Vietnam – Denmark
Development Cooperation in the Environment (DCE)

2005 - 2010

Component Document

Cleaner Production in Industry
Poor people are most likely to be employed in the most polluting industries, work in the most unsafe and unhealthiest working conditions and live in or close to environments most polluted by industry. The correlation between poverty, poor occupational health, safety and welfare of industrial workers, and poorest compliance with environmental laws and the Labour Code is well documented.

The component provides a Cleaner Production strategy for Large Polluting Enterprises which addresses the shortfalls of previous Cleaner Production initiatives in Vietnam, reinforces commitment to Cleaner Production from the Government of Vietnam and establishes a methodology and Cleaner Production infrastructure for the National Cleaner Production Action Plan.

The component examines the environmental and Occupational Health and Safety conditions in and around Domestic Production Units, Cooperatives and Small and Medium Size Enterprises in densely populated areas. It examines existing permitting, inspection and practices promoting small enterprises. It identifies shortfalls in existing practices and raises capacity to improve conditions and production efficiency to promote the sustainable development of small enterprises. Training and hands on demonstration projects, practice of auditing and inspection and developing and implementing improvement plans for small businesses are included.

The component proposes demonstration projects in hotspots in four provinces, two with large enterprises and two with small enterprises. Improved production efficiency, environmental quality and health of inhabitants and workers in and around polluting industry (both large and small scale) will be demonstrated.

Signatures:

For Royal Danish Embassy                    For MoI
# TABLE OF CONTENTS

Cover Page  
List of Abbreviations  
Executive Summary

## 1. INTRODUCTION

1.1. Sector Context  
   1.1.1. Alignment with DCE Components  
   1.1.2. Alignment with Other Projects and Programmes

## 2. DESCRIPTION OF COMPONENT

2.1. Summary Statement

2.2. Development and Immediate Objectives

2.3. Strategy  
   2.3.1. Selection of Target Provinces  
   2.3.2. Selection of Target Areas and Target Enterprises  
   2.3.3. Strategy for Addressing Pollution from Large Enterprises  
   2.3.4. Strategy for Addressing Pollution from Small Enterprises  
   2.3.5. Demonstration Project Implementation Strategies

2.4. Outputs

2.5. Activities

2.6. Component Inputs  
   2.6.1. Danida Inputs  
   2.6.2. Inputs by the Ministry of Industry

2.7. Component Budget

2.8. Capacity Development  
   2.8.1. Capacity Development in CP for Large Enterprises  
   2.8.2. CP Capacity Development to Address Pollution from Small Enterprises  
   2.8.3. Programme Timing and Alignment

## 3. ASSUMPTIONS AND RISKS

3.1. Commitment of Stakeholders

3.2. Institutional

3.3. Accountability

3.4. Sustainability, Replicability and Capacity Development

## 4. MONITORING

4.1. Monitoring System
4.2. Linkage to National Sector Framework Targets 22
4.3. Indicators and Means of Verification 22
4.4. Reporting System 23
4.5. Review and Evaluations 23
4.6. Schedule 23

5. MANAGEMENT AND ORGANISATION 24
5.1. Management of Component 24
  5.1.1. Programme Level Management 24
  5.1.2. Component Level Management 24
  5.1.3. Provincial and Community Level Management 25
5.2. Procedures for Implementation Planning and Budgeting 26
  5.2.1. National level 26
  5.2.2. Selection of Demonstration Projects 26
  5.2.3. Revision and Adjustment of Component 26

6. FINANCIAL MANAGEMENT AND PROCUREMENT 28
6.1. Budgeting and Cash Flow Management 28
6.2. Disbursement Authorisation 28
6.3. Accounting Principles and Procedures 29
6.4. Financial Auditing and Reporting 29
6.5. Procurement 29

7. COMPONENT IMPLEMENTATION PLAN 30

Annexes:
Annex A  Component Logframe
Annex B  Organisation Diagram
Annex C  Detailed Budget and Cash Flow
Annex D  Job Descriptions for Long Term technical Assistance
Annex E  Management Plans for Cross-Cutting Issues
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASMED</td>
<td>Agency for SME Development</td>
</tr>
<tr>
<td>BAT</td>
<td>Best Available Technique</td>
</tr>
<tr>
<td>CBO</td>
<td>Community-based Organization</td>
</tr>
<tr>
<td>CDS</td>
<td>Capacity Development Support for Environmental Planning and Management</td>
</tr>
<tr>
<td>CFM</td>
<td>Component Financial Manager</td>
</tr>
<tr>
<td>CIDA</td>
<td>Canada International Development Agency</td>
</tr>
<tr>
<td>CIP</td>
<td>Component Implementation Plan</td>
</tr>
<tr>
<td>CIR</td>
<td>Component Inception Report</td>
</tr>
<tr>
<td>CP</td>
<td>Cleaner Production</td>
</tr>
<tr>
<td>CPI</td>
<td>Cleaner Production in Industry</td>
</tr>
<tr>
<td>CPRGS</td>
<td>Comprehensive Poverty Reduction and Growth Strategy</td>
</tr>
<tr>
<td>CSC</td>
<td>Component Steering Committee</td>
</tr>
<tr>
<td>CSO</td>
<td>Component Support Office</td>
</tr>
<tr>
<td>Danida</td>
<td>Danish International Development Assistance</td>
</tr>
<tr>
<td>DARD</td>
<td>Department of Agriculture and Rural Development</td>
</tr>
<tr>
<td>DCE</td>
<td>Development Cooperation in the Environment</td>
</tr>
<tr>
<td>DEA</td>
<td>Danish Environmental Assistance</td>
</tr>
<tr>
<td>DKK</td>
<td>Danish Kroner</td>
</tr>
<tr>
<td>DOC</td>
<td>Department of Construction</td>
</tr>
<tr>
<td>DOFI</td>
<td>Department of Fisheries</td>
</tr>
<tr>
<td>DOH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>DOI</td>
<td>Department of Industry</td>
</tr>
<tr>
<td>DOLISA</td>
<td>Department of Labour, Invalids and Social Affairs</td>
</tr>
<tr>
<td>DONRE</td>
<td>Department of Natural Resources and Environment</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FSC</td>
<td>Financial Service Consultant/Company</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographical Information System</td>
</tr>
<tr>
<td>GOV</td>
<td>Government of Vietnam</td>
</tr>
<tr>
<td>HCMC</td>
<td>Ho Chi Minh City</td>
</tr>
<tr>
<td>ILTA</td>
<td>International Long-term Adviser</td>
</tr>
<tr>
<td>JPR</td>
<td>Joint Programme Review</td>
</tr>
<tr>
<td>LMPA</td>
<td>Sustainable Livelihoods in and around Marine Protected Areas</td>
</tr>
<tr>
<td>MARD</td>
<td>Ministry of Agriculture and Rural Development</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MOC</td>
<td>Ministry of Construction</td>
</tr>
<tr>
<td>MOFI</td>
<td>Ministry of Fisheries</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MOI</td>
<td>Ministry of Industry</td>
</tr>
<tr>
<td>MOLISA</td>
<td>Ministry of Labour, War Invalids and Social Affairs</td>
</tr>
<tr>
<td>MONRE</td>
<td>Ministry of Natural Resources and Environment</td>
</tr>
<tr>
<td>MOSTE</td>
<td>Ministry of Science, Technology and Environment</td>
</tr>
<tr>
<td>MPI</td>
<td>Ministry of Planning and Investment</td>
</tr>
<tr>
<td>NGO</td>
<td>Non Government Organization</td>
</tr>
<tr>
<td>NIOEH</td>
<td>National Institute of Occupational and Environmental Health</td>
</tr>
<tr>
<td>NLTA</td>
<td>National Long-term Adviser</td>
</tr>
<tr>
<td>NSEP</td>
<td>National Strategy for Environmental Protection</td>
</tr>
<tr>
<td>OH&amp;S</td>
<td>Occupational Health and Safety</td>
</tr>
<tr>
<td>PCC</td>
<td>Programme Coordination Committee</td>
</tr>
<tr>
<td>PCDA</td>
<td>Pollution Control in Poor Densely Populated Areas</td>
</tr>
<tr>
<td>PCO</td>
<td>Provincial Management Office</td>
</tr>
<tr>
<td>PFMA</td>
<td>Programme Financial Management Advisor</td>
</tr>
</tbody>
</table>
PIM  Programme Implementation Manual
PPC  Provincial Peoples Committee
PSO  Programme Support Office
PPSO Provincial Programme Support Office
QA  Quality Assurance
RDE  Royal Danish Embassy
SD  Environmentally Sustainable Development of Poor Urban Areas Component
SDC  Swiss Development Corporation
SDU  Environmentally Sustainable Development in Poor Urban Areas
SIDA  Swedish International Development Agency
SME  Small and Medium Size Enterprise
SSCI  Small Scale Cottage Industries
TA  Technical Assistance
TWG  Technical Working Group
UNEP  United Nations Environmental Programme
UNIDO  United Nations Industrial Development Organisation
VAOH  Vietnam Association of Occupational Health
VECP  Vietnam Energy Conservation Programme
VNCPC  Vietnam Cleaner Production Centre
VND  Vietnamese Dong
EXECUTIVE SUMMARY

Introduction


Component Summary

The interventions of this component are designed to assist the Government of Vietnam in meeting targets and goals set forth in the National Strategy of Environmental Protection until 2010 and the orientation to 2020 (2 December 2003); the Comprehensive Poverty Reduction and Growth Strategy, May 2002; and the Millennium Development Goals November 2003.

CPRGS provides a clear commitment to the promotion of industrial growth as an important means to eradicate poverty. Cleaner Production is recognised as a key element to sustainable development and the Government of Vietnam recognises that Cleaner Production has an important role in achieving development priorities. The component supports sustainable industrial growth, builds capacity and commitment to Cleaner Production and demonstrates how industrial enterprises and people working in and living around them benefit from reduced pollution and improved efficiency.

Poor people are most likely to be employed in the most polluting industries, work in the most unsafe and unhealthiest working conditions and live in or close to environments most polluted by industry. The correlation between poverty, poor occupational health, safety and welfare of industrial workers, most polluting production techniques, and poorest compliance with environmental laws and the Labour Code is well documented.

The component focuses on hotspot areas in provinces where the most polluting enterprises have the most adverse impacts on the living and working environments of poor communities. In Vietnam these hotspots can be characterised as:

Small enterprises in densely populated areas - often owner operated, often employing family members including children, with very limited Occupational Health and Safety provisions and often in areas with no wastewater or waste management infrastructure.

Larger highly polluting enterprises in Industrial Zones employing high numbers of workers in unhealthy working environments that have inadequate wastewater treatment and disposal provisions and inadequate waste handling and disposal facilities.

The component provides a Cleaner Production strategy for Large Polluting Enterprises which address the shortfalls of previous Cleaner Production initiatives in Vietnam, reinforces commitment to Cleaner Production from the Government of Vietnam and establishes a methodology and Cleaner Production infrastructure to overcome barriers to setting the implementation of the National Cleaner Production Action Plan into motion.

The component examines the Occupational Health and Safety conditions in and around Domestic Production Units, Cooperatives and other small and medium enterprises in
densely populated areas. It examines existing permitting, inspection and practices promoting small enterprises. It identifies shortfalls in existing practices and raises capacity to improve conditions and production efficiency and promote the sustainable development of small enterprises.

The component will implement demonstration projects in hotspots in at least four provinces. Demonstrations will target improved production efficiency, environmental quality and health of inhabitants and workers in and around polluting industry.

Component Objectives

Development objective

The livelihoods of people working in and living around industrial enterprises benefit from controlled pollution and improved resource use of industrial enterprises

Immediate Objectives

- The capacity and commitment to implement Cleaner Production is established amongst key national players
- Key elements of the national Cleaner Production strategy are effective in target provinces
- Cleaner production techniques are demonstrated, and experience is used to refine the strategy and to replicate the policy in other provinces

Component Outputs

1. The capacity and commitment to implement Cleaner Production is established amongst key national players.
   1.1 A national Cleaner Production strategy covering large, medium and small-scale industry
   1.2 Functioning Cleaner Production Unit in the Ministry of Industry promoting and monitoring Cleaner Production implementation by industry sectors and enterprises
   1.3 Plan to address shortfalls in with existing industrial incentive systems and regulatory framework

2. Key elements of the national Cleaner Production strategy are effective in target provinces.
   2.1 Functioning Small and Medium Size Enterprise support unit in the Department of Industry Industry Promotion Units
   2.2 Cleaner Production is an important element of pollution management plans in target provinces

3. Cleaner production techniques are demonstrated, and experience is used to refine the strategy and to replicate the policy in other provinces.
   3.1 Demonstration Projects prepared and implemented in priority sectors and locations
   3.2 Participating enterprises demonstrate cost-effective improvements in production efficiency and enhanced compliance with relevant national environmental, Occupational Health and Safety and labour regulations
3.3 Plan for information dissemination and vertical and horizontal integration of lessons learned developed and applied

Component Management

The total support is 55 million DKK. At the component level, a Component Steering Committee will be established in the Ministry of Industry, with a membership to include the Ministry of Construction, the Ministry of Agriculture and Rural Development, the Ministry of Fisheries, the Ministry of Natural Resources and Environment, the Ministry of Health, and the Ministry of Labour, Invalids and Social Affairs and other institutions directly involved in implementation.

A national Component Director at Director level in the Ministry of Industry, will take overall responsibility for the component. The Component Director will be assisted by a Component support office supported by an International Long-term Adviser and a national advisor who will assist with day-to-day management activities.

A Technical Working Group, consisting of partners from the involved sectoral ministries and other national stakeholders, will also support the Component support office.

In selected provinces, demonstration projects will be undertaken with the Department of Industry Promotion Units. In provinces where demonstration projects address the Small and Medium Size Enterprise sector, then pilot Small and Medium Size Enterprise Support Units will also be introduced within the Industry Promotion Units.

A provincial level Technical Working Groups will also be formed and include representatives from the District Peoples' Committee, relevant line ministries, and local mass organizations and Non Government Organizations.

The total budget will be DKK 55 million, made up as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Assistance</td>
<td>DKK 11.5 million</td>
</tr>
<tr>
<td>Investments</td>
<td>DKK 30.5 million</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>DKK 7.9 million</td>
</tr>
<tr>
<td>Contingency</td>
<td>DKK 3.8 million</td>
</tr>
<tr>
<td>Other</td>
<td>DKK 1.3 million</td>
</tr>
<tr>
<td>Total</td>
<td>DKK 55.0 million</td>
</tr>
</tbody>
</table>
1. **INTRODUCTION**

The Government of Vietnam approved the National Environmental Protection Strategy (NSEP) on 2 December 2003. Being under overall management by MONRE, the Strategy lists 36 national priority programs for environmental protection with appointed host agencies. The program Nr. 28 "Application of clean and environmental friendly technologies" is to be developed and implemented by the Ministry of Industry. The Cleaner Production in Industry (CPI) Component is designed to support the Ministry of Industry in implementing this particular program Nr. 28 in NSEP.

Based on the Work plan of the Government in 2005, Ministry of Industry has issued Decision number 166/QD-PC dated 21/01/2005 on program to develop legal document in 2005 at Ministry of Industry, in which include the development of Decree to Promote Cleaner Production. This decree will be developed in two years 2005 and 2006. Component “Cleaner Production In Industry” shall support this development process.

This component is part of the new programme of and Denmark for 2005 – 2010. Other components include: Environmentally Sustainable Development in Poor Urban Areas (SDU); Pollution Control in Poor Densely Populated Areas (PCDA); Sustainable Livelihoods in and around Marine Protected Areas (LMPA) and Capacity Development Support for Environmental Planning and Management (CDS).

The CPI component builds on previous Danida projects in Vietnam, particularly the Danish Environmental Assistance (DEA) project “Mitigation Measures in the Building Materials Industry”.

1.1. **Sector Context**

To ensure the most appropriate and effective intervention the Cleaner Production in Industry (CPI) component outputs and activities:

- are coordinated with and are complimentary to other component outputs and activities especially where components work in the same provinces;
- are coordinated with and are complimentary to other Danida Sector Programmes;
- are coordinated with and are complimentary to previous, ongoing or planned Cleaner Production (CP) initiatives by Danida and other donors;
- include plans for links to complimentary initiatives by other donors to share experiences, successes, training and demonstrations.

1.1.1. **Alignment with DCE Components**

**Environmentally Sustainable Development in Poor Urban Areas (SDU)**

The key link with the SDU component is through the CPI component intervention with small Domestic Production Units, Cooperatives and Small and Medium Size Enterprises (SMEs) within densely populated areas. The establishment of an SME support unit within Department of Industry Industry Promotion Units and combined CP/Occupational Health and Safety (OH&S) audits of small enterprises in hotspot areas will identify shortfalls in existing permitting, inspection and small enterprise development practices. Training, and identification of practical measures to improve efficiency and overcome problems, will increase capacity to apply and enforce environmental and OH&S legislation and promote the sustainable development of small businesses at local level.

The organisation structure developed to deliver the CP small enterprise demonstration projects will bring together environmental and OH&S regulators and inspectors and other stakeholders,
will demonstrate a more effective and streamlined approach to permitting, and will promote the sustainable development of new small businesses in densely populated urban areas.

**Pollution Control in Poor Densely Populated Areas (PCDA)**

The key link with the PCDA component is through small enterprise demonstration projects in two provinces where combined CP/OH&S audits will increase capacity to undertake inspections and respond to findings, identify waste management needs and support decision making to close and relocate unsuitable business types.
1.1.2. Alignment with Other Projects and Programmes

Danida Water Sector Programme and Private Sector Initiative

The key link with the Danida Water Sector Programme is through its support in the development of supply networks and business plans and their interaction with industrial enterprises large and small. The CPI component also links with the Private Sector Initiative through its support in the development of business management capabilities in industrial enterprises.

Past and On-going Danida Projects

Important Danida projects where opportunities exist to build on and compliment activities include:

- Industrial and Urban Development in Viet Tri, which includes CP projects
- Support to Urban Environmental Management, Environmental Monitoring and Solid Waste Management in Vietnam, 2004 – 2007. This project will develop pilot Urban Development Plans in two of the component provinces Thia Nguyen and PhuTho

Activities Supported by Other Donors

The CPI component also offers opportunities to build on and compliment activities supported by other donors, including:

- Swiss Development Corporation (SDC) / United Nations Industrial Development Organisation (UNIDO) – Formation of the Vietnam Cleaner Production Centre (VNCPC - developed and implemented CP work programmes in many enterprises across most industry sectors).
- Canada International Development Agency (CIDA) – Making waste work for the economy / IPPC and industry
- GovNed/European Union (EU)/Swedish International Development Agency (SIDA) - Foundation EDP Project VECP - (Vietnam Energy Conservation Programme) VECP office /Energy Conservation Centres established in DOI offices in 5 provinces Can Tho, Da Nang, Ho Chi Minh City, Hanoi and Hai Phong.

1.2 Component Identification and Preparation Activities

Events leading to component formulation included:

- Formation of a working group with representatives from the Ministry of Industry (MOI), the Ministry of Construction (MOC), VNCPC
- Research into previous CP initiatives in Vietnam
- Meetings with Provincial Peoples Committee (PPC) members, DOI and other stakeholders in the target provinces (Phu Tho, Thai Nguyen, Nghe An, and Quang Nam)
- Visits to hotspots in target provinces
- Meetings with the VNCPC Hanoi, VECP Office Hanoi and CIDA
- Working group meetings and workshops

The results of the component formulation activities confirm that there is a need for a CP intervention that:
• Raises CP awareness in industrial ministries and demonstrates a CP approach and methodology that is applicable to enterprises with little or no funding for investment that can set the implementation of the National CP Action Plan into motion

• Can deliver no- and low cost improvements through the use of management systems which prepare enterprises for technology and plant investments in the future

• Is anchored in the MOI and delivered through Industry Promotion Units (set up in DOI offices) to promote the development of industry;

• Increases capacity and reinforces CP commitment from ministries to all industry sectors

• Can reach large enterprises, Domestic Production Units, Cooperatives and SMEs

• Can effect actual improvement in environmental, OH&S and resource use standards.
2. DESCRIPTION OF COMPONENT

2.1. Summary Statement

Poor people are most likely to be employed in the most polluting industries, work in the most unsafe and unhealthiest working conditions and live in or close to environments most polluted by industry. The correlation between poverty, poor occupational health and safety of industrial workers, most polluting and inefficient production techniques, and poorest compliance with environmental laws and the Labour Code is well documented.

The scope of the component is to:

- Provide and demonstrate a CP implementation strategy for Large Polluting Enterprises that addresses the shortfalls of previous CP initiatives in Vietnam, reinforces commitment to CP from the Government of Vietnam (GOV) and provides a methodology and infrastructure to operationalise the National CP Action Plan

- Examine the OH&S conditions in and around Domestic Production Units, Cooperatives and SMEs in densely populated areas. Examine existing permitting, inspection and practices promoting the development of small enterprises. Identify shortfalls in existing practices and raise capacity to improve conditions and promote the sustainable development of small enterprises in densely populated areas. Provide training and hands on practice through auditing inspection and developing and implementing improvement plans for small enterprises

- Successfully implements demonstration projects in target areas in at least four provinces which improve production efficiency and environmental quality and the health of inhabitants and workers in and around polluting industry

The component targets hotspot areas in provinces where the most polluting enterprises have the most adverse impacts on the living and working environments of poor communities. In Vietnam these hotspots can be characterised as:

Small Enterprises in densely populated areas - often owner operated, often employing family members including children, with very limited OH&S provisions and commonly in areas with no wastewater or waste management infrastructure. GOV policy to alleviate poverty through promoting domestic production units and cooperatives has resulted in increasing numbers of new businesses in densely populated areas, sometimes called small scale craft industries (SSCIs). Consequently the number of people exposed to poor OH&S conditions, and the amount of pollution discharged into their working and living environment is increasing.

Larger highly polluting enterprises in Industrial Zones employing high numbers of workers in unhealthy working environments that often have inadequate wastewater treatment and disposal provisions and inadequate waste handling and disposal facilities.

This component will increase capacity and commitment to improve hotspot situations. Demonstration projects will be identified, developed and implemented by local stakeholders with support from Danida. It is anticipated that two provinces will have Small Enterprise demonstration projects and two provinces will have Large Enterprise demonstration projects.

CP has already had good success in Vietnam in delivering benefits to industry, however, despite these successes uptake and sustainability of CP by enterprises has been disappointing.

The VNCPC established in 1998 within the framework of UNIDO/United Nations Environmental Programme (UNEP) ‘National Cleaner Production Centres’ Project, has had a leading role in CP initiatives. The VNCPC reports annually on CP implementation progress.
within Vietnam industry, the problems encountered and the lessons learned. VNCPC hosted a CP Round Table in Hanoi in June 2002 and representatives from government ministries, industrial enterprises and CP practitioners from national and international environmental projects discussed project results, achievements and barriers to the uptake of CP. Attention has been paid to the results of the Round Table in component development.

CP is recognised as a key element in Vietnam's sustainable development. CP action plans and decrees to encourage greater uptake by industry have been produced, and include:

- A 'National CP Action Plan' Ministry of Science, Technology and Environment (MOSTE) (now Ministry of Natural Resources and Environment (MONRE) Dec 2000, which sets out targets and goals for CP in industrial enterprises (although the document has yet to receive GOV ratification).
- Vietnam Energy Conservation Program (VECP)
- **Decision 64/2003/QD-TTg, Dealing with seriously polluting facilities**
- Decree 67/2003/ND-CP Charging for waste water
- Decree 102/2003/QD –CP on Energy Conservation and Efficiency
- Decree 175/CP Implementation of Environmental Protection
- **Decree 121/2004/NĐ-CP Fines for breeches of environmental protection laws**
- **Decision 155/1999 QDD-TTg, Regulation on Hazardous waste management - waste minimisation and recovery for all domestic productive units;**
- Comprehensive Poverty Reduction and Growth Strategy (CPRGS) May 2002
- **Decision 256/2003/QD-TTG dated 2 December 2002, of the Prime Minister on issuing National Strategy for Environmental Protection (NSEP)**
- Decision 153/2004/QD-TTg of the Prime Minister on issuing Agenda 21 of Vietnam
- Directive 41-NQ/TW dated 15/11/2004 of the Politic Bureau on Environmental protection in industrialisation and modernisation of the countries
- **Decision 34/2005/QD-TTg dated 22/02/2005 of the Prime Minister issuing Governmental Action Plan to implement Directive 41-NQ/TW**

### 2.2. Development and Immediate Objectives

**Development Objective:**

The livelihoods of people working in and living around industrial enterprises benefit from controlled pollution and improved resource use of industrial enterprises.

There are three Immediate Objectives as follows:

- The capacity and commitment to implement CP is established amongst key national players
- Key elements of the national Cleaner Production strategy are effective in target provinces
- Cleaner production techniques are demonstrated, and experience is used to refine the strategy and to replicate the policy in other provinces

**Target beneficiary groups:**
- Owners of large industrial enterprises employing the poor, - women and ethnic minority people/groups in particular
- SME owners and employees - women and ethnic minority groups in particular
- Industrial poor workers, - women and ethnic minority groups in particular

Royal Danish Embassy
- Central and local authorities and other OH&S stakeholders responsible for implementation of National legislation
- Labour and Women's Union
Indirect beneficiaries:
- The poor living in and around polluted areas
- Enterprises providing, designing, manufacturing and supplying CP, environmental management and OH&S services and equipment

2.3. Strategy

Component implementation will be done in close dialogue with key organisations and target provinces, especially Ministry of Natural Resources and Environment. It is encouraged to maximize application of technical resources available in Vietnam in cleaner production. Where comparative professional advantages exist the Vietnam Cleaner Production Center and other relevant resource centers in Vietnam could be invited to participate in the component implementation.

2.3.1. Selection of Target Provinces

DCE will focus most of its resources on a limited number of provinces. This focus will reduce administrative burdens whilst allowing a significant influence and a familiar presence in the provinces in which it is concentrated. It was considered during early discussions that the number of provinces to be selected should be at least four to ensure that there is sufficient comparison in pilot implementation across a variety of settings, including both topographic (highland, coast, and delta) and socio-economic conditions.

Additional selection criteria used in the identification of focus provinces has included:

- Danida experience in the province (including previous and on-going environment projects and programmes in other sectors)
- Extent and nature of other donor activities in the province
- GOV priority, and needs identified in the NSEP
- Absorptive capacity of provinces and match of provincial needs with DCE focus
- Opportunities for component complimentarity
- Poverty index
- Industrial hotspots and prevalence of SSCIs

As part of the early selection process a matrix was formed to assist in short listing suitable provinces. The matrix combined the criteria listed above with logistical considerations in respect to ease or restrictions to working access. The quantitative analysis was supported by discussions, and programme provinces were subsequently selected together with the Ministry of Planning and Investment (MPI) and other DCE partners. The Matrix on province selection is provided as Annex B of the DCE Feasibility Study.

The target provinces for all components are Thai Nguyen, Nghe An, Phu Tho, Ha Nam, Quang Nam and Ben Tre. The CPI component will select provinces to host demonstration projects based on demand from the province and suitability of the intervention proposed.

2.3.2. Selection of Target Areas and Target Enterprises

The component development activities identified SMEs in densely populated areas and Large Enterprises in hotspot areas where pollution from enterprises has the most adverse impacts on the living and working environments of poor communities.

Taking into consideration the different scale, ownership, management and regulatory control of enterprises associated with each hotspot situation the component strategy to address pollution is
tailored to each situation. Consequently, two CP models have been produced, one for large and one for small-scale enterprise.

2.3.3. Strategy for Addressing Pollution from Large Enterprises

To make a significant and sustainable impact in addressing pollution from Large Enterprises, commitment must start with the ministries that are responsible for promoting, developing and managing industrial performance. These ministries include MOI, MOC, the Ministry of Agriculture and Rural Development (MARD) and the Ministry of Fisheries (MOFI). MOI has overall responsibility for industry, Industrial Zones, and OH&S. It is also directly responsible for the greatest numbers of industry sectors and enterprises. The CPI component is therefore anchored with MOI and will be managed and delivered through a Component support office (CSO) set up within Ministry of Industry.

Commitment to CP by the industrial ministries needs to be reinforced. The National CP Action Plan has not yet been ratified by GOV and restructuring of MOSTE has resulted in a loss of impetus in implementing the plan.

The biggest barrier to industrial ministries implementing CP action plans is lack of investment finance linked to the misunderstanding that CP commonly requires investment for technological improvements. There is therefore a need to raise awareness and commitment of CP management strategies from ministerial level through industrial corporations, to enterprise level operations.

The strategy to reinforce the commitment at the ministerial level is to demonstrate a CP methodology that can reap benefits from no cost and low cost opportunities that prepares enterprises for sound investments and consequently makes them more attractive to investors. The methodology is instigated ‘in house’ by enterprises and prepares factories for specialist inputs to identify and evaluate process optimisation and technology investment opportunities as required. This methodology shown in Figure 1 will be tried and tested on industrial zone demonstration projects in two provinces.

The strategy to raise awareness and commitment from ministry level through to enterprise level takes advantage of the strict hierarchical management structure in Vietnam industry by setting up a network of CP advocates in each sector and at each level in the structure. Advocate awareness and commitment will be raised by training and involving staff with responsibilities in an exercise to produce sector performance reports. Sector performance reports will benchmark enterprises against each other and where possible compare them with international performance standards. Sector performance reports will be produced by the sector advocates and used to plan sector/enterprise improvement programmes. Prioritisation and coordination of the improvement programmes will be managed with support from MOC, MARD and MOFI.

Successful CP projects have demonstrated that significant benefits can be achieved at no cost and low cost as well as from investments in new technology. CP benefits are achieved from ‘People,’ ‘Systems’ and ‘Technology’ opportunities.

People driven opportunities are associated with improvements in operating practices and cost nothing to implement. Good operating practice starts with basic housekeeping and the recognition of opportunities to avoid spillage, breakage, leaks, and loss of time through faulty ordering and storage practices. The benefits from these opportunities are reaped from the promotion of awareness of the costs and solutions, and involve the allocation of costs to departmental budgets and efficient production scheduling.
Figure 1: Large Enterprise Cleaner Production Methodology

1. Cleaner Production Audit
2. Cost of waste, Sources of waste identified and quantified
3. Targets, Action plans, Potential benefits
4. Monitoring & Measuring
5. Training/Awareness Problem Solving Teams
7. Process Optimisation Through Trials
8. Waste Minimised, recycled
9. Capital Investment
10. Waste Eliminated?
Systems driven opportunities are based on the concept that ‘if you don’t measure you don’t manage.’ Production management information systems enable early identification of variance and wastage due to faulty materials, machine malfunction, or poor operator control and these opportunities cost very little to implement. The data from systems will support decisions associated with raw material specification changes, process optimisation trials and investments in new technology plant and equipment.

Technology Driven Opportunities are based on changes to existing plant and equipment to make them more efficient or the installation of new more efficient technology. Opportunities in this area involve capital investment necessitating detailed cost benefit evaluation and justification. Accurate evaluation can only be achieved by eliminating aspects of poor efficiency associated with poor housekeeping and poor production management control, which seriously impair cost benefit analysis.

Due to poorly developed production and resource use management systems in enterprises in Vietnam, previous CP initiatives have predominantly been improved housekeeping and isolated ‘worked elsewhere in this industry sector’ technology projects where the involvement of the enterprise staff is limited and the relative benefits from low cost opportunities and investment opportunities are not fully considered. These types of CP interventions do not make the best use of finance available and do not anchor CP into an enterprise. Consequently CP is not sustained after the experts leave. CP initiatives which are predominantly technology based also encourage the misconception that CP implementation always requires expert consultants from outside the factory and always requires capital investment.

The Large Enterprise CP Strategy promotes and requires involvement of enterprise staff. Before capital investments support for new technology demonstration projects can be considered, enterprises must have effective resource management systems in place. Information from the management systems will facilitate proper cost benefit analysis of the investment and ensure that any funding available targets the best investment areas. The component will demonstrate system based CP projects that are integrated into enterprise management systems.

Enterprises that use resource management systems to reduce and demonstrate consistent control over the resource use intensity of their products will be more competitive on the global market and more attractive to investors.

Enterprises wishing to enter the global market often need certifications under international environmental management standards that require enterprises to demonstrate efficient use of resources. The large company strategy supports access to international markets and certification.

Delivering no cost and low cost opportunities enables the methodology to be applied to and benefit old manufacturing plants with old technology. MOI has identified many factories operating with old equipment installed in the 1960’s and 1970’s and using outdated technology as major polluters. Complete replacement of manufacturing plant and equipment requires significant capital investment. MOI have stated that for the majority of these enterprises investment within the next 20 years is unlikely and consequently these factories will continue to pollute and contribute to unhealthy living and working conditions. Such industrial enterprises - major polluters avoided by previous CP initiatives - can be improved and benefit from application of the Large Enterprise CP implementation methodology.

Governments worldwide are recognising that prevention of pollution at source, by ensuring the most efficient use of resources, is essential for cost effective and sustainable solutions to pollution. Many are developing and implementing legislation where, as a fundamental requirement of obtaining operating permits larger enterprises have to document and demonstrate knowledge of their processes, resource inputs and discharges, efficient use of resources and best available techniques (BAT). A systematic voluntary proactive approach where enterprises can do this over time through implementing CP programs is more beneficial to enterprises than a short-
term reactive legislation driven approach. The Large Enterprise strategy will initiate a systematic 'voluntary' proactive approach within the larger enterprises in Vietnam.

2.3.4. Strategy for Addressing Pollution from Small Enterprises

GOV policy to address poverty through industrial growth includes the promotion of domestic production units, cooperatives and SMEs. This promotion is successful and the numbers of domestic production units, cooperatives and SMEs in densely populated areas in Vietnam are rapidly increasing (for example Thai Nguyen province reported 400 new SME enterprises in 2002-2003).

Many small businesses are unauthorised and inadequately regulated. Enforcement and compliance with environmental and OH&S regulations and the Labour Code within small enterprises is low. Many small business operations are in areas with no drainage and waste management infrastructure. Some operations should be relocated and some should never have been permitted in the first place and should be closed down.

There is a need to increase capacity to promote the sustainable development of small businesses and achieve greater compliance with National Laws and decrees on Environment, OH&S and the Labour Code.

The component will deliver demonstration projects in two provinces, managed through pilot SME support units (which will be based in DOI Industry Promotion offices).

The strategy to raise capacity to improve conditions and promote the sustainable development of small enterprises in densely populated areas in two provinces is to:

- Examine the OH&S conditions in and around Domestic Production Units, Cooperatives and SMEs in the province target area
- Examine existing permitting, inspection and practices promoting the development of small enterprises
- Raise capacity to improve conditions and promote the sustainable development of small enterprises in densely populated areas through training and a demonstration project which includes hands on auditing / inspection, development and implementation of improvement plans for small enterprises
- Identify shortfalls in permitting, inspection and promotion practices (through links with demonstration projects)
- Develop organisation structures and networks to support sustainable development of small enterprises and streamline permitting (and support) procedures

2.3.5. Demonstration Project Implementation Strategies

The demonstration project implementation strategy will be responsive to the different scale, ownership, management and regulatory control of enterprises associated with each hotspot. An overview of how the demonstration projects improve standards of SMEs in densely populated areas and Large Enterprises is outlined in Figure: 2 below.

To improve SME standards CP interventions will be more effective if targeted directly at local government and other stakeholders at provincial level. Improvements in SMEs will be achieved through short-term audits/inspections, support with developing and implementing improvement opportunities and follow up visits.

Sustainability and replicability of the capacity developed and improvements made is anchored into the Provincial Component Office (PCO) through pilot SME Support Units established as
part of the Industry Promotion Units in DOI offices in the provinces. MOI has a keen interest in piloting these centres to facilitate more rapid, efficient and effective decentralised permitting, inspection and regulation of the increasing numbers of SMEs.

Local government officials and other provincial stakeholders will develop and evaluate the role of the SME Support Units, develop an action plan and report to GOV to support decisions on their replication in other provinces.

**Figure 2 Demonstration Project Comparison**

<table>
<thead>
<tr>
<th>SMEs - Densely Populated Area</th>
<th>Large Enterprises - Industrial Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many - all SMEs in Residential Area Hotspot</td>
<td>Approx 20 - All Enterprises in Industrial Zone Hotspot</td>
</tr>
<tr>
<td>Indicators and Baseline Survey of Area</td>
<td>Indicators and Baseline Survey of Area</td>
</tr>
<tr>
<td>Training &amp; Guides</td>
<td>Training &amp; Guides</td>
</tr>
<tr>
<td>Short Term Env/CP/OH&amp;S Audits / Inspections of SMEs</td>
<td>Long term Implementation of CP Methodology at Large Enterprises</td>
</tr>
<tr>
<td>Implementation of audit recommendations</td>
<td>Meters, measurement - management systems</td>
</tr>
<tr>
<td>Follow up inspections and support</td>
<td>Better housekeeping and process control</td>
</tr>
<tr>
<td></td>
<td>Process optimisation</td>
</tr>
<tr>
<td></td>
<td>Capital investment in technology</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Reporting and Dissemination</td>
<td>Reporting and Dissemination</td>
</tr>
</tbody>
</table>

Sustainability and replicability of the capacity developed and improvements made is anchored into a Pilot “Industry Cleaner Production Unit” established in the MOI which will have key links to other industrial ministries and the MOI's Science and Technology Department. MOI has a keen interest in piloting the CP Unit to support delivering “Tasks of the MOI Science and Technology Department” as set out in Article 16 and 17 of the Functions of the Department of Science and Technology in support of GOV development objectives.
2.4. Outputs

Component outputs are summarised in the context of the component development and immediate objectives.

Development objective

The livelihoods of people working in and living around industrial enterprises benefit from controlled pollution and improved resource use of industrial enterprises.

Intermediate Objectives and Outputs

1. The capacity and commitment to implement CP is established amongst key national players

   1.1 A national CP strategy covering large, medium and small-scale industry

   1.2 Functioning CP Unit in MOI promoting and monitoring CP implementation by industry sectors and enterprises

   1.3 Plan to address shortfalls in with existing industrial incentive systems and regulatory framework.

2. Key elements of the national CP strategy are effective in target provinces.

   2.1 Functioning SME support unit in DOI Industry Promotion Units;

   2.2 CP is an important element of pollution management plans in target provinces

3. CP techniques are demonstrated, and experience is used to refine the strategy and to replicate the policy in other provinces

   3.1 Demonstration Projects prepared and implemented in priority sectors and locations

   3.2 Participating enterprises demonstrate cost-effective improvements in production efficiency and enhanced compliance with relevant national environmental, OH&S and labour regulations

   3.3 Plan for information dissemination and vertical and horizontal integration of lessons learned developed and applied.

2.5. Activities

The precise activities needed to produce the outputs listed above, can only be developed by the implementing partners with the help of the advisors and within the supervisory framework set out in Programme Document. Activities will first be specified during the inception period in an annual work plan that will be submitted for the approval of the Component Steering Committee (CSC) and the review of the Programme Coordination Committee (PCC). Annual work plans will be prepared thereafter until the final year of the component. Proposed new activities or changes to the annual plans will be set out in the six-monthly progress reports. Finally, a detailed plan of activities for each quarter will be prepared in support of the application for routine replenishment of the programme bank account.
Any activities indicated at this stage, therefore, can only be indicative, useful as a guide to the thinking that has underpinned component formulation and a further explanation of the nature of outputs expected. The activities listed in the component’s logical framework (Annex A) should be considered in that way.

2.6. Component Inputs

2.6.1. Danida Inputs

All Danida inputs will be supplied on a demand responsive basis, with full participation of the recipient organisations in identifying Technical Assistance (TA) requirements and selection of national TA support resources.

An International Long-term Advisor (ILTA) will be posted in the Pilot CP unit within MOI during the full five years of component implementation. The ILTA will provide advice to the CSO in managing and implementing the component and will manage component activities targeted at industry ministries including the production of sector performance reports and action programmes, both nationally and in the provinces. In each province there will be a Provincial Programme Support Office (PPSO) to help identify, develop and administer demonstration projects. An amount has been budgeted to cover a share of the PPSO costs.

Danida Inputs are summarised as follows:

- TA from international consultants
  - ILTA (60 months)
  - Short-term TA (34 months)

- TA from Vietnamese consultants.
  - National Long-term Advisers (60 months)
  - Short term TA (84 months).

- Component Support Staff

- Investments
  - Funds for capacity development, training and study tours
  - Funds to support the pilot demonstration projects
  - Funds for field investigations
  - Funds for workshops and seminars
  - Budget for office equipment and office running costs

Funds are also provided for demonstration projects. The distribution of these funds will be in accordance with criteria and procedures laid down in a Programme Implementation Manual (PIM) produced by the Programme Support Office (PSO) during the Inception Period. These procedures and criteria are outlined in the Programme Document, Chapter 6.
2.6.2. Inputs by the Ministry of Industry

- Counterpart Staff
  - Component Director (half-time)
  - Management support to the CSO
  - Access to relevant data, information and research funding carried out by or on behalf of the GOV.

- CSO Support
  - Office space for Component Advisor, support staff and TA consultants;
  - Electricity, water, provision of local phone, fax, and email.

Government and / or enterprise contribution and investments in demonstration projects will be estimated and agreed upon during/following the systems implementation stage for large enterprise demonstration projects and following the audit and reporting stage for small enterprise demonstration projects. Civil works, local labour and materials will be covered out of partner funds.
2.7. Component Budget

The timing of funding requirements for large enterprise demonstration projects ties in closely with the component implementation strategy.

The proposed demand responsive strategy is to firstly (over the first 18 months) apply “the stick” to improve production efficiency and management practices i.e. implement no cost low cost system based “if you do not measure you do not manage” CP and support costs for meters, measuring equipment, data recorders and computers as required. This will stabilise existing production performance and the enterprise will be in a position to properly undertake and demonstrate cost benefit analysis for new technology. Then delivery of “the carrot” the implementation of new technology can be considered. Where appropriate new plant will be installed and monitored using factory production management practices, and will continue to the end of the project to demonstrate achievements.

A summary of total support to the component is provided in the following table. The budget corresponds to activity based budgets where the cost of each activity is estimated in terms of technical assistance, operational costs, investment cost and contingency. The activity-based budget (printed in full in the Feasibility Study Report, Annex E) was completed as a check of the feasibility of producing component outputs with the funds available, but should not be seen as restricting the ability of the Component Management Team to adjust budget lines and restructure activities, as necessary, during the Inception Period.

<table>
<thead>
<tr>
<th>Category</th>
<th>Unit</th>
<th>Number</th>
<th>Million DKK</th>
<th>Percentage of component budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International long term</td>
<td>mm</td>
<td>60</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>1 demo proj mgr assist in each of 4 prov</td>
<td>mm</td>
<td>60</td>
<td>0.54</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td><strong>5.04</strong></td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>Short term</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International short term</td>
<td>mm</td>
<td>34</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>National TA-Short term</td>
<td>mm</td>
<td>84</td>
<td>1.34</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td><strong>6.44</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>Support costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of PPSO Costs</td>
<td></td>
<td></td>
<td>4.51</td>
<td></td>
</tr>
<tr>
<td>Office staff</td>
<td>mm</td>
<td>421</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Office equipment/running cost</td>
<td></td>
<td></td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>One 7-seat car/running cost</td>
<td></td>
<td></td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>Local travel costs</td>
<td>mm</td>
<td>60</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td><strong>7.969</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Investment costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops/study tours/training</td>
<td></td>
<td></td>
<td>3.67</td>
<td></td>
</tr>
<tr>
<td>Demonstration projects</td>
<td>P/s</td>
<td>40</td>
<td>26.77</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td><strong>30.44</strong></td>
<td><strong>55</strong></td>
</tr>
<tr>
<td>Contingencies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingencies (10% non TA)</td>
<td></td>
<td></td>
<td><strong>3.84</strong></td>
<td><strong>7</strong></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Review</td>
<td>P/s</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Financial Audit</td>
<td>P/s</td>
<td>6</td>
<td>0.27</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td><strong>1.27</strong></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Grand total</td>
<td></td>
<td></td>
<td><strong>55.000</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Funds are also provided for demonstration projects. The distribution of these funds will be in accordance with criteria and procedures laid down in a PIM (PIM) produced by the Programme Support Office during the Inception Period. These procedures and criteria are outlined in the Programme Document, Chapter 6.
2.8. Capacity Development

2.8.1. Capacity Development in CP for Large Enterprises

Building capacity to reduce pollution from industrial enterprises large and small is a key part of the CPI component. The component has been developed to respond to the differing needs of both situations.

MOI has stressed that poverty alleviation through economic growth is one of GOVs main priorities. Developing support and communication networks that encourage “voluntary” implementation of CP techniques by enterprises is preferred by GOV and MOI to developing and implementing new rules and regulations.

The component establishes a support and communications network emanating from MOI and utilising strict industry organisation structures to reach industrial enterprise.

The capacity to achieve CP by industrial enterprises is strengthened by:

- Piloting a CP Unit (in MOI Local Industry Directorate), that promotes, monitors, and reports on CP progress across all industry sectors. The unit will develop capacity by managing the production of sector performance reports, sector improvement programmes and coordinating their implementation in line with the National CP Action Plan. The CP Unit will be responsible for securing finance from GOV and other sources for improvement programmes

- A network of CP advocates will be appointed in industry corporations, enterprises, research organisations and vocational schools. Sector advocates will be responsible for appointing and liaising with advocates within enterprises, research organisations and vocational schools to produce sector performance / benchmarking reports. Sector reports will include recommendations for improvement programmes. The first Sector reports will be produced 2 years into the component and repeated annually until the end of the component

- A data base of sector CP specialists from within and outside enterprises will be established by the sector advocates and the experts will be involved in the delivery of training and the implementation of demonstration projects

- Introducing and raising capacity to implement a CP strategy that can be used at enterprises with no investment funds available will strengthen commitment to this structure. The strategy can deliver benefits from no cost and low cost measures and prepare enterprises for investment by establishing the business case for investments in new equipment

The human resource development approach is based on the philosophy:

- Tell me – I forget
- Show me – I remember
- Involve me – I understand

All stakeholders with a role to play in promoting CP in large industry will be involved and will be trained in the classroom and on the job and will be coached to deliver a successful component. Study tours for enterprises to inspect new plant and equipment options will be organized as appropriate.
2.8.2. CP Capacity Development to Address Pollution from Small Enterprises

GOV policy to address poverty through industrial growth includes the promotion of domestic production units, cooperatives and SMEs. This promotion is successful and the numbers of domestic production units, cooperatives and SMEs in densely populated areas in Vietnam is increasing. There is a need to increase capacity at the provincial level to promote the development of sustainable small businesses.

Support networks will be set up and coordinated by Pilot SME Support Units, anchored in the PCOs in DOI.

SME Support Units will facilitate better organisation and coordination of stakeholders involved in permitting and support activities and will strengthen and streamline permitting and support services to small business.

Combined CP / OH&S audits, and the development of SME management plans will identify shortfalls in existing permitting, inspection and promotion practices. Where shortfalls are identified, templates for inspection, reporting and improvement notices (together with guidance notes and case study examples) will strengthen capacity for small business to develop in a sustainable manner.

All stakeholders with a role to play in promoting the sustainable development of small businesses will be involved and will be trained in the classroom and on the job and will be coached to deliver a successful component. Study tours to inspect best practice for small businesses in densely populated areas will be arranged as appropriate.

2.8.3. Programme Timing and Alignment

A DCE component – Capacity Development for Environmental Planning and Management (CDS) will allow capacity development activities of each DCE component to be closely coordinated, and training activities targeting the strengthening of GOV’s environmental management functions at the local level combined.
3. ASSUMPTIONS AND RISKS

3.1. Commitment of Stakeholders

- Stakeholders agree to and cooperate with MOI’s role in promoting, progressing and monitoring performance of large enterprises
- Stakeholders agree to and cooperate with DOI’s role in promoting the sustainable development of small businesses

Mitigation Measures:

- Capacity development, awareness raising activities and pro-active participatory approaches of all stakeholders are initiated during the Inception Phase
- The Technical Working Groups (TWGs) will provide horizontal integration of all component activities and will promote team building and understanding of respective responsibilities

3.2. Institutional

- Sufficient capacity is available within MOI and provincial DOI’s to implement the component efficiently and effectively
- Institutional coordination between industry ministries is sufficient to demonstrate a multi-sectoral approach
- Industry hierarchical management structure supports the identification of CP advocates in corporations and enterprises and delegation of responsibilities to deliver the component. Decentralisation initiatives facilitate institutional coordination at province level between PPC and other local government departments and stakeholders with a role to play in promoting the sustainable development of small businesses

Mitigation Measures:

- Capacity development, awareness raising activities and pro-active participatory approaches of all stakeholders are initiated during the Inception Phase
- The Programme Coordination Committee ensures the participation of all line ministries, at central and through to provincial level
- Local experts provided to support MOI and DOI staff carry out component duties in parallel to their normal duties.

3.3. Accountability

- An appropriate funding mechanism is set-up and implemented effectively
- An appropriate component delivery mechanism / organisation structure is set up and responsibilities delegated

Mitigation Measures:

- Written agreement on commitment to funding and accounting procedures are in place before component implementation begins
- Written agreement on commitment to component delivery mechanism / organisation structure and delegation of responsibilities are in place before component implementation begins
3.4. Sustainability, Replicability and Capacity Development

- Skills at the provincial level are sufficiently developed to enable continued support to the sustainable development of small businesses and implementation of large industry CP initiatives without component support. Financial resources are available for continued implementation.
- CP activities of other donors are influenced by the component and support duplication and replication.

*Mitigation Measures:*

- Implement intensive capacity development of management and operational skills during Inception Phase and throughout the component.
- Establish financial management and business planning systems to promote financial sustainability.
- Coordination with other donors will be maintained through establishment of communication links, information sharing, and sharing of training opportunities.
4. MONITORING

4.1. Monitoring System

The MOI Component Director will conduct monitoring of the component to feed into the overall Joint Programme Review (JPR) to be conducted by Danida and MPI. Monitoring will take the form of regular meetings with the main provincial stakeholders and on the basis of the annual work plans and semi-annual progress reports.

To measure performance, a Monitoring and Evaluation (M&E) system will be set up during the component Inception Phase. Indicators will be developed and refined together with component stakeholders based on the component’s logical framework, and a baseline survey will be undertaken at each demonstration project site against which performance can be measured.

The M&E system will, as a minimum, cover the following:

- progress monitoring and reporting (of physical and financial progress)
- Quality Assurance (QA) auditing (checking on quality and compliance with procedural and financial regulations)
- process monitoring (quality of activities, outputs and management procedures)
- impact evaluation (assessment of component impacts) and
- information dissemination and feedback (local, provincial, national)

Timing of monitoring, reporting and review are presented as a bar chart in Chapter 7.

4.2. Linkage to National Sector Framework Targets

Vietnam’s CPRGS provides a clear commitment to the promotion of industrial growth as an important means to eradicate poverty. CP is recognised as a key element in sustainable development and GOV recognises that CP has an important role in achieving development priorities. The component supports sustainable industrial growth, builds capacity and commitment to CP and demonstrates how industrial enterprises and people working in and living around them benefit from reduced pollution and improved efficiency.

The CPI component will contribute to the implementation of the NSEP, and to the achievement of the targets in the CPRGS. In doing so, it will also assist in meeting the MDG, as shown below:

<table>
<thead>
<tr>
<th>MDGs</th>
<th>CPRGS</th>
<th>NSEP</th>
</tr>
</thead>
</table>
| Cleaner Production in Industry | Goal 7 – Ensure environmental sustainability
Air/water pollution must attain national standards by 2005 | Development of SMEs
Implement NSEP
Concentrate on environmental deterioration in | Technical renewal/Pollution control
Priority 2 – Decision 64 “Hot spots”
Priority 25
Wastewater treatment in industrial parks
Priority 28
Environmentally clean and friendly technologies |

4.3. Indicators and Means of Verification

Suggested indicators and means of verification are provided in Annex A. During the Inception Phase workshops will be undertaken and stakeholders at all levels will assist in elaborating and refining indicators and their means of verification.
4.4. Reporting System

In assigning the reporting system, the principle to be followed is that national institutions shall function according to their mandate. The Component Director will therefore produce reports based upon the existing GOV reporting system. Information from these reports will be collated and synthesised by the ILTA into semi-annual and annual progress and planning reports, and submitted to the CSC for review, and distribution to Danida and the Royal Danish Embassy (RDE). The exact format and content for semi-annual and annual reporting will be developed during component inception, following a pro forma contained within the PIM.

The PIM will also provide guidance on the development of an appropriate monitoring and management information to be established during the Inception Phase, to enable the Component Director and the ILTA to capture the data for the progress indicators in an efficient manner. The indicators listed in the log frame (Annex A) are provided as suggestions for discussion and further development during the component inception period.

The reports prepared for Danida shall be in English and Vietnamese, while the internal reporting from local and provincial level to MOI can be prepared in Vietnamese only.

Financial reporting will follow the procedures outlined in Chapter 7 of the Programme Document.

4.5. Review and Evaluations

JPRs will be undertaken in years one, two (month 30) and four (month 48). The review will determine the necessity or otherwise of component Technical Reviews addressing any specific issues or problems that may be identified during the evaluation process. Technical Reviews may also be undertaken at the discretion of the PSO or CSO after the Inception Phase, around Month 10-12, to determine the appropriateness of the component guidelines and the detailed work plans. All Technical Reviews will be scheduled to feed into the JPR. The JPR during year four will be undertaken during month 48 (ie 12 months before the end of the component), and will be combined with an appraisal of the components possible continuation.

Both the implementing agencies and external reviewers will undertake component monitoring and evaluation. An Annual Component Report will include an assessment of the impact monitoring indicators as well as a post-evaluation of environmental effects of the demonstration project interventions and the impacts of the component on the capacity of participating institutions. Monitoring reports will be submitted to the CSC, the PSO and ultimately to the PCC.

4.6. Schedule

The Component Implementation Chart Chapter 7 presents timing of key monitoring, reporting and review events.
5. MANAGEMENT AND ORGANISATION

5.1. Management of Component

A diagram illustrating the structure described below is included as Annex B.

5.1.1. Programme Level Management

At the national level, a PCC will guide and oversee the overall implementation of the DCE programme. The PCC will have regular semi-annual meetings and will also be able to meet on an ad-hoc basis to address emerging issues that require urgent attention. The PCC will be chaired by MPI (at Vice Minister level) and membership will include MONRE (also at Vice Minister level) and the RDE. The main mandate of the PCC will be to oversee the Programme’s strategic directions and its support toward achieving national environmental improvement and poverty reduction policy and strategy goals. The PCC will also consider and approve annual component work plans and ensure that there are effective feedback-loops from programme interventions to national policy and strategy development.

While much of the responsibility for financial planning and management would be delegated to the component level, the PCC will also implement decisions made at annual sector reviews on the use of any unallocated budget and on any re-allocations of budgets between components, as well as on major changes to components (including consideration of major issues arising from the individual components that would require urgent attention at the overall programme level). The PCC would tie in closely with key events in the programme cycle, for instance the Joint Programme Review (JPR), underscoring the joint nature of this exercise.

The PCC will be guided and assisted by representatives from other ministries involved in programme implementation. This will be facilitated through the continuation of an inter-ministerial Task Force established during programme formulation. The Task Force will meet twice per year, and as required.

A PSO will assist the PCC in its operations. It will act as a service provider of the components, supplying management tools and expertise as well as acting as a conduit for the exchange of information and ideas.

5.1.2. Component Level Management

Overall management of component content, planning and expenditure will be the responsibility of a CSC, operating through a CSO. The Chair and Director of these will be provided by the MOI, and include a wider membership of MOC, MARD, MOFI, MONRE, the Ministry of Health (MOH), and the Ministry of Labour, Invalids and Social Affairs (MOLISA) (and other institutions directly involved in implementation). CSC members will be mainly concerned with reviewing and endorsing annual work plans and budgets as well as linkages with provincial level sectoral policies and strategic development goals. They could also play a role in dissemination and replication of good practice developed by activities in each component.

A national Component Director at the Director level in MOI will take overall responsibility for implementation and the achievement of component objectives and outputs. The Component Director will be based in the CSO which will function as a Pilot CP unit within the MOI Local Industry Directorate. The Component Director will be supported by an ILTA who will assist with management and monitoring of activities, and for preparing and monitoring annual work plans and budgets. The ILTA would also assist with establishing a network of CP advocates in industry, producing sector performance reports and improvement programmes. Access of the ILTA to the Component Director on a regular and as needed basis will also be ensured.
The Component Director will make the plan for recruiting International Short Term consultants. The long-term advisor will assist in drafting TOR and assist in assessing and advising on qualified International Short Term consultants. The Embassy of Denmark will contract international short-term consultants based on Component's TOR.

A TWG, consisting of partners from the relevant sectoral ministries and other national stakeholders, will also report to the CSO. The TWG will focus on supporting the production of sector performance reports, enterprise improvement programmes, and pilot demonstration projects.

The Component Director and the inputs of the CSC, as well as office accommodation and local communication costs, will be provided as part of the partner contribution. MOI and the other supporting ministries and institutions will also contribute staff to the TWG and to the network of CP advocates across all industry sectors. The support staff is hired by GOV following salary scale to be agreed between Embassy of Denmark and MPI, and is paid for by the Programme.

5.1.3. Provincial and Community Level Management

In each province there will be a PPSO. The duties of the PPSO in the province would mirror those of the PSO nationally. In addition it would have specific responsibility for helping this component (and the PCDA and SDU components) identify demonstration projects that match the needs of the province.

The PPSOs will be directed by the relevant PPC Vice Chairmen (i.e. those nominated by the PPC whose responsibilities include all or most of the province’s activities in the areas of environment, industry, planning and capacity development) and supported by a full-time national coordinator. The Vice Chairman will decide where the PPSO will be located (3 of the partner provinces have indicated that DONRE would be the preferred location). The direction of the PPSO is expected to require around 20% of one person’s time. The Vice Chairman would probably choose to delegate a deputy but would be expected to retain overall control and lend authority as needed.

All participating provinces may apply to take part in component activities. The Component Director will identify areas in which the component wants to test policies or approaches or to develop models through demonstration projects (these will include the development of capacity in provincial organisations) and set out conditions that they expect to be met by participating provinces and criteria for selecting provincial partners. The PPSOs will then consider whether these match priorities in the province and mobilise provincial departments to prepare a response. The CSC will then select the optimum response(s) using a transparent methodology based on the PIM, component work plan, budget, risk etc.

Detailed arrangements to manage the provincial pilot demonstration projects and for other activities at the district and community level will be developed by the PPSO based on the size and nature of the project portfolio. It is anticipated that in several provinces, demonstration projects will be carried out within the newly established DOI Industry Promotion Units and, where demonstration projects address the SME sector, pilot SME Support Units will be established.

The PPSO may form provincial level TWG to support the selection and implementation demonstration projects. Membership of the TWG could include staff from DOI, the Department of Construction (DOC), the Department of Agriculture and Rural Development (DARD), the Department of Fisheries (DOFI), the Department of Natural Resources and Environment (DONRE), the Department of Health (DOH), the Department of Labour, Invalids and Social Affairs (DOLISA), the Agency for SME Development (ASMED), Vietnamese Association of Occupational Health (VAOH), the National Institute of Occupational and Environmental Health (NIOEH), Local Labour Union, Women's Union, City and District Peoples' Committee, and local mass organizations and Non Government Organisations (NGOs).
5.2. Procedures for Implementation Planning and Budgeting

5.2.1. National level

Management structures within the CSO will be fully defined and prepared for all the CSO positions during the component Inception Phase. The CSO will have responsibility to develop the planning and budgeting guidelines needed to make a consistent work plan of activities.

At the end of the Inception Phase, the CSO will present to the CSC a refined work plan, a detailed activity plan, and a budget for the first year of operation. The activity plan will be responsive to the priorities and needs of provincial authorities and stakeholders.

5.2.2. Selection of Demonstration Projects

Demonstration projects will be preferred that both further the objectives of the component and make a significant and sustainable contribution to the livelihoods of the poor. The potential to carry out demonstration projects that meet the objectives of one or more of the other components (especially PCDA and CPI) will be explored, so that interventions will generate a more visible improvement in some selected areas and demonstrate integrated solutions.

Selection of the demonstration projects will take into account the overall strategy of the DCE programme by applying criteria to be elaborated in the PIM. These will include:

- Relevance to poverty alleviation
- Potential to address cross-cutting issues and priority themes
- Demand for the intervention
- Cost-effectiveness and sustainability

Within this overall framework, the component will establish its own strategic and technical criteria for selection of demonstration projects, including the following:

- Projects have strategic importance in relation to addressing provincial priorities that are common in provinces where achievements can be replicated
- Projects can demonstrate improvements to the environmental quality and health of workers in and around polluting industry in target areas
- Projects provides an opportunity for institutional cooperation and involvement of local NGOs and/or citizen groups
- Projects provide examples of good practices; and
- Build upon previous Danida experiences

5.2.3. Revision and Adjustment of Component

The procedure for revision and adjustment of component activities and budgets will be as follows:

- Changes to overall budget and activities of the component will be subject to discussion and approval during Technical Reviews
- Use of unallocated funds - as above
- Use of contingencies and reallocation between component budget lines will be decided by the PCC based on recommendations by the CSO. It is noted that reallocation cannot occur in relation to budget lines covering already agreed contracts
- Adjustment of provincial level activities affecting reallocation of provincial level budget lines to be decided by CSO and reported for review by CSC at the subsequent CSC meeting
• Inclusion of new demonstration project, or alterations to demonstration project budget and/or activities: to be decided by the CSC based on recommendations of the PPSO and CSO

To ensure that poverty and cross-cutting issues are being addressed within training and demonstration projects (and subject to iterative review), the following organisations and institutions will be consulted during the inception phase and encouraged to participate in stakeholder workshops at central and provincial levels:

• MOLISA/DOLISA
• MOH /DOH
• Local Labour Union
• Women’s Union, - where relevant- e.g. in identifying small, female headed enterprises, or small enterprises employing women and/or ethnic minority, during Component Baseline Survey etc.
• ASMED and other national SME development centres (to be identified during inception phase)
• VAOH
• NIOEH
• National Fatherland Front and other mass organisations
6. FINANCIAL MANAGEMENT AND PROCUREMENT


The overall budget for the component is specified in the Programme Document, and can only be changed by the PCC. Proposals for reallocation of funds and major changes to inputs, activities and outputs may be referred to annual Technical Reviews that may be carried out for specific components and for the entire programme.

Component policymaking, coordination of activities, annual budget approval and allocation of budget within the component rests with the CSC, as assisted by the CSO. MOI will be responsible for budgeting and cash flow management of the operational budget of the component, assisted by the CSO, and, if necessary, a Financial Service Consultant/Company (FSC) contracted by the RDE out of the programme budget.

Budgeting and cash flow of international long-term and short-term TA consultant agreements for delivery of services to the component will be entirely managed by RDE, Hanoi. National consultancies will part of the operational budget managed by the MOI and the CSO.

The MOI will utilize its own accounting system to account for the programme activities. However, if their existing accounting software is unable to accommodate these activities, separate accounting software for the particular purpose can be procured. Which ever solution is chosen, the system must be able to handle budget lines for the programme and provide the financial reports as required. The FSC will provide any necessary assistance.

The Component Inception Report (CIR) elaborated by the CSO will include a revised budget for the whole component as well as a detailed budget and workplan for the first year of operation divided into quarters. The budget will clearly stipulate the relation to GOV contributions and accounting procedures and scheduling. Furthermore the CIR will include an accounting manual based on the internal procedures of the MOI and elaborated in cooperation with the Component Financial Manager (CFM). Subsequent budget revisions and update will be carried out in connection with the regular progress reporting.

The MOI will be responsible for overall coordination, monitoring and verification that the outputs are consistent with the funds used, and thus for approving the transfer of new tranches. Assistance will be available from the FSC.

6.2. Disbursement Authorisation

The MOI will administer a separate bank account to which the Programme Account will make quarterly deposits based on the approved work plans and budgets and subject to satisfactory quarterly financial statements.

Disbursements from the Programme Account will follow the procedures laid down in the PIM, and CIR. Bank interest, gained on bank holdings, is not to be considered as part of the programme finance and must returned to RDE at the end of every fiscal year.

Disbursements for demonstration projects will be channelled through the CSO, but will then be managed by the implementing agency, and likewise be subject to presentation of satisfactory financial reports. Where the implementing agency is an external body, then the MOI will retain overall responsibility for financial management and reporting.
6.3. **Accounting Principles and Procedures**

The procedures and accounting system will be based on Danida’s General Guidelines for Accounting (1996) and procedures described in the Programme Implementation Manual (PIM). For demonstration projects the implementation agency may use its own accounting procedures to report expenditure to MOI, provided that these are GOV approved, or if not, that they have first been reviewed and approved by the FSC.

6.4. **Financial Auditing and Reporting**

Financial reporting will be carried out by the MOI with assistance from the CSO. The CSO will in turn receive support and guidance from the PSO and FSC, to include both supervision and training in harmonising the systems for programme financial management.

Financial reporting will be monthly, quarterly and annually and be in accordance with the PIM. As a minimum the monthly reporting will at least include consolidation of bank statements whereas the quarterly reporting will include estimated spending per budget line. All reporting will be subject to internal auditing as and when required. The internal audit may be carried out by the Danish Auditor General, Head of Financial Accounting Section or Financial Controller of RDE.

External audits will be undertaken on an annual basis upon the previous year’s accounts. At the termination of the component a final audit will also be undertaken within three months of closure, or as agreed according to a plan to be outlined in cooperation between the component and PCC.

6.5. **Procurement**

Procurement of goods and services financed by Danish funds transferred through the MOF to the participating ministries will be done according to the procurement rules to be agreed between GOV and RDE in the Programme Implementation Manual.

Routine procurements under Demonstration Projects will follow thresholds and procedures detailed in the PIM. Procurement of international TA follows Danida rules and regulations.
7. COMPONENT IMPLEMENTATION PLAN

The Component Implementation Plan (CIP) is shown below. The CIP shows indicative timing for all component outputs and activities over the 5-year time span of the component. Also included are activities for a 6-month component Inception Phase.

The CIP also shows expected timing of reports and technical reviews.

<table>
<thead>
<tr>
<th>Cleaner Production in Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="table.png" alt="Table" /></td>
</tr>
</tbody>
</table>

**Outline Component Implementation Plan**

<table>
<thead>
<tr>
<th>Output &amp; Area</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**CIP Details**

- **Output 1: Sectoral Implementations**
- **Output 2: Policy and Law**
- **Output 3: Technology Development and Transfer**
- **Output 4: Market Analysis**
- **Output 5: Training and Capacity Building**
- **Output 6: Monitoring and Evaluation**

**Component Reports**

- **Annual Report**
- **Progress Report**
Annexes:

<table>
<thead>
<tr>
<th>Annex</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annex A</td>
<td>Component Log frame</td>
</tr>
<tr>
<td>Annex B</td>
<td>Organisation Diagram</td>
</tr>
<tr>
<td>Annex C</td>
<td>Detailed Budget and Cash Flow</td>
</tr>
<tr>
<td>Annex D</td>
<td>Job Description</td>
</tr>
<tr>
<td>Annex E</td>
<td>Management Plan for Cross-Cutting Issues</td>
</tr>
</tbody>
</table>
Annex A    Component Log frame
1. The capacity and commitment to implement CP is established amongst key national players

1.1. A national CP strategy covering large, medium and small-scale industry
1.1.1 Analyse national CP resources for CP and determine organisational needs
1.1.2 Establish network of VNCP expertise to support component activities
1.1.3 CP Component and CP awareness training of partners
1.1.4 Consultation, information gathering, study tours
1.1.5 Prepare strategy with wide consultation, and a national workshop

1.2 Functioning CP Unit in MOI promoting and monitoring CP implementation by industry sectors and enterprises
1.2.1 Establish networks of CP advocates in government, industry sectors, industrial associations and academic/research institutes
1.2.2 Establish network of CP advocates in Industrial Enterprises
1.2.3 Sector CP Advocates analyse sector performance and produce sector improvement action plans

1.3 Plan to address shortfalls in with existing industrial incentive systems and regulatory framework
1.3.1 Examine current permitting, inspection and support practices for domestic production units, cooperatives and SMEs
1.3.2 Link with other components, PPCs, MOC and MONRE to identify shortfalls in permitting and regulation
1.3.3 Develop joint proposals to streamline and improve permitting, inspection and support for small enterprises

2. Key elements of the national Cleaner Production strategy are effective in target provinces

2.1 Functioning SME support unit in DOI Industry Promotion Units
2.1.1 Set up SME support unit in existing Business Promotion Units Within DOI offices in selected component provinces
2.1.2 Guidance prepared for target sectors on cost effective ways to improve resource use and environmental performance
2.1.3 MOI and DOI develop and implement action plans and budgets to continue and replicate the work of the SME support unit

2.2 CP is an important element of pollution management plans in target provinces
2.2.1 With other components, PPCs and DONRE, establish contribution of industry to state of the environment in and around hotspots
2.2.2 CP audits of industrial zone enterprises in stages (historical data, audit-surveys, benchmarking
2.2.3 Guidance notes, case studies, inspection/reporting proforma developed to assist improvement to permitting, inspection practice
2.2.4 Data base of small enterprises produced, waste management needs and enterprise relocation needs identified
2.2.5 Stakeholders identify and recruit targets for demo projects
2.2.6 Partner training including awareness raising, workshops and case studies

3. Cleaner production techniques are demonstrated, and experience is used to refine the strategy and to replicate the policy in other provinces.

3.1 Demonstration Projects prepared and implemented in priority sectors and locations
3.1.1 Preparation-identify area to be covered, collect available data on enterprises
3.1.2 Plan and prepare for audits/inspections, identify local expertise, training guidelines, inspection and reporting proforma
3.1.3 Demonstration Projects prepared and implemented in large Enterprises
3.1.4 Demonstration Projects prepared and implemented in domestic production units, cooperatives and SMEs

3.2 Participating enterprises demonstrate cost-effective improvements in production efficiency and enhanced compliance with relevant national environmental, OH&S and labour regulations
3.2.1 Management systems embedded, processes optimised, technology improvements identified and evaluated, study tours
3.2.2 New technology plant and equipment investments, funding and implementation
3.2.3 Establish post demo project state of the environment in and around industrial zones
3.2.4 Support implementation of enterprise improvement measures and follow up visits

3.3 Plan for information dissemination and vertical and horizontal integration of lessons learned developed and applied
3.3.1 Prepare pilot demonstration project report and other material for information dissemination
3.3.2 Monitor results of demonstration projects in accordance with the indicators
3.3.3 Review experiences and outputs from relevant GOV, Danida and other donor projects
3.3.4 Review and identify possible funding mechanisms to supplement component resources
3.3.5 Prepare and implement plan for disseminating component information to other provinces, cities and local NGOs
3.3.6 Participate in regional and international networking ad information exchanges
Annex B – Component Organisation Diagram
Interministerial Task Force. Meet twice per year and as required, to guide and assist PCC

Programme Coordination Committee - PCC

Programme Support Office - PSO
(located in MPI, and with technical arm at MONRE).
Programme Director
Danida funded PA
Administrative staff.

Cleaner Production in Industry Component Steering Committees - CSC
MOI (Chair)
MONRE
MOC
others ministries

Component Support Office - CSO
Component Director, MOI
Long-term advisor
Senior Staff from MOI
Support Staff

Technical Working Groups – TWG

Technical Assistance – TA
International TA
National TA

PPSOs in six Provinces

PPSO Director
National Advisor

Demonstration Project Implementers
May include:
Provincial Departments
NGOs
Community Organisation
Mass Organisations
Private Companies or cooperatives

Royal Danish Embassy
Annex C – Detailed Budget
<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>No.</th>
<th>No.</th>
<th>No.</th>
<th>No.</th>
<th>No.</th>
<th>No.</th>
<th>Unit Cost DKK</th>
<th>Total DKK</th>
<th>Sum DKK</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total 2005 2006 2007 2008 2009 2010</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TECHNICAL ASSISTANCE FIXED</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 International TA - Long term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,500,000</td>
<td></td>
</tr>
<tr>
<td>Danida Advisor (fee, accommodation)</td>
<td>mm</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>75,000</td>
<td>4,500,000</td>
<td></td>
</tr>
<tr>
<td>2 National TA - Long term (4No)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>540,000</td>
<td></td>
</tr>
<tr>
<td>1 demo proj mgr assist in each of 4 prov</td>
<td>mm</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>9,000</td>
<td>540,000</td>
<td></td>
</tr>
<tr>
<td><strong>TECHNICAL ASSISTANCE DEMAND</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 International TA - Short term</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5,100,000</td>
<td></td>
</tr>
<tr>
<td>(fee + accommodation + subsistence)</td>
<td>mm</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>150,000</td>
<td>1,500,000</td>
<td></td>
</tr>
<tr>
<td>CP Energy Efficiency Specialist</td>
<td>mm</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>150,000</td>
<td>1,350,000</td>
<td></td>
</tr>
<tr>
<td>CP Industry Sector Specialists</td>
<td>mm</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>150,000</td>
<td>1,050,000</td>
<td></td>
</tr>
<tr>
<td>OH &amp;S Specialist</td>
<td>mm</td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>150,000</td>
<td>1,200,000</td>
<td></td>
</tr>
<tr>
<td>Environmental Auditing Specialist</td>
<td>mm</td>
<td>20</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>16,000</td>
<td>320,000</td>
<td></td>
</tr>
<tr>
<td>Total man-months ISTA</td>
<td>mm</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 National TA-Short term (fee, accom)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,344,000</td>
<td></td>
</tr>
<tr>
<td>CP Energy Efficiency Specialist</td>
<td>mm</td>
<td>20</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>16,000</td>
<td>320,000</td>
<td></td>
</tr>
<tr>
<td>CP Industry Sector Specialists</td>
<td>mm</td>
<td>28</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4,480,000</td>
<td>1,350,000</td>
<td></td>
</tr>
<tr>
<td>OH &amp;S Specialist</td>
<td>mm</td>
<td>16</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>16,000</td>
<td>256,000</td>
<td></td>
</tr>
<tr>
<td>Environmental Auditing Specialist</td>
<td>mm</td>
<td>20</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>16,000</td>
<td>320,000</td>
<td></td>
</tr>
<tr>
<td>Total man-months NSTA</td>
<td>mm</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SUPPORT COSTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6,614,533</td>
<td></td>
</tr>
<tr>
<td>5 Support staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management/component officer</td>
<td>mm</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>8,000</td>
<td>480,000</td>
<td></td>
</tr>
<tr>
<td>Accountant</td>
<td>mm</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>6,000</td>
<td>360,000</td>
<td></td>
</tr>
<tr>
<td>Share of PPSO Costs</td>
<td>P/s</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4,514,533</td>
<td>4,514,533</td>
</tr>
<tr>
<td>Secretary</td>
<td>mm</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>6,000</td>
<td>360,000</td>
<td></td>
</tr>
<tr>
<td>Interpreter/Translator</td>
<td>mm</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>6,000</td>
<td>360,000</td>
<td></td>
</tr>
<tr>
<td>Driver</td>
<td>mm</td>
<td>180</td>
<td>18</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>18</td>
<td>3,000</td>
<td>540,000</td>
<td></td>
</tr>
<tr>
<td>Total man-months support staff</td>
<td>mm</td>
<td>421</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Office equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>P/s</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>45,000</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td><strong>Office operating expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>660,000</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>month</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>5,000</td>
<td>300,000</td>
<td></td>
</tr>
<tr>
<td>Office Running Cost</td>
<td>month</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>3,000</td>
<td>180,000</td>
<td></td>
</tr>
<tr>
<td>Printing and copying</td>
<td>month</td>
<td>60</td>
<td>6</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>6</td>
<td>3,000</td>
<td>180,000</td>
<td></td>
</tr>
<tr>
<td>Staff training expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Vehicle purchase</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td>INVESTMENT COSTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Workshops/study tours/training</strong></td>
<td>3,670,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops/seminars</td>
<td>P/s 30, 5, 5, 5, 5, 5, 5, 9,000, 270,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study Tours</td>
<td>P/s 4, 0, 1, 1, 1, 1, 0, 500,000, 2,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Courses</td>
<td>P/s 14.0, 1, 3, 3, 3, 3, 1, 100,000, 1,400,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Demonstration projects</strong></td>
<td>26,766,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech equipment/support systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field investigations</td>
<td>31, 1, 6, 6, 6, 6, 6, 50,000, 1,550,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support to provincial partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International travel</td>
<td>2, 0, 1, 0, 1, 0, 0, 8,000, 16,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-cutting issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration projects Large</td>
<td>P/s 11.0, 0, 0, 3, 3, 3, 2, 1,500,000, 16,500,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstration projects Small</td>
<td>P/s 29.0, 2, 6, 6, 6, 6, 3, 300,000, 8,700,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONTINGENCIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CONTINGENCIES (10% nonTA)</strong></td>
<td>3,844,053</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OTHER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technical and financial Audits</strong></td>
<td>1,270,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical reviews</td>
<td>P/s 4, 1, 1, 1, 1, 1, 250,000, 1,000,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial audits</td>
<td>P/s 6, 1, 1, 1, 1, 1, 45,000, 270,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>55,003,586</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex D – Job Description for Long-term Technical Assistance
Job Description for Long-Term International Advisor

Overall objective:
The objective of the international long term Component Advisor is to advise and support the national Component Director (delegated MOI) in implementing the component in accordance with the agreed Component Document.

The Component Advisor will advise the Component Director with regard to the required methods and processes for achieving the component objectives, outputs, activities within the budget allocations. The Component Advisor and Component Director will jointly ensure that the component’s activities are planned and implemented in a coherent manner and consistent with Vietnam’s and Danida policies and the demand driven approach. Jointly, they will be responsible for the planning, budgeting and reporting to Danida on the component activities.

The Component Advisor will assist in ensuring a high professional quality of all the capacity development and project implementation activities under the component. The Component Advisor will also be responsible for the quality of input of the international short term TA.

The Component Advisor will furthermore make sure that RDE is kept fully informed of component issues and that the needs and requirements of Danida and RDE are met, in relation to oversight, supervision and compliance with policy and procedures. The component is an integral part of the DCE programme to Vietnam. In this regard, the Component Advisor will contribute to programme meetings and activities.

The Component Advisor will be based in the MOI in Hanoi but will spend time in each of the demonstration project provinces.

Specific Responsibilities:
The specific responsibilities of the Component Advisor will include, but not be limited to, the following:

- Coordinate between the DCE programme, MOI and other ministries responsible for improving the performance of industrial enterprises and support and progress the implementation of the component
- Assist the CSO in preparing TORs for all CSO members and national and international TA
- In coordination with the Component Director and CSO, provide QA of national and international TA
- Assist in conducting QA of the training and capacity development activities and the awareness raising activities funded by the component
- Assist the Component Director in evaluation of pilot demonstration proposals for acceptance and funding
- Assist the CSO with monitoring of component objectives, outputs and activities
- Assist the CSO in preparing semi-annual progress reports and annual work plans to the CSC and RDE
- Conduct daily office administration, coordination of meetings and supervision of support staff and TA
- Participate as an observer in CSC meetings
- Participate in national events, training workshops and dissemination seminars

Qualifications:

- Degree level qualification, practical background, track record and experience in production and environmental engineering, project management, environmental science and technology, environmental management, waste minimization and cleaner production directly relevant to improving the performance of industrial enterprises large and small
- Track record of working with industry sector umbrella groups and trade associations and producing sectors performance reports

Royal Danish Embassy
• Track record of developing and implementing CP demonstration projects
• Awareness of BAT and performance standards for a wide range of industry sectors
• Track record demonstrating knowledge and experience of manufacturing processes and process management techniques across a wide range of industry sectors
• Experience in recognizing manufacturing and environmental improvement needs of enterprises and developing and implementing improvement programmes in the context of the enterprise business climate
• Track record of improving the environmental performance and production efficiency standards of industrial enterprises large and small
• Knowledge and experience of capacity development and training activities
• Familiarity with manufacturing and environmental issues in developing countries
• Familiarity with drivers and barriers to implementing CP programs and ways to overcome barriers
• Experience in the management of externally funded development projects, and management skills and experience in staff supervision, and managing collaborative facilitation between diverse interest groups
• Proven and specific experience in QA
• Must be fluent in writing and speaking English
Job description for Long-term National Advisers

It is likely that the provincial and local organisations will initially need practical assistance and close supervision in the preparation of pilot project concept paper and detailed project proposal, and in the administration of the implementation of projects. The National Advisors will work to build the capacity in the partner organisations through on-the-job training.

The National Advisors will be employed directly under the CSO and will report to the national Component Director on employment matters, but will report to both the Component Advisor and the provincial authorities for professional matters.

Qualifications:

• Degree level qualification, practical background, track record and experience in production and environmental engineering, project management, environmental science and technology, environmental management, waste minimization and CP directly relevant to improving the performance of industrial enterprises large and small
• Experience in financial management, training and environmental awareness raising, organisational development, demand driven approaches and community participation
• Track record of working with industry sectors, umbrella groups and trade associations
• Track record of developing and implementing CP production demonstration projects
• Awareness of BAT and performance standards for a wide range of industry sectors
• Track record demonstrating knowledge and experience of manufacturing processes and process management techniques across a wide range of industry sectors
• Experience in recognizing manufacturing and environmental improvement needs of enterprises and developing and implementing improvement programmes in the context of the enterprise business climate
• Track record of improving the environmental performance and production efficiency standards of industrial enterprises large and small
• Knowledge and experience of capacity development and training activities
• Familiarity with manufacturing and environmental issues in developing countries
• Familiarity with drivers and barriers to implementing CP programs and ways to overcome barriers
• Experience in the management of externally funded development projects, and management skills and experience in staff supervision, and managing collaborative facilitation between diverse interest groups
• Proven and specific experience in QA
• Knowledge of and experience from capacity development and training activities
• Minimum 5 years’ working experience from related and relevant fields
• Must be fluent in writing and speaking English
Annex E – Management Plan for Cross-Cutting Issues
Management Plans for Cross-Cutting Issues

An overriding strategy in the implementation of the component is to ensure integration of cross cutting issues into all aspects of the component. The cross cutting issues that are addressed by the component formulation include the following:

- Poverty alleviation
- Gender equality
- Good governance
- Environment, and
- HIV/AIDS

This management plan is developed to ensure that the cross-cutting issues are adequately considered and applied during component implementation. The management tools to be used to monitor the integration of the cross-cutting issues include: (1) analysis of component Indicators and Means of Verification, and (2) the periodic Technical Reviews.

To ensure that poverty and cross cutting issues are being addressed within training and demonstration projects (and subject to iterative review), the following organisations and institutions will be consulted during the inception phase and encouraged to participate in stakeholder workshops at central and provincial levels:

- MOLISA/DOLISA
- MOH /DOH
- Local Labour Union
- Women’s Union, - where relevant- e.g. in identifying small, female headed enterprises, or small enterprises employing women and/or ethnic minority, during Component Baseline Survey etc.
- ASMED and other national SME development centres (to be identified during inception phase)
- VAOH
- National Institute of Occupational and Environmental Health
- National Fatherland Front and other mass organisations

Indicators / Means of Verification

Component Indicators and Means of Verification for the component objectives, outputs and activities are shown in the log frame (Annex A). During the inception phase of component implementation, the log frame will be updated and expanded by the CSO to include specific Indicators and Means of Verification and guidelines for measuring the impact of how the component is achieving the cross-cutting issues.

In preparing the Indicators and Means of Verification, the CSO will consider the following aspects for each of the cross cutting issues:

- Poverty alleviation
  - Pilot project are pro-poor development oriented

- Gender equality
  - Gender balance in component training
  - Degree of women’s participation in decision-making
  - Involvement of Women’s Union in pilot project design and implementation
  - Public awareness programs provide adequate orientation towards women and gender issues
• Good governance
  − Decision-making and pilot project management and implementation undertaken at lowest practical community-based level
  − Urban poor are involved in pilot project identification, management and implementation
  − Degree of partnership between local governing bodies and community based groups
  − Vertical integration of lessons learned from local pilot projects into central level policy and regulations

• Environment
  − Environmental Impact Assessment (EIA) guidelines include analysis of social impacts with decision making weighted towards relevance of pilot projects to reducing poverty and increasing gender equality
  − EIA guidelines contain adequate provisions for Environmental Management Plans for ensuring pilot project sustainability, compliance with regulations and monitoring of results and impacts

• HIV/AIDS
  − The link between poverty alleviation and HIV/AIDS is addressed is public awareness campaigns and in training sessions
  − Prevention of occupational exposure to HIV/AIDS is addressed in training and pilot project formulation

At the overall component management level, the CSO will periodically monitor achievement of the cross-cutting Indicators and Means of Verification with regard to the component objectives, outputs and major activities.

At the provincial level, the respective Provincial Directorates will prepare cross-cutting Indicators and Means of Verification for each of the local pilot projects based upon guidelines prepared by the CSO. Moreover, the cross-cutting issues will be integrated into all parts of the pilot project cycle. For instance, during the baseline surveys information will be collected on urban poverty levels, degree and quality of services provided in poor urban areas, representation of women in local decision-making, availability of access to information on HIV/AIDS. During pilot project formulation, public consultation and awareness will be promoted to ensure that pro-poor priorities are targeted. Training in management and project implementation will be focused on the poor communities to increase their capacity for local management of the pilot projects. Local management will not only serve to anchor ownership in the poor communities but will also promote sustainability. Furthermore, local implementation will provide management experience to poor urban individuals who can use these new job skills to improve their livelihood.

Technical Reviews

There are three formal Technical Review planned during the 5-year component implementation period. During these reviews, QA audits will be conducted by an independent Technical Review team. The QA audits will be conducted according to a QA Manual that will be prepared by the CSO during the component inception phase.

The QA Manual will contain provisions for assessing integration of the cross-cutting issues into component and pilot project implementation. In the QA audit report, the independent Technical Review team will present their analysis of the component's impact in addressing the cross-cutting issues. This analysis will be independent and a check of the cross-cutting issue monitoring conducted by the CSO.

Royal Danish Embassy