



GEF

**PROJECT DEVELOPMENT FACILITY
REQUEST FOR PDF BLOCK A FOR Medium-sized Project**

AGENCY'S PROJECT ID: GF/VIE/05/XXX

GEFSEC PROJECT ID:

COUNTRY: Vietnam

COUNTRY ELIGIBILITY: Eligible under para 9a of the GEF instrument. Vietnam ratified the Stockholm Convention on 22 July 2002

PROJECT TITLE: Introduction of BAT and BEP methodology to demonstrate reduction or elimination of PCDD/PCDFs releases from the industry in Vietnam.

GEF AGENCY: UNIDO

OTHER EXECUTING AGENCY (IES): Government of Vietnam

DURATION: 4 months

GEF FOCAL AREA (S): Persistent Org. Pollutants

GEF OPERATIONAL PROGRAM (S): OP #14

GEF STRATEGIC PRIORITY (IES): POPs-SP2- Implementation of policy/regulatory reforms and investments.

ESTIMATED STARTING DATE: November 2005

FINANCING PLAN (US\$)	
GEF PROJECT	
PDF A	US\$ 50,000
Sub-Total GEF	US\$ 50,000
CO-FINANCING	
GEF Agency	
National Contribution	
In Cash	
In Kind	US\$ 5,000
Others	
Sub-Total Co-financing:	US\$ 5,000
Total PDF Financing:	US\$ 55,000

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

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Date: 7 September 2005

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for approval.

Name & Signature

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PART I: PROJECT INFORMATION

1. PROJECT LINKAGE TO NATIONAL PRIORITIES, ACTION PLANS AND PROGRAMS

The GEF initial support on the implementation of the Stockholm Convention focuses on assisting Vietnam to prepare its National Implementation Plan (NIP). The NIP provides a framework for the country to develop and implement, in a systematic way, priority policy and regulatory reforms, capacity building and investment programmes on POPs. The NIP development process is approaching its completion and priorities have been identified, analyzed and approved.

In the Action Plan of the NIP, dioxins and furans have been identified as a priority issue and an urgent problem due to the threat it represents to human health and environment, particularly from the labor intensive sector of the industries.

The proposed Medium-sized Project (MSP) will demonstrate methodologies to promote the implementation of best available techniques (BAT) and best environmental practices (BEP) to reduce unintentional production of POPs in the industrial sector recognized as important sources of unintentional production of dioxins and furans in Vietnam. The project will allow the Government of Vietnam to demonstrate methodologies that would help initiate plans to meet its obligations under the Stockholm Convention in relation to the promotion of BAT and BEP for existing sources within the source categories listed in Part II of Annex C and within source categories such as those in Part III of that Annex.

In addition to the above-mentioned priority of the NIP, the proposed MSP will assist in planning means to eventually help in achieving other priorities, namely - improvement of environmental performance in the industry as well as other processes of the whole industrial sector and to enable linking the industrial sector cleaner production programmes with the NIP action plan

The project will be a logical continuation of the Enabling Activities project and one of the first steps for the practical implementation of pollution reduction and elimination measures for POPs in Vietnam. It will stimulate other programme ideas related to those mentioned in Articles 10 and 11 of the Stockholm Convention.

2. PROJECT RATIONALE AND OBJECTIVES

Dioxins and furans (PCDD and PCDF) are among the POPs chemicals listed in the Stockholm Convention that have demonstrated chronic adverse effects on human health and the environment. Chronic impairment to human health through environmental exposure to POPs has direct implications to national and international efforts to meet sustainable development targets in human health and indirectly impacts efforts to reduce poverty and improve attainment of educational opportunities.

Studies on PCDDs and PCDFs indicate that eliminating them can lead to reduction in the environmental degradation rate and in a longer time, reduce its harmful and dangerous influence on health both to the present and future generations. Such an approach has prompted the international action that resulted in the adoption of the Stockholm Convention on POPs. The actions proposed here relate directly to PCDDs and PCDFs listed in Annex C, Part II of the Convention. The rationale and objectives of the MSP originate from the needs identified during the inventory process conducted in the course of the NIP preparation, priorities and key objectives established by the NIP. Their implementation will permit the country to have a better planning to enable compliance with its obligations under the Stockholm Convention on POPs and through this to contribute to the

improvement of the environmental situation in Vietnam and eventually reduce and eliminate the threats, which PCDDs and PCDFs pollution represents to human health.

The preliminary inventory identified the priority industries of concern in terms of releases of dioxins and furans such as the metallurgical industries, pulp and paper, open burning, cement industries that are firing used tyres as well as firing used oils and waste incineration. The fossil fuel power stations in the major cities of the country may constitute a major source of releases classified by Article 5 Annex C as Part III source categories. The introduction of BAT and BEP strategies will eventually support the efforts of Vietnam to comply with the requirements of the Stockholm Convention.

Project Objectives:

The immediate objective of the proposed MSP will be to assist the country to plan and strategise for the needs to comply with the obligations under the Stockholm Convention on POPs in respect of Article 5 in its parts concerning reduction or elimination of PCDDs and PCDFs emission releases from the industrial sectors and processes mentioned in Annex C, Part II.

The proposed MSP will be designed to assist the country to implement the activities of the NIP related to the key objective (priority) # 2 in order to support investments that emerge from NIPs or other priority setting exercises. Key objectives are:

- To prepare BAT and BEP options to demonstrate reduction and elimination of unintentional production of POPs in the industry, recognized by the preliminary inventory conducted within the POPs EA process for Vietnam, as key sources of unintentional production of POPs chemicals listed in Annex C of the Stockholm Convention.
- To prepare estimates of the likely range of incremental costs of implementing BAT and BEP options at enterprise and sector level as contributions to action planning and strategy development to reduce releases and eliminate sources of unintentional production of POPs chemicals listed in Annex C of the Stockholm Convention.

3. Expected Outcomes

The outcome of the project is to introduce methodologies for the reduction of the likely ongoing human health threat from continuous releases of PCDDs and PCDFs from the anthropogenic process as well as avoidance of their future releases into the environment through introduction of strategies of prevention, reduction and elimination.

The immediate outcomes of the project will be an effective working system for the determination of technical and technological options associated with incremental costs to enable planning for the transfer of BAT and BEP to the industrial sector processes and ensure approved Government policies and strategies in this respect, as well as securing a number of highly trained national specialists on clean technologies for safe operation of BAT and BEP practices in the industry and a wide public awareness on the issues of health and environment related to these strategies.

The project will be structured into four basic components:

Component A: Inception and coordination at the national industry level and selection of POPs priority sector level;

- Component B: Revised unintentional production baseline and the existing monitoring capacity of the sector at enterprise level;
- Component C: Unit operation analysis for mass, contaminant product and energy balance including operational audits;
- Component D: Best options of BAT and BEP methodologies, cost modeling and incremental costs determination.

4. PLANNED OUTPUTS TO ACHIEVE OUTCOMES

The MSP outputs will include:

- Setting up a Project Steering Committee (PSC) and coordination mechanism;
- Development of a detailed logistic plan for the introduction of BAT and BEP strategies;
- Enterprise-level analysis for setting out optimized BAT and BEP strategies for unintentional production, reduction and the incremental costs of implementation;
- Sector-level analysis of incremental costs of implementing BAT and BEP in the selected industrial sector;
- Capacity at enterprise and sector levels in (i) preparing BAT and BEP implementation strategies; (ii) preparing incremental cost calculations; (iii) monitoring unintentional production;
- Capacity at national level in BAT and BEP options and incremental cost calculations for national action plan and participation in the Convention implementation;
- Publications for setting out methodologies adopted in this project and lessons learnt for distribution to the industry in Vietnam and as a contribution to the BAT and BEP implementation for existing processes.
- Intensive communication and preparation of awareness-raising activities on BAT and BEP opportunities in the industrial sector;
- Evaluation and dissemination of the results to the industry at national level.

5. STAKEHOLDERS INVOLVED IN PROJECT

The project will stress on the participation of relevant stakeholders within the country such as the Ministry of Natural Resources and Environment (MONRE), Ministry of Health, National Cleaner Production Center, National Industrial Research Center, other local governments, expert companies of the industrial sector, national and local communities, private sectors, universities, and the specialized NGOs.

During the project preparation phase, the establishment of the public-private partnership is expected. The consultations indicate possible support from foreign donors as well as national entities.

6. EXPECTED OUTCOMES/COSTS AND COMPLETION DATES OF THE PDF A

The expected outcomes of the PDF-A are a package of policy and legislation reviews led by technical and technological demonstration, capacity building for local human resources and relevant institutions, as well as effective public awareness on the viability of BAT and BEP strategies for human health and the environment.

The management arrangements for the project will be established between UNIDO and the National Executing Agency, which in this case is the Ministry of Natural Resources and Environment (MONRE) represented by the Vietnam Environment Protection Agency (VEPA). Staff would be officially nominated as well as logistical needs for the project implementation will be defined. General concepts of the introduction of BAT and BEP in the industrial processes and approaches to their implementation will be provided to national experts identified and drawn from industry and government. Experts who have participated in the exercise of developing the inventories for the NIP project as well as those experts who have been delegated to attend the regional meetings arranged by UNEP on BAT and BEP will be involved in the discussions.

Local experts will be identified to work with teams to be established within participating enterprises. Staff will be trained on systematic methods of identifying sources of unintentional production. Each enterprise will also be assessed for its ability to monitor process performance, analyse environmental emissions data and interpretation of results to improve operational effectiveness.

Attention would also be given to specialized and active NGOs in the elimination or reduction of POPs chemicals identified during the NIP process, to seek their support particularly during the public awareness phase of the project. The small and medium industrial enterprises sector is labor intensive and therefore aspects of community perception on risks associated with emissions of PCDDs and PCDFs, and the development of social capital would be some of the tasks to be jointly carried out with CBOs during the project implementation. A working group will be formed to look into this matter.

Following formal agreement on how to proceed with project activities in the industrial sector and within typical enterprise(s), local and international sector experts will be recruited to undertake the activities listed in the workplan.

Implementation Work plan

Project Tasks

- | | |
|---|---------------|
| 1. Preparation for establishing project coordination mechanisms | December 2005 |
| 2. Build capacity in support of project implementation | January 2006 |
| 3. Assess and prepare infrastructural capacity | January 2006 |
| 4. Prepare plans to execute and review PCDD/PCDF inventories | February 2006 |
| 5. Definition of prevention, reduction and elimination stages | February 2006 |
| 6. Prepare draft MSP, time schedule and additional funds mobilization (if needed) for introduction of BAT and BEP | March 2006 |
| 7. Workshop on project achievements | March 2006 |
| 8. Submission of Final MSP proposal to GEF | March 2006 |

BUDGET

Activity	US\$
1. Capacity building and project coordination (Activities 1 & 2)	10,000
2. Review of infrastructure capacity and PCDD/PCDF inventories, define prevention, reduction and elimination stages (Activities 3, 4 & 5)	20,000
3. Drafting of MSP proposal (Activity 6)	15,000
4. Finalization of results (Activities 7 & 8)	5,000
TOTAL	50,000

Total budget of the PDF-A grant is expected to be US\$ 55,000. The Government of Vietnam through the provision of personnel, venue and logistical support for the workshop, transportation, analytical services and additional support costs, will provide US\$ 5,000 of this amount in-kind.

7. OTHER POSSIBLE CONTRIBUTORS/DONORS AND AMOUNTS

Several donors are supporting UNIDO technical assistance programmes of Vietnam namely France, Spain, Switzerland and Belgium. For the MSP project, the EU and bilateral donors support of private-public partnership could be anticipated for up to Euro 100,000. The Government of Vietnam is expected to play an important role in the investment phase of the project.

PART III: INFORMATION ON THE APPLICANT INSTITUTION

<p>8. Name: Vietnam Environment Protection Agency (VEPA) under the Ministry of Natural Resources and Environment (MONRE)</p>	<p>9. Type: Specialized national government environment department</p>
<p>10. Date of Establishment, Membership, and Leadership: VEPA was established on 11/11/2002 with a work force of nearly 100 staff; and Dr. Tran Hong Ha, was appointed as the Director General</p>	<p>11. Sources of Revenue: Government budget.</p>

12. Mandate/Terms of Reference:

VEPA is the organ directly under the Ministry of Natural Resources and Environment (MONRE) with the mandate of governmental management of environmental protection, specifically including environmental monitoring, pollution prevention and control, environmental emergency response, environmental quality improvement, nature and biodiversity conservation, environmental technology application, environmental database development, inventory, information and reporting; environmental awareness raising and education. VEPA is the national focal point of Vietnam for the Stockholm Convention on POPs.

13. Recent Activities/Programs, in particular those relevant to GEF.

The following GEF projects could be mentioned:

- UNDP/GEF Project on “Development of National Implementation Plan for Vietnam in the process of accession, implementation and enforcement of the newly-signed Stockholm Convention on Persistent Organic Pollutants (POP)” (scheduled to be finished in July 2005).
- Global UNDP/GEF Project on “Demonstrating and Promoting Best Practices in Reducing Medical Waste to avoid Environmental releases of Dioxins and Mercury from Health Care Practice” (PDF-B)
- UNEP/GEF project on “Demonstrating and Scaling up Sustainable Alternatives to DDT, and Strengthening National Vector Control capabilities in South Asia and Pacific” (pipeline)
- UNEP/GEF project on “Demonstration of Integrated, Intersectoral Approach to Persistent Organic Pollutants used in Plant Protection and Vector Control” (pipeline)

Other types of environment related projects were mainly developed with UNIDO such as the National Cleaner Production Centre and some projects implemented with donor bilateral funds such as waste management and wastewater treatment.

PART IV: INFORMATION TO BE COMPLETED BY THE IMPLEMENTING AGENCY

14. Project Linkage to Implementing Agency program(s)

In 1994, UNIDO assisted Vietnam in developing the Industrial Environmental Policies, shortly after the country developed its National Plan for Environment and Sustainable Development for 1991-2000. This has resulted in a series of technical assistance support projects and programmes such as:

1. Industrial Pollution Reduction in Viet Tri and Dong Nai cities in 1995;
2. The creation of the Cleaner Production Centre of Vietnam (CPCV) in 1997;
3. Reduction of Industrial Pollution in Ho Chi Minh City in 1998;
4. Strengthening the Chemical and Environmental Engineering Department at VietNam National University of Hanoi (Swiss Cooperation);and
5. Municipal and Industrial Waste Management programme.

UNIDO, through the CPCV, has participated in the workshops of the GEF funded National Implementation Plan (NIP) development for the Stockholm Convention on POPs. The current project proposal is an agreed continuation of UNIDO cooperation with the Government of Vietnam in implementing the priorities of the NIP.

Annex 1: Terms of Reference for the elimination of unintentionally produced POPs products in Vietnam.

Post title: Expert in BAT and BEP strategies to reduce unintentional production of POPs

Duration: 3.0 work-month

Date required: December 2005 to February 2006

Duty station: Hanoi-Vietnam

Counterpart: Ministry of Natural Resources and Environment, Vietnam Environment Protection Agency in cooperation with the industrial sector.

Brief Description:

This project will demonstrate methodologies to promote the implementation of best available techniques (BAT) and best environmental practices (BEP) to reduce unintentional production of POPs in the sector of industry recognized as important sources of such production in Vietnam. Working with enterprise staff, local and international experts will establish improved information on unintentional production at enterprise level, and identify opportunities to reduce unintentional production through improved process management, modified raw material and product specifications and emission standards, and the introduction of new technology at key stages.

Realistic and feasible measures to reduce or eliminate unintentional production of POPs through the implementation of BAT and BEP strategies at enterprise level will be prepared as a PDF-A for a Medium-sized GEF project allowing the detailed calculation of incremental costs. The outcomes will be of immediate relevance to the priority NIP action plans to reduce unintentional production of POPs. These plans will be a key element for post NIP now being prepared to meet Vietnam obligations under the Stockholm Convention. Project outputs will also be of value during negotiations related to selection of appropriate techniques and financial measures.

Main Duties	Expected duration	Location	Expected results
1. Visit several pre-selected industries, meet government representatives & stakeholders, identify and provide technical details for national executing agency in the country.	1.0 w/m	Hanoi-Vietnam	Executing Agency, stakeholders identified
2. Collect technical and economic data on industries and process source of emissions of PCDD/PCDF and other related POPs issues. Prepare a detailed work plan of BAT/BEP project activities based on which the budget could be estimated including incremental costs areas.	1.0 w/m	Hanoi-Vietnam	Data on UP-POPs and work Plan prepared

3. Seek agreement from government authorities/GEF Operational Focal Point to develop sectoral post NIP projects as a first step to implement the Stockholm Convention on POPs	0.5 w/m	Hanoi-Vietnam	Endorsement obtained
4. Prepare a 50-60-page proposal on MSP format (including data obtained on duties 1, 2 &3 above) following the GEF Guidelines (www.gefweb.org ; templates and guidelines).	0.5 w/m	Home based	MSP Proposal prepared

Qualifications: Advanced university degree in chemical engineering or qualified chemical technologist, environmental scientist, with at least 5 years experience and background in the management of POPs related issues

Language: French.

Background information:

In May 2000, UNIDO was awarded the status of Executing Agency with Expanded Opportunities due to a comparative advantage in the area of POPs. UNIDO has a long-term experience on POPs related industrial activities. For this reason, it became a member of the GEF Inter-agency Task Force on POPs, which has developed the Guidelines for Enabling Activities for the Stockholm Convention on POPs. Consistent with the decision to make UNIDO as Executing Agency with Expanded Opportunities, the GEF Council on its 17th Council Meeting held in Stockholm in May 2001, approved the direct access of UNIDO to GEF resources for expedited Enabling Activities on POPs.

Due to this large project portfolio, a Memorandum of Understanding was drawn up between UNIDO and the Secretariat of the Global Environment Facility granting UNIDO Direct Access to GEF Resources and was signed on 20 July 2004. The MoU governs the manner in which UNIDO will seek allocations of GEF resources for the preparation and implementation of GEF projects from the Council and the Chief Executive Officer, as appropriate. Consequently, the respective duties and responsibilities of the Secretariat and UNIDO with respect to allocations of such resources made to UNIDO were specified.

Associated to the MoU is a Financial Procedures Agreement to govern arrangements for the administration, commitment and disbursement of all GEF resources allocated to UNIDO pursuant to the Expanded Opportunities Decision and the Executing Agencies Direct Access Decision between UNIDO and the International Bank for Reconstruction and Development as Trustee of the Global Environment Facility Trust Fund.

Within UNIDO's activities of implementing Stockholm Convention programme, technical work has commenced to identify BAT and BEP for POPs elimination or reduction as well as the adoption of alternative materials as substitutes for the prescribed POPs. In addition, countries will need assistance to identify suitable approaches to legal and social aspects of the management of POPs through capacity-building assistance for government, industry and civil society.