified under the two components. The Training and Demonstration Coordinator report to and take direction from the PM.

Specific responsibilities of the Training and Demonstration Coordinator include:

A. Managing the works under the two components:

1. Facilitate the completion of the detailed TORs of subcontractors and consultancy and submit results to PM for approval;
2. Participate in the recruitment/procurement of the consultants and subcontractors;
3. Take responsibilities for the progress of the work under the respective components through planning, directing, and monitoring the progress of the implementation of the work assigned under the respective components;
4. Coordinate the appraisal of the deliverables submitted by subcontractors and consultants;
5. Organize meeting to review the progress of the work of subcontractors and consultants and produce to review reports;
6. Prepare the periodical progress reports and submit to PM;

B. Assist PM in overall project management:

7. Collaborate with technical staff of PMU to develop annually and quarterly workplan, as directed by PM;
8. Inform PM of any deviation from approved plan, recommend corrective actions to PM;
9. Identify and advise the PM of any risks or issues associated with the component's outputs;
10. Manage specific risks as directed by the PM;
11. Assist PM in collaborating the project workplan and the partners workplan;
12. Attend the meetings of the Project Steering Committee as directed by PM;
13. Monitoring the progress of the collaborative workplan with project partners, as directed by PM;
14. Attend project's annual and quarterly planning meetings as directed by the PM.

Qualification and Experience

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

JOB DESCRIPTION (7.13)

<u>Title:</u>	EESP and Financing Coordinator
<u>Duty Station:</u>	Hanoi with national travel as required
<u>Duration of Assignment:</u>	12 months full-time with possibility for extension of 40 months
<u>Direct Supervisor:</u>	Project Manager

Duties and Responsibilities

The major role of the EESP and Financing Coordinator is to assist NPD and PM to effectively deliver the project outputs specified under the following components of the Project:

Component 4: Energy Efficiency Service Provision Support Program.

Component 5: EC&EE Financing Support Program

S/he is accountable to NPD and PM for the completion of project activities to an appropriate quality, in a timescale and budget specified in the approved workplan of the project. He/she shall be responsible in coordinating the provision of technical inputs, as well as administrative, to the PMU on various activities of the project specifically on the aspects of EESP and financing specified under the two components. The EESP and Financing Coordinator report to and take direction from the PM.

Specific responsibilities of the EESP and Financing Coordinator include:

A. Managing the works under the two components

1. Facilitate the completion of the detailed TORs of subcontractors and consultancy and submit results to PM for approval;
2. Participate in the recruitment/procurement of the consultants and subcontractors;
3. Take responsibilities for the progress of the work under the respective components through planning, directing, and monitoring the progress of the implementation of the work assigned under the respective components;
4. Coordinate the appraisal of the deliverables submitted by subcontractors and consultants;
5. Organize meeting to review the progress of the work of subcontractors and consultants and produce to review reports;
6. Prepare the periodical progress reports and submit to PM;

B. Assist PM in project strategic planning

7. Collaborate with technical staff of PMU to develop annually and quarterly workplan, as directed by PM;
8. Inform PM of any deviation from approved plan, recommend corrective actions to PM;
9. Identify and advise the PM of any risks or issues associated with the component's outputs;
10. Manage specific risks as directed by the PM;
11. Assist PM in collaborating the Project workplan and the partners workplan;
12. Attend the meetings of the Project Technical Working Groups and Project Steering Committee as directed by PM;
13. Monitoring the progress of the collaborative workplan with project partners, as directed by PM;
14. Attend project's annual and quarterly planning meetings as directed by the PM.

Qualification and Experience

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

TERMS OF REFERENCE (8)
PECSME Project Steering Committee (PSC)

<u>Title:</u>	Project Steering Committee
<u>Duration:</u>	As project starts
<u>Chairperson:</u>	MOST Vice Minister

Composition

The Steering Committee will be chaired by the Vice Minister of MOST and consist of representatives from the following bodies:

- Representatives of MPI, MOF, MOI, and participating Provinces and Businesses
- UNDP CO, UNDP-GEF Regional Coordinator

Major Roles and Functions

The PSC will provide overall guidance for implementation of PECSME and ensure unified guidance of project implementation and effective coordination among the participating agencies. Project steering committee is the modality for making decision on the issue regarding the collaboration between MOST, as UNDP implementing partner, and other agencies/institutions, who entered the agreement with MOST on project co-financing and project implementation.

The each member of PSC is responsible for the following tasks:

- Review and comment on draft of the Inception report, Annual Project Reports and Work plans.
- Ensuring that the committed resources for the project are made available timely and adequately.
- Endorse the project annual workplan and co-financing budget
- Ensure that relevant departments/agencies under his/her supervision duly implement the project activities as required in the approved project annual workplan.
- Provide support to MOST and other partners in reviewing and adopting policies related to environmental sustainability & poverty.
- Facilitate good coordination between various departments in MOST and the other project partners.
- Provide support to PMU responsible for the overall co-ordination and management of the project components.

Modality of work

The PSC will meet twice a year. Additional meetings may be convened if requested by NPD or concerning members.

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 PSC 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 the 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:
 - Level of representation and individual membership of the PSC and receive confirmation of willingness to participate
 - Modality of work for the PSC
 - Role and responsibility of the PSC
 - 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, DOST, PMU, project staff, contractors), including reporting lines. This should include:
 - Location of all staff and PMU
 - 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, STA, MOST, PMU, 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 CO and UNDP-GEF's Regional Office in Kuala Lumpur), review the capacity of MOST, DOST and the PMU 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- DOST. 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 PM and PMU 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 PM leads the Inception Phase (with assistance from Project advisers) 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 CO. 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 CO and UNDP-GEF will be held well in advance of the PSC meeting in order to reach agreement on key issues before seeking the PSC'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, Annual Project Reports 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 PSC members. The final draft will be sent to PSC members no later than 2 weeks in advance of the Inception Meeting.

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 MONRE
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 business, engineering and financial skills.	No EESP training courses
	No EESP institutional and legal framework
	7 EESPs operating in Vietnam
	No technical assistance provided to EESPs
	Very few number of EESP contracts and projects
No assessment of local equipment supply capability reports	

Project Strategy & Indicators	Baseline (Value in Year 0)
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		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 loans 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 billion, from VND 1 - 5 billion, and from VND 5 – 10 billion; (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 ¹ (see Table E-8 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 billion, from VND 1 - 5 billion, and from VND 5 – 10 billion; (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-8 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 billion, from VND 1 - 5 billion, and from VND 5 – 10 billion; (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-8 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

$AES = \text{Average energy savings per site, ktoe}$

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

$$AEC_N = BEC_N - ES_N$$

Where: $AEC = \text{Annual energy consumption, ktoe}$

$N = 2006, 2007, 2008, 2009$

$BEC = \text{Annual energy consumption (baseline), ktoe}$

$ES = \text{Annual energy savings, ktoe}$

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 = CO_2 emissions, ktonnes
 EC = energy consumption, ktoe
 CO_2EF = CO_2 emissions factor, tonnes/toe

The CO_2 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 = CO_2 emissions reduction, ktonnes
 CO_2E = CO_2 emissions, ktonnes

Table 2 shows the annual CO_2 emissions from the brick sub-sector under the baseline and alternative scenarios, as well as the annual CO_2 emissions reductions as calculated using the above equations. The same equations apply for estimating the annual CO_2 emissions (baseline and alternative) in the other sub-sectors.

The energy consumptions and CO_2 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 CO_2 emission factor based on the average energy mix in the brick sub-sector is 3.9694 ktonnes/ktoe.

Table C.2: Projected CO_2 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: The Proposal of Mobilization of the Loan Guarantee Funding Mechanism

1. Rationale:

The mobilization of the Loan Guarantee Funding (LGF) 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:

- 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 their owning the land that their businesses are located on.
- 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 (*by passing the Law on Credit Institutions on December 12, 1997 and issuing Decree No 178/1999/ND/CP on Credit Institution's Loan Security on December 29, 1999*), 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, which is part of the Vietnam–Germany Credit Program (VGCP), 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 under VGCP 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 under the Vietnam-Germany Credit Program (VGCP) managed by INCOMBANK will unblock currently available but underutilized funding sources for EC&EE investment in energy conservation. Financial support from the GEF will be used to guarantee to both EESPs and SMEs in implementing the EC&EE projects.

All information on establishment of Loan Guarantee Fund Mechanism under the PECSME project is as following:

2. Objective:

To set up a loan guarantee fund mechanism that will support the commercial funding of EC&EE projects to be undertaken by SMEs and EESPs.

3. Loan Guarantee Fund Size:

At the demo stage, capital support from GEF of US\$ 1.95 million will be used to set up a loan guarantee fund for EC&EE investment projects. Other contributions and/or supports are welcome.

4. Recipients:

All SMEs having EC&EE investment proposal are eligible to enjoy such financial support program. However, due to limited capital, at the early stage, the program should prioritize to sectors that need renovate technology/equipment to save energy, such as brick, ceramic, textile, food processing and paper & pulp industries. The Fund will guarantee selected SMEs (the end-user) who have insufficient collateral to get commercial bank loan for implementing EC&EE project. The program also provides guarantee for EESPs (third party financing) and in turn these companies will provide EC&EE technical services to SMEs. SMEs pay fee to EESPs for using technical services rather than borrowing bank capital for EC&EE investment.

5. Participating Parties involved in LGF' Operational Mechanism:

(1) LGF managing Bank: the guarantee fund of US\$ 1.95 million will be deposited in trust in the Industry and Commercial Bank of Vietnam (INCOMBANK). The money will deposit in stages as the guarantee portfolio increase. The INCOMBANK will also act as the fund manager as designated by the MOST.

(2) Participating credit institutions: these institutions will provide lending to SMEs in implementing EE& EC activities under the guarantee from the LGF managing bank. Any commercial bank that has experiences in lending to SMEs and handling lending from international support could be a participating bank.

(3) The Project Management Unit: the PMU of the PECSME Project will conduct technical assistances to involved parties in operating the LGF. The office will also advise the EC&EE Project Appraisal Committee in selecting projects and supervise the LGF's activities according to its regulations.

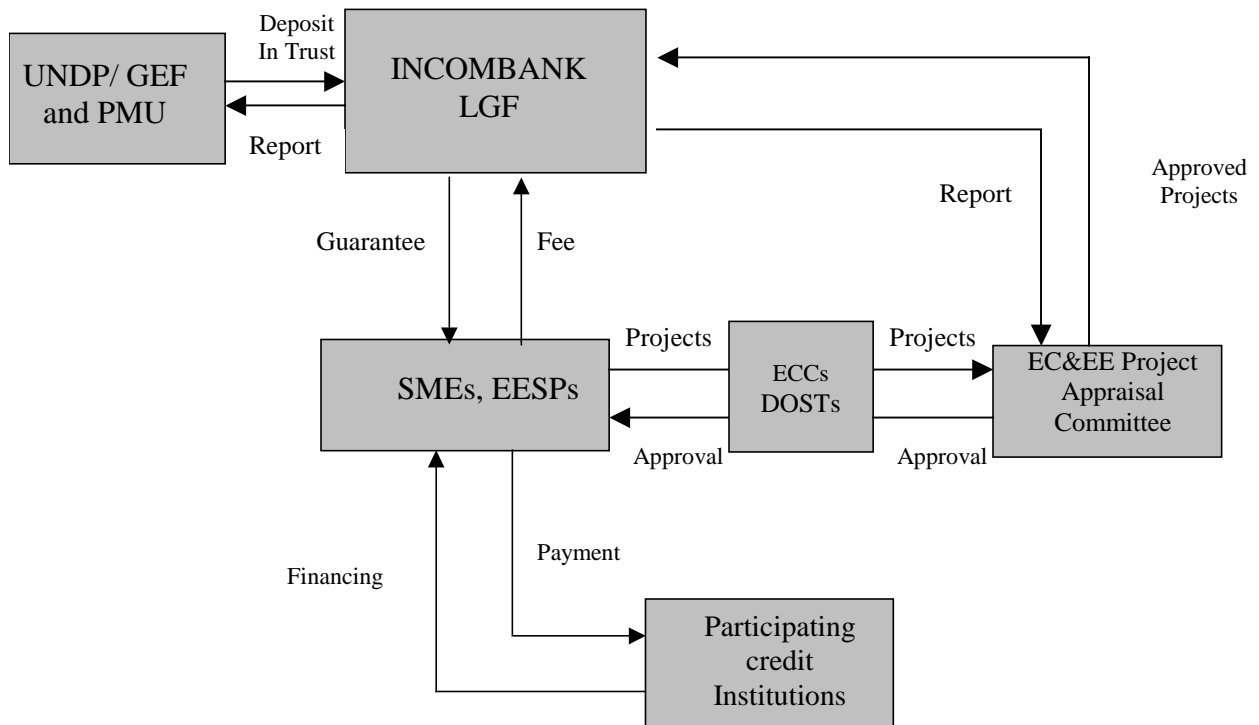
(4) Energy Conservation Centers (ECCs) and Departments of Science and Technology (DOSTs) in participating provinces/cities: these agencies will act as local focal points to receive SME's applications on loan guarantee for their EC&EE investment projects and facilitate the meetings of the EC&EE Project Appraisal Committee.

(5) The EC&EE Project Appraisal Committee: The Committee will consist of representatives from MOST (PMU), UNDP and INCOMBANK. The Committee has the following tasks and powers: (i) to adopt the strategy operation, financial plan and final account settlement reports of the Fund; (ii) to select the EC&EE investment projects that will be guaranteed by the LGF and submit the list of selected projects for NPD's approval. Senior advisors on EC&EE activities should be invited to be a participant in the Committee meeting of selecting the loan guarantee projects on case-by-case base.

6. Guarantee level: the Loan Guarantee Fund will only provide a partial guarantee for the portion of the loans not covered by collateral. The maximum ceiling of guarantee will be

discussed in details between INCOMBANK and the Project Management Unit. Based on the existing guarantee policy in Vietnam, the paper recommends that should not exceed 75% of the portion of total loan.

7. Procedures of guarantee: the guarantee procedures are summarized in the following diagrams.



8. Conditions to operate the guarantee system: to implement the above mentioned guarantee system, the following conditions need to be addressed:

- Sources to cover management fee of the LGF managing bank and the meetings of the EC&EE Project Appraisal Committee.
- SMEs as the guarantee beneficiaries must pay guarantee fee.
- INCOMBANK must pay interest for deposited money in the LGF at the Bank (Interest Rate for the Fund at the Bank is equal to the interest rate of the non-limit bank deposits at commercial banks nation-wide as proposed by INCOMBANK). All interest will be paid back to UNDP.
- Risk sharing mechanism among banks and borrowers.

9. Roles of Institutions in managing the GEF Grant allocated for Loan Guarantee Fund

This section lays down some principal roles and responsibilities of relevant parties involving operation of the LGF during the project period. These roles and responsibilities will be further detailed into agreements/MoU and the operational mechanism of the LGF

UNDP Country Office

- Have authority to approve the LGF operational plan, financial plan, and the operational regulations and criteria of LGF;
- Manage the total capital US\$ 1.95 of LGF granted by GEF and transfer to LGF in stages as work plan prepared and requested by PMU and in consistence with the approved operational and financial plans and results of monitoring and evaluation of LGF;
- Participate in the EC&EE Project Appraisal Committee;
- Have the authority to regularly check the usage of LGF money deposited at the INCOMBANK and reserve the right to withholding or withdrawing money already deposited to the LGF subject to detection of fault or misuse of the GEF resources.

MOST/PMU

- MOST will be held accountable to UNDP and the Government of Vietnam for the proper and effective use of the GEF grant deposited in the LGF;
- MOST will sign the MOU on LGF management with INCOMBANK;
- Prepare the LGF operational strategy, financial plan as well as its operational regulations and criteria;
- Supervise and ensure the LGF 's activities according to its regulations and criteria as well as decision of the NPD;
- Provide technical assistances to involved parties in operating the guarantee fund as needed;
- Participate in the EC&EE Project Appraisal Committee;
- Have the authority to regularly check the usage of LGF's money deposited at the INCOMBANK;
- MOST, in collaboration with UNDP and GACA, is responsible for development and implementation a strategy for transfer of the GEF grant for LGF to the Government Treasury at the end stage of the project.

INCOMBANK

- Manage the LGF in accordance with Vietnamese Law and the Provisions of MOU signed between INCOMBANK and MOST;
- Participate in the EC&EE Project Appraisal Committee;
- Submit the quarterly and annually reports on their operation to PMU.
- Have responsibility to submit all needed information as required by UNDP and MOST. The Fund used by LGF will be checked two times a year. The information should be provided as follows:
 - o Verifications of guarantee issued from LGF;
 - o Total amount to be transferred to credit banks to cover the bad debts;
 - o Total guarantee fee collected from SMEs as beneficiaries;
 - o Total income from collected interest for LGF money deposited in INCOMBANK.

(Note: All these information should be included in the MOU signed between INCOMBANK and MOST).

10. Work Plan of Establishment of LGF Operational Mechanism

During the PDF-B one offer letter for managing the LGF has been sent to 3 commercial banks namely: Industry and Commercial Bank (INCOMBANK), Investment and Development Bank

and VIETCOMBANK. At the end of Year 2003, PMU has received 3 proposals for LGF Management from those banks. As a financial institution has the professional capacity in managing the loan guarantee funds, INCOMBANK has been chosen to be the LGF manager (see reasons given in the Rationale part of the Proposal of Mobilization of the Loan Guarantee Funding Mechanism).

As planned in the Project Design, the LGF Mechanism will be operated to support EC&EE investments by the Second Quarter of Year 2 of PECSME implementation and continue its operation beyond the Project. In order to support the implementation of this plan, PMU will conduct the following technical assistances: (see also Table 1)

- (1) During 2nd Quarter of Year 1 of PECSME Implementation, one Subcontractor and one International Expert will be hired to work closely together to complete the following technical outputs:
 - a. Action Plan to mobilize the existing Guarantee Fund Mechanism in INCOMBANK;
 - b. Design of LGF operational mechanism, formulation of LGF regulation and criteria;
 - c. Draft MOU and facilitate the signing an MOU between the INCOMBANK and MOST.
- (2) During 2nd Quarter of Year 5 of PECSME implementation, two independent financial experts will be hired to work closely with one International Expert to produce the following technical outputs:
 - a. Evaluation of the effectiveness and viability of the established financing mechanism;
 - b. Recommendation on a sustainable financing program for EC&EE project beyond the project implementation.

Table 1: The Workplan for Development of the Loan Guarantee Fund

The LGF's Preparation Plan presented below indicates what activities need to be undertaken by whom, when and with what outputs.

Output	Activity	Date & duration Inputs	Year 1				Year 2				Year 3				Year 4				Year 5			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1. Planning for LGF																						
1.1 Plan and schedule for LGF formulation prepared	1.1. Prepare 1 st quarterly workplan	In 1 st Quarter of Year 1 NPD/PM & I-STA																				
1.2. Recruitment of Consultants and Subcontractor	1.2. Recruit the consultant and subcontractor	In 1 st Quarter of Year 1 UNDP and NPD																				
2. Preparation for LGF																						
2.1 Design of LGF operational mechanism prepared (i.e. operational regulation, criteria)	2.1 Work on design of the LGF	In 1 st month of 2 nd Quarter of Y 1 LGF International expert (TOR 5.2)																				
2..2. Full operational mechanism developed and agreed between MOST/PMU and INCOMBANK	2..2. Develop a full operational mechanism (based on LGF' operational regulation and criteria developed by LGF International expert)	From 2 nd Quarter of Y 1 to 1 st Quarter of Y 2 Subcontractor and Inter. Expert																				
2.3 MoU signed by INCOMBANK and MOST	2.3. Negotiate with INCOMBANK on the MoU	In 1 st Quarter of Y 2 PMU, Subcontractor and Inter. Expert																				
	2.4 Sign the MOU between INCOMBANK and MOST																					
3. Operationalized LGF																						

Output	Activity	Date & duration Inputs	Year 1				Year 2				Year 3				Year 4				Year 5			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
3.1 On going monitoring and evaluation. of LGF's operation conducted	3.1. Develop a M&E System to track the progress of operation of LGF mechanism	In 1 st Quarter of Y 2 PMU, Subcontractor and Inter. Expert																				
	3.2 Monitoring and evaluation	From 2 nd Quarter of Y2 to the end - Y5 INCOMBANK and PMU																				
4. Strategy for sustainable financing Program for EC&EE projects beyond the PECSME implementation completed																						
	4.1 Assess and evaluate the effectiveness and viability of LGF operational mechanism	In 2 nd Quarter of Y 5 National Consultants, Inter. Expert and PMU																				
	4.2. Conduct a Workshop to gather consultancy on LGF operational mechanism	In 2 nd Quarter of Y 5 National Consultants, Inter. Expert and PMU																				
	4.3. Strategy on a sustainable financing Program for EC&EE Projects	The end 2 nd Quarter of Y 5 National Consultants, Inter. Expert and PMU																				