PROJECT BRIEF (27Apr07rev)

1. IDENTIFIERS

PROJECT NUMBER:	GF/CPR/07/XXX
PROJECT TITLE:	Strengthening Institutions, Regulations and Enforcement (SIRE) Capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) in China
PROJECT DURATION:	5 years
IMPLEMENTING AGENCY:	UNIDO
EXECUTING AGENCY:	State Environmental Protection Administration, Government of China
PRINCIPAL COOPERATING AGENCIES:	
REQUESTING COUNTRY:	The People's Republic of China
ELIGIBILITY:	The People's Republic of China signed the Stockholm Convention on 23 May 23 2001 and completed ratification on August 13, 2004, making China eligible according to para 9(a) and (b) of the GEF Instrument. Pursuant to para 3 of Article 12, eligible activities include capacity-building to implement obligations under the Convention.
GEF PROGRAMMING:	
BENEFIT:	The various mechanisms, platforms and partnerships to be established under this project will form the basis for effective and efficient reduction and elimination of POPs in China and generate significant benefits for the protection of the global environment and human health. Global benefits may be further increased through dissemination of China's experience to other developing countries.

2. PROJECT SUMMARY

China signed the Stockholm Convention on Persistent Organic Pollutants in May 2001 and the National People's Congress ratified the Convention in June 2004. The Convention entered into force in the country on 11 November 2004. To guide the development of the NIP, China has established a coordinating group consisting of 11 POPs-related ministries. The development of the National Implementation Plan (NIP) in China has benefited from the valuable support and active participation of a variety of international and domestic institutions and organizations and from extensive consultations with international and domestic stakeholders. The NIP has already been endorsed by 13 relevant ministries and upon final approval of the State Council, the NIP will be officially submitted to the Convention Secretariat and to the Conference of Parties (COP) and will thereafter serve as the overall guidance document for China's implementation of the Convention.

During the development of the NIP, extensive consultations with a wide range of international and domestic stakeholders have been conducted to assess China's capacity needs to implement the Convention. Three regional workshops were held in Eastern, Central and Western regions of China with representatives of central and local governments, industrial associations and enterprises. The goal of these workshops was to identify the capacity building needs while taking into account regional imbalances and disparities in social and economic development. Questionnaires to assess governmental capacity needs have been designed and distributed and have received a high rate of

response. In order to assess the capacity needs of enterprises to adopt BAT/BEP for the reduction of unintentional produced POPs (UPOPs), workshops involving industry associations and related enterprises from 6 key and prioritized sectors were also conducted. In addition, a series of site visits to Eastern and Central China and consultations with relevant stakeholders were undertaken by representatives of the Convention Implementation Office (CIO) and UNIDO. These consultations have provided substantial inputs to the preparation of this project brief.

NIP development and the project brief preparation have enabled POPs-related ministries to better understand China's POPs situation, identify gaps for Convention implementation, and develop strategies and action plans to address these gaps and implement the Convention. A consensus view has been developed that capacity building should be carried out nationwide in order to more effectively organize and implement measures for POPs reduction and elimination, including study and formulation of the related policies and legislation, strengthening of related institutions, development and transfer of technologies for POPs reduction, disposal and substitution, study and application of the financing mechanism, and enhancement of public participation. These capacity building activities are consistent with the priorities set in the NIP, with related decisions by the COP2, and with the strategic objectives established by GEF4, and are essential to ensure the smooth implementation of the NIP in China.

Due to significant regional disparities at levels of economic development and different management capacities among the eastern, central and western parts of China, three pilot provinces will be selected for demonstration activities, including (1) establishment of detailed provincial POPs inventories, (2) testing of on-line data collection and transmission, (3) development of provincial implementation plans, (4) establishment of cross-departmental enforcement mechanisms, and (5) exploring mechanisms for co-financing POPs reduction and disposal. In the three demonstration provinces stricter provincial regulations than current national ones will be developed and formulated in the areas of reduction and/or elimination of POPs. The experience and lessons learned in these three provinces will expedite the formulation improvement of national regulations.

In order to allow for a smooth implementation of the NIP considering the constraints of limited time and resources, the proposed project will focus on cross-cutting capacity building activities, which will be implemented according to the NIP by 2010 and will form a solid foundation for the future implementation of NIP activities after 2010.

The **overall objective** of this project is to effectively and efficiently assist China to implement the Stockholm Convention by strengthening the institutions, regulations and enforcement and to enhance the capacities for the sound management of POPs at national and local levels.

The **concrete objective** of this project is to create an enabling environment in China by establishing/amending laws, regulations and standards, strengthening institutions for monitoring, improving research and development (R&D), promoting technology transfer, facilitating data and information collection, enhancing supervision, enforcement and evaluation for continuous improvement and awareness raising of stakeholders on POPs issues.

3. COST AND FINANCING

		Amount (US$)
GEF		***5,410,000***
Co-Financing for Full Project:		***9,825,000***
GEF IA	UNIDO (in-kind)	200,000
Governments of	China (in cash/in-kind)	6,625,000
Other	THU (in kind)	750,000
	RCEES (in kind)	750,000
	Italy (in cash/in kind)	1,500,000
Total Project Costs		**15,235,000**

4. BASELINE

Under the Baseline Scenario and in absence of this project, China would be faced with a significant shortage of capacities at various levels and would continue to face existing barriers for cost-effective implementation of the Stockholm Convention, including:

- Lack of an enabling policy and regulatory environment;
- Lack of mechanisms for sustainable co-financing;
- Weak monitoring capacity for POPs;
- Lack of an effective mechanism for orienting R&D towards Convention implementation;
- Lack of an effective mechanism for technology transfer;
- Unavailability of and limited access to information;
- Weak institutional capacity for planning, guiding and enforcement for the Convention compliance;
- Under capacity in evaluation for continuous improvement of NIP implementation;
- Low public awareness on POPs;
- Lack of qualified human resources.

Some of the above barriers may be partially addressed by thematic projects within their scope. However, due to the cross-cutting nature of these barriers and the limited scope of thematic projects, this will not be sufficient to completely eliminate all of them. The proposed project will allow an efficient use of GEF resources by allowing capacity building activities to be implemented in a cost-effective manner, e.g., where stakeholders are affected by multiple POPs areas, a training program could be designed and delivered to address those areas simultaneously, rather than conducting separate training programs for each thematic area as would otherwise be the case. Similarly, one technology transfer center can be established spanning multiple sectors, given the functional overlap and obviating the need for a separate technology transfer center for each thematic area. Without this project, mechanisms to allow for such coordinated and cost-effective use of the GEF's limited resources for Convention implementation would not be able to be established and innovative practices to achieve the NIP objectives would not be possible.

5. GEF OPERATIONAL FOCAL POINT ENDORSEMENT

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Date: 26 September 2006

6. IMPLEMENTING/EXECUTING AGENCY CONTACT

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LIST OF ACRONYMS AND ABBREVIATIONS

BAT	Best available technology
BEP	Best environmental practices
CDC	Center for Disease Control and Prevention
CIO	Convention Implementation Office
COP	Conference of Parties
DDT	dichloro-diphenyl-trichloroethane
EIA	Environmental Impact Assessment
FECO	Foreign Economic Cooperation Office
GEF	Global Environment Facility
MIS	Management Information System
MOE	Ministry of Education
MOF	Ministry of Finance
MOH	Ministry of Health
MOST	Ministry of Science and Technology
NCG	National Coordination Group
NDRC	National Development and Reform Commission
NGO	Non-governmental organization
NIP	National Implementation Plan
NPD	National Project Director
NSFC	Natural Science Foundation Committee
OP	Operational Program
PCB	Polychlorinated biphenyls
PCDD/PCDF	Polychlorinated dibenzo-p-dioxins and dibenzofurans
PIP	Provincial implementation plan
PIRs	Project Implementation Reviews
PMO	Project Management Office
POPs	Persistent Organic Pollutants
R&D	Research and Development
RCEES-CAS	Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
SC	Stockholm Convention
SEPA	State Environmental Protection Administration
SIRE	Strengthening Institutions, Regulations and Enforcement
TCG	Technical Coordination Group
THU	Tsinghua University
TTPC	Technology Transfer Promotion Center
UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNIDO	United Nations Industrial Development Organization
UPOPs	Unintentionally produced persistent organic pollutants

1. PROJECT DESCRIPTION: BACKGROUND AND CONTEXT

(Baseline Course of Action)

1.1 Context/history

1. The Chinese government attaches great importance to environmental protection. Since 1980s, China has established environmental protection as a basic national policy and sustainable development as a key strategy and has pursued a "road of a new type of industrialization." While promoting economic growth, China has adopted an array of measures to strengthen environmental protection. Particularly in recent years, the Chinese government has focused on preventive approaches and comprehensive pollution control. Breakthroughs have occurred and government officials at all levels have worked hard to solve conspicuous environmental problems that threaten the public health.

2. China stresses international cooperation on environmental protection and is active in conducting cooperative activities with the United Nations (UN) and other international organizations. China has acceded to over 50 international environmental protection conventions, and has been active in performing the obligations stipulated in these Conventions, including the Stockholm Convention on Persistent Organic Pollutants (POPs).

3. However, as the most populous and largest developing country in the world, China's high rate of economic development has led to serious environmental problems with significant local and global environmental impacts. The conflict between environmental protection and economic growth is becoming more prominent than ever, particularly given the increasing number and importance of global environmental conventions that China has agreed to. Resource shortages, a fragile ecological environment and insufficient environmental loading capacity are becoming critical problems hindering China's sustainable development.

1.2 The Stockholm Convention and China

The Convention

4. Persistent organic pollutants possess toxic properties, resist degradation, bioaccumulate and are transported, through air, water and migratory species, across international boundaries and deposited far from their place of release, where they accumulate in terrestrial and aquatic ecosystems. With years of emissions before their environmental risk became known, POPs have already become an international environmental problem that human kind must face.

5. In May 2001, the Stockholm Convention on POPs was adopted with the aim of protecting human health and the environment from POPs. The Convention entered into force on 17 May 2004. Two Conferences of the Parties, COP1 and 2 have been convened to specify detailed requirements and procedures for implementation of the Convention.

6. The GEF has been selected as the Convention's financial mechanism. In October 2002, the GEF Assembly approved the addition of POPs as a new GEF focal area, and in November 2003, the GEF Council approved a GEF Operational Program on POPs – OP#14.

Overview

7. China has been an active participant in the negotiations of the Convention since 1998. China signed the Stockholm Convention on POPs in May 2001, the first day when it opened for signature and the National People's Congress ratified the Convention in June 2004. The Convention entered into force in the country on 11 November 2004. China has participated in the each of the COPs and other Convention related meetings, such as the meetings of the Expert Group on Best Available Technologies and Best Environmental Practices (BAT/BEP)

and the meetings of the POPs Review Committee. China has also undertaken active preparations for the nationwide implementation of the Convention.

8. Initial working mechanism at central government level established: A National Coordination Group (NCG) has been established, bringing the vice minister of State Environmental Protection Administration (SEPA) to act as the group leader and director-generals of the 10 related ministries to act as the coordinators and focal points within their ministries. A Convention Implementation Office (CIO) under the Group has been established to work as the focal point and information-clearing house of China to the Convention and take charge of domestic management, organization and coordination of the Convention implementation affairs. Several joint working groups have been established within CIO between SEPA and respective ministries, including the Ministry of Construction, State Electricity Regulatory Commission, Ministry of Agriculture, etc.

9. The NIP been successfully developed: Comprehensive inventories have been conducted to understand the status of POPs production, distribution, use, import, export, emissions, stockpiles, contaminated sites and waste. Sectors and key enterprises with significant potential for dioxin release have been identified, and a dioxin release inventory has been developed based on the UNEP Toolkit. The current institutional settings, policies and regulations and technologies for POPs treatment, disposal and substitution have been reviewed and evaluated. Objectives, strategies and action plans to control, reduce and eliminate POPs have been formulated, along with indicators for effective evaluation (see more detailed introduction of the NIP development process and main contents in Part 1.2.3). Addressing capacity building as one of the most fundamental activities, $275,900 USD was approved by the GEF for use during NIP development to structure a Capacity Building Project to be implemented in conjunction with and support of the NIP.

10. Active responses to Convention requirements already underway: In conjunction with the development of China's 11th Five Year Program (2006-2010), pollution control standards and environmental quality and technical guidelines related to POPs have been identified for revision or establishment during the coming five years. Subject to reduction or elimination according to the Convention's requirements, products containing POPs and manufacturing processes producing POPs have been included in the Guiding Catalogue of Industrial Structure Adjustment. All of these have effectively pushed forward the process in order to implement the Stockholm Convention.

11. Campaigns to raise public awareness of POPs launched in various forms: Following the two significant dates on which the Convention was signed (May 23rd) and entered into force (Nov. 11th) and the implementation of demonstration projects, extensive publicity and awareness raising activities have been carried out through press conferences, planetary reports, 3-D media, questionnaires, and thematic workshops to promote the creation of a sound social environment for the implementation of the Convention.

12. China's successful initiation of several thematic projects to take measures for POPs reduction and elimination under the financing mechanism of the Stockholm Convention: The implementation of these projects will lay a solid foundation for China to fully and smoothly fulfil the obligations under the Convention. For details of these projects, please see Section 1.2.4.

The National Implementation Plan

Development process

13. The development of the National Implementation Plan (NIP) in China has been implemented by the Foreign Economic Cooperation Office (FECO) of SEPA under a letter of agreement with UNIDO. It was supported by a full size project approved by the GEF Council in May

2003 and initiated on 21 September 2004. After approval by the State Council, the NIP will be submitted to GEF, and will thereafter serve as overall guidance for implementing the Stockholm Convention.

14. In order to guide the development of the NIP, China established a coordinating group led by SEPA and comprising of the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs (MOFA), Ministry of Finance (MOF), Ministry of Commerce (MOFCOM), Ministry of Science and Technology (MOST), Ministry of Agriculture (MOA), Ministry of Public Health (MPH), Ministry of Construction (MOC), General Administration of Customs (GAC), and the State Electricity Regulatory Commission (SERC). The CIO was established to assume responsibility for the day-to-day management of the development process and serve as a liaison office for the implementation of the Convention. The CIO reports to the coordination group on important issues and implements its decisions.

15. The development of NIP was based on the valuable support and active participation of the international and domestic institutions and organizations, and in extensive consultations with international and domestic stakeholders. For soliciting the comments on the NIP's framework, information and data, five meetings of the Technical Coordination Group (TCG) were organized involving a wide range of international and domestic stakeholders, including related ministries, local governments, relevant industries, enterprises, NGOs, professionals, the public, UNIDO, UNDP, UNEP, FAO, GEF, the World Bank, and the Governments of Canada, Germany, Italy, Japan, Norway and the United States. A series of thematic workshops targeting specific industries and geographical regions were held to understand the management status of industries and local governments, identify their needs for Convention implementation, and explore action plans and strategies that can both meet Convention requirements and promote industrial and local development.

16. The NIP strictly follows the Interim Guidance for Developing a National Implementation Plan for the Stockholm Convention and the requirements of the Convention's NIP-related articles. Based on extensive investigations and consultations, the NIP has developed a series of activities, strategies and action plans to be carried out through 2015 for China to implement the Stockholm Convention.

Main contents of the National Implementation Plan

17. Of the 12 POPs initially included in the Convention for control, chlordane, mirex and DDT are still being produced and used for some special purposes. Chlordane and mirex are used mainly for the control of termite and DDT is mainly used as intermediate for production of dicofol, as additive in production of antifouling paint and in malaria control. The production of PCBs was stopped in 1974, but electrical devices containing PCBs are still being used, and decommissioned sealed devices have not been adequately and properly disposed off. In China all of the 10 categories exist, 62 subcategories of sources of dioxin release included in Standardized Toolkit for Identification and Quantification of Dioxin and Furan Releases issued by UNEP, including wastes (municipal waste, medical waste and hazardous waste) incineration, paper making, iron and steel, non-ferrous metal, chemical industries, fossil fuel-fired power generation and other sources. Due to the low level of awareness and management and economic and technical development limits, wastes containing POPs and contaminated sites have not all been identified and properly managed or disposed of, including production sites of the enterprises that stopped producing POPs in the 1970s and 1980s.

18. Based on China's ongoing situation, 17 action plans have been developed for inclusion in the NIP, with the estimated investment of 34 billion RMB over the first ten-year period (2006-2015). Initial priority areas include:
    - Constitute and improve the policies and regulations required and reinforce the constitutional basis for the implementation of the Convention;

- Eliminate production and use of chlordane, mirex and DDT;
- Confirm inventory for unintentionally generated POPs releases emissions and the list of equipment containing PCBs and wastes containing POPs;
- Drastically reduce or eliminate exposures from identified high-risk power equipment in service which contains PCBs;
- Adopt BAT/BEP to control dioxin releases for key dioxin emitting industries;
- Realize environmentally sound management of wastes containing dioxin in the waste incineration industry;
- Establish financial mechanisms to ensure implementation of each action plan;
- Conduct project demonstrations and extensive replication;
- Develop and enhance capacity building in support of Convention implementation; and
- Establish a long-term mechanism to control POPs releases emissions.

Identified capacity building needs

19. During the preparation of the NIP, analysis has been made of the gaps between Convention requirements and the present situation. This gap analysis has shown that in order to meet Convention requirements, there is a need for strengthened capacity in a range of areas:
    - institutional capacity in technical support institutions;
    - legislation, regulation, implementation, and enforcement capacities;
    - research, development and dissemination of technical capability for alternatives and alternative technologies;
    - supervision and management of labeling, transportation, storage and disposal of in-use power equipment containing PCBs;
    - supervision and management in identification, labelling, transportation, storage and disposal of end-of-life power equipment containing PCBs;
    - supervision and management of POPs specific exemptions and acceptable purposes;
    - capacities in reducing unintentionally produced chemicals release;
    - capacities in POPs stockpiles and wastes identification, management, and disposal;
    - capacities in identifying and remediating contaminated sites;
    - administration capacities of local governments;
    - capacities in information exchange, public information, awareness raising, and education; and
    - capacity for effectiveness evaluation and compilation of Convention implementation report.

20. The capacity assessment during the NIP development further identified in Part 4.3 the fields of priorities for capacity building taking into consideration the constraints of time and resources in the period of 2007 to 2010. Specific priorities during 2010-2015 will be determined based on the evaluation of results and impacts from initial implementation of the NIP.

Thematic investment projects

21. In order to address the requirements of the Convention, China has prepared and implemented several thematic projects to reduce or eliminate chemicals included in Annex A and B of the Convention. The capacity building components within the thematic projects generally include legislation, institutional strengthening, monitoring and information and public awareness and education in the sectors covered. The projects that were initiated are described below.

    1. <u>*PCBs Management and Disposal Demonstration Project*</u>: The project is to identify and demonstrate environmentally sound and cost-effective policies, procedures and techniques for safe managing and disposing of China's uniquely temporarily stored PCBs and associated PCB-contaminated wastes. The project started on July 1, 2005 and has a duration of 4 years. A national replication program will be developed upon its completion in 2010. The implementation of this project contributes to achieve the

following objectives of the NIP: (i) Complete the environmentally sound disposal of high-risk in-service electrical equipment containing PCBs identified in the demonstration areas by 2010; and (ii) Environmentally sound management and disposal of high-risk PCBs wastes in the demonstration areas by 2010.

2. *Demonstration of Alternatives to Chlordane and Mirex in Termite Control Project*: The objective of this project is to demonstrate the elimination of chlordane and mirex use for termite control in the demonstration provinces through introduction of integrated pesticide management. It has started on 2 January 2006 with a duration of 4 years. A national replication program for IPM will start in 2009, in which time the production of chlordane and mirex will be stopped. The implementation of this project supports to achieve the following objectives of the NIP: (i) primarily stop the production and use of chlordane; and (ii) primarily complete environmentally sound management and disposal of identified pesticide POPs wastes nationwide.

3. *Alternatives to DDT Usage in the Production of Antifouling Paint:* The binding objective is to eliminate 250 MT DDT per year used for production of DDT based antifouling paints by shifting to technically feasible, economically viable and environmentally friendly alternatives. The project also sets a prospective objective, which is to establish a long-term mechanism to protect marine environment from pollution of harmful antifouling systems in support of China's signing of the International Convention on the Control of Harmful Anti-fouling Systems on Ships based on the technologies, experience and instruments obtained from the phase out of DDT antifouling paint. The project is estimated to start in October 2006 with a timeframe of 4 years. Its implementation is aimed to completely phase out the use of DDT in the production of antifouling paint.

A complete snapshot of the capacity needs

22. The priority areas for capacity building during the period of 2010-2015 and beyond will be specifically determined based on the overall performance assessment of the results of all the Convention implementation activities. Basically, the magnitude of the capacity building can be qualitatively pictured as indicated in Figure 1.

23. Figure 1 gives schematic indication of the development of capacity building until it reaches a sustainable stage. Monitoring and central level activities such as legislation, institutional strengthening and public awareness are important initial activities. Gradually there will be a dominance of technical capacity building for the practical management of production facilities, stockpiles and waste. Also, the capacity building will be replicated at provincial and other local levels.

24. The total volume will initially be dominated by cross-cutting activities for which the funding is controlled by the government. In the intermediate stage much more funding for capacity building is expected to come from both the government and industry as required by legislation promulgated during the first phase. In the sustainable stage, it is expected that less funding would be needed for legislation, institutional strengthening and public awareness, but the funding for technology transfer will go up with more tangible actions to be taken to reduce the release of UPOPs.

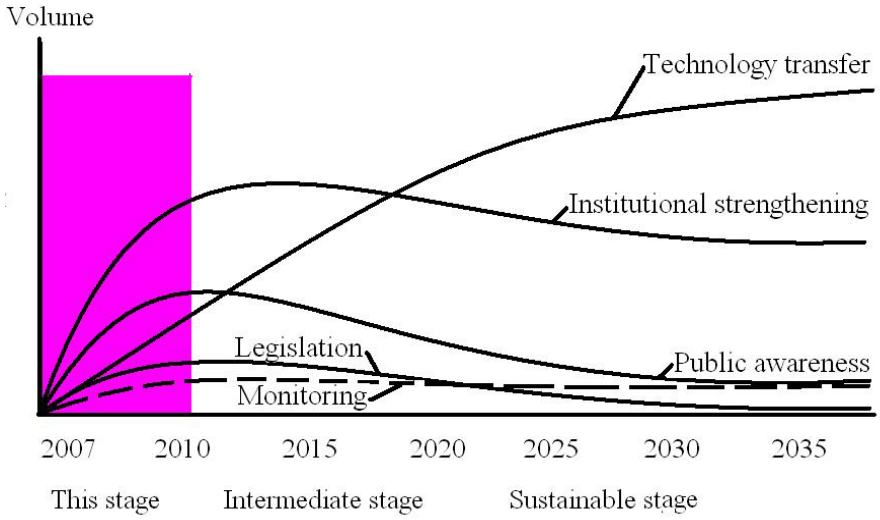


Fig. 1: Qualitative indication of the volume of resources spent on capacity building over time

1.3 Barriers to the enhancement of capacity for effective and efficient implementation of the NIP

Lack of an enabling policy and regulatory environment

25. The NIP has identified the existing policy and regulations regarding the production, use, import and export, environmental monitoring, and ingestible standards for pesticide POPs, PCBs, DDT, UPOPs, stockpiles, wastes and contaminated sites. Findings show that there are no specific policies or regulations regarding POPs management. Instead, stipulations related to POPs management are dispersed throughout different laws and regulations that are hard to coordinate where some current regulations are impracticable. These regulations generally contain overlaps and gaps and would benefit from increased incentive-based measures to promote self-regulation and a monitoring rather than an enforcement role for local officials. At local levels, where capacity is weak, regulations are poorly understood, inconsistently applied and subject to varying interpretations.

26. The proposed project will promote the preparation and development of a comprehensive law so that important constituent and legislative elements for POPs reduction and elimination could be integrated together. A parallel approach would be conducted. While text of regulation will be drafted and prepared at the central government level, the local legislation at several focal pilot provinces, as a support to central level legislation preparation, will be also conducted and tried against local context. Successful experiences in these provinces, in particular the experiences in monitoring and incentives will be disseminated nationwide and used as a valuable reference in the national level legislation preparation.

Financial barriers to the implementation of NIP

27. According to the NIP, China's total cost for Convention implementation is estimated at US$ 4.3 billion. Given the magnitude of this sum, no single financial source can fill China's Stockholm Convention compliance needs. As the Convention's financial mechanism, the GEF is the most stable and significant financial source for POPs issues, but it has earmarked only $282 million USD for GEF4 (2007-2010), which is far from sufficient to fully support China's NIP implementation, let alone the rest of the world.

28. According to the 11th Five Year Program for National Economy and Social Development, China will need about US$ 162,500 million for environmental protection. However, POPs issues have not been directly addressed in the Program.

29. With the development of market economy, China has established diverse pattern of investment and financing channels for environmental protection. Yet, most of them are not dedicated to POPs issues.

30. On the other hand, as China is transiting from a planned economy to market economy, there are a wide variety of constraints for NIP implementation to have access to domestic financial resources. They are in general related to a poor understanding for any POPs related environmental protection undertakings, which include low profit-making or financial significance, long payback periods, high risk and uncertainty, high transaction cost and weak capacity to access to adequate information. For example, the BOT financial instrument that is quite mature in developed countries is still at an emerging stage due to low awareness, knowledge and skills.

31. In addition, there are market, technology and policy barriers as well that could also hinder their access to financial resources.

32. As mitigating the enormous gap and finding out ways to overcome the barriers mentioned above is of vital importance, there is a compelling need to study enabling environment, for instance, the financing mechanism, feasible and operational models, as well as opportunities for public and private investment. To this end, the project has designed activities to explore the likelihood of co-financing and test their feasibility and applicability in a pilot city.

Weak monitoring capacity for POPs

33. Monitoring is a process involving sampling and analysis.

34. With regard to the sampling infrastructure, few enterprises are equipped with emission sampling facilities and there is, at present, little or no sampling capacity amongst China's environmental monitoring stations.

35. However, with regard to the analysis infrastructure, China has established a nationwide environmental monitoring system consisting of 40 stations at the national or provincial level, 399 stations at the municipal level, and 1850 stations at county level. Most of the equipment and instruments in this monitoring system and networks meet only the requirements for the analysis of organochlorine pesticides (OCPs) and polychlorinated biphenyls (PCBs).

36. China has also established 13 dioxin analysis laboratories with samples tested in total about 7239 from 2002 to 2004. In addition, seven regional laboratories of dioxin analysis are under construction. Although the research laboratories, affiliated to the Chinese Academy of Sciences or to major universities, have recently received investment from the Government of China in order to equip themselves to undertake analysis of dioxins and furans, none of them is yet accredited to an international scheme and it is unlikely that they would have the capacity to undertake a major analytical programme in support of systematic and routine monitoring without major additional investment.

37. In addition, the limited research undertaken on dioxins and furans to date in China (about 7,239 samples in total) has been principally geared to determining their prevalence in certain limited and specific sites of environmental interest. This analytical work has been financed by a wide range of supportive sources. There is, however, no systematic monitoring of releases from anthropogenic sources.

38. The monitoring cost for one sample is now about $1000 (excluding sample collection cost) in China that cannot be afforded by the emission producers. The high cost is to a great extent attributed to the high cost of reference standards imported from abroad and the lack of national reference materials.

39. Lastly, the current monitoring for POPs is hampered by lack of qualified human resources and standardized management in existing dioxin analysis laboratories. Building up capacity in (i) standard operating procedures (SOPs) including extracting POPs from various samples (e.g. wastes, environmental media, human tissue, food & feed, etc.); and (ii) national laboratory accreditation system to assure the quality of POPs analysis and formulation of important regulations/standards for routine monitoring of POPs.

40. In addition to the monitoring activities (sampling and analysis) focused on PCDD/PCDF monitoring of other pollutant emissions has of high relevance to the sustainability of this project. For example monitoring of particulates in stack emissions is within the obvious limitations a good surrogate for PCDD/PCDF. As particulates such as fly ash absorb very high proportions of PCDD/PCDF from the flue gases, any reduction in particulates will result in reduction of PCDD/PCDF. Hence general emission control and monitoring can give important information on the amounts of PCDD/PCDF emission releases even in cases where more expensive specific analysis would not be affordable or feasible.

41. The significant capacity building requirements at national and provincial levels in China can neither be met solely from the financial resources likely to be available during the full project, nor can be delivered during the limited duration of the project. For these reasons, the project at its first stage of NIP implementation will only address the last barrier to monitoring and meanwhile focus on barrier removal activities of improving human resources and standardized management so that the existing basic national monitoring facilities can properly perform its preliminary monitoring function.

42. Activities for removing other barriers mentioned above will be addressed in more details as recommendations and suggestions for capacity building program proposal to be developed in parallel with the implementation and as an output of the proposed project.

Barriers to R&D

43. The coordination and cooperation among stakeholders for R&D is weak and the practical impact of R&D is poor. Although with China's ratification of the Convention, the relevant Chinese governmental departments, including MOST, Natural Science Foundation Committee (NSFC) and MOE, have come to realize the importance to provide the support to R&D on POPs and some key research programme/projects have been supported. Most of these existing researches have not covered many key issues directly associated with the implementation of the Stockholm Convention (SC), such as technologies for UPOPs release reduction and control and monitoring techniques, and other technologies for using pesticide alternatives, destruction and disposal of PCBs and other POPs wastes, remediating/rehabilitating contaminated sites. In addition, these studies are often financed by different funding ministries and departments without consultation, coordination and cooperation among key stakeholders. Lastly, the capacity to transfer the research results from research domain to application domain is poor and there are always complaints that the researches are often academic and of little practical use.

44. To remove the barriers mentioned above, the project has designed activities to enhance the communication mechanism among ministries and main funding sources, to formulate polices that supports application of research results, to trace the progresses of R&D activities relevant to POPs, to promote the communication among researchers at home and abroad and to strengthen the linkages among research bodies, enterprises and the government. These

activities will be conducted in line with the priorities identified in the NIP, which are as follows:

1. Formation mechanism and release features of POPs from local sources;
2. Model and application system of environmental risk assessment (ERA) and health risk assessment (HRA) for POPs and related materials/wastes/environmental phases;
3. Screening techniques and related products for POPs contamination;
4. Test methods for POPs in various media and monitoring techniques for the release of POPs from key sources;
5. Localization of instruments, equipments, chemical standards, regents and standard reference materials for POPs analysis in China;
6. Alternative technologies or alternatives to POPs in specific fields;
7. BAT/BEP measures to reduce the release of dioxins from key sources;
8. Safe disposal technologies for POPs and POPs containing materials/wastes;
9. Sound remediation solutions for POPs contaminated sites, involving the remediation of soil, groundwater, etc.; and
10. Basic research on potential new POPs.

Barrier to the technology transfer

45. Despite considerable investment and improvement in technology, there remains a large gap between the performances of industry in China with that of the developed world. This is particularly evident in pollution control technology and equipment. Some advances have been made in recent years to control air pollution emissions from large- and medium-scale enterprises and these may also have served to reduce emission of unintentionally produced POPs. However, a feature of many industrial sectors in China is the prevalence of relatively small-scale enterprises, where the efficiency of energy and material utilization are not only much lower than that of OECD countries but also lower than that of many developing countries (India for example).

46. Although the government has realized the importance of restructuring economy towards more efficiency, less material consumption and more environmental and ecological protection, and is actively pursuing the policies towards economic restructuring, cleaner production and circular economy, few policy makers and professionals are familiar with legislation and regulations and technological policies which resulted in substantial investments in other countries such as Denmark, Germany, India, the Netherlands, U.K. and U.S.A., let alone with the simultaneous integration of the Stockholm Convention requirements.

47. Barrier also exists in mainstreaming the BAT and BEP requirements in current technology application. The application of BAT and BET, which is prevalence in other countries, is seldom seen in China. On the contrary, cases can be found where practices and technology use in China are inconsistent with BAT and BEP requirements. For example, in medical waste disposal sector, the prevalent technology use is incineration, rather than the non-combustion technologies that have been widely applied in many countries.

48. The capacity for commercialization of BAT and BEP is poor due to the poor linkages among researchers, entrepreneurs and government officials. The BAT is just at the beginning stage of commercialization in the Chinese market. Research institutes, while providing highly competent researchers, are not equipped for the production and marketing function. Entrepreneurs do not have easy access to the information of BAT and BEP. Government professionals familiar with the state of the art in several BATs have no more than a passing familiarity with market finance, commercial enterprise operation and economic project appraisal.

49. To address the barrier for NIP implementation, the project has designed activities under Outcome 5 (i) to bridge the linkages among government, enterprises and industrial associations, (ii) to build up the platform for information exchange between technology

owners and users, (iii) to provide the enterprise with technical assistances to phase in BAT/BEP application and facilitate access to technology users to cost effective pesticide alternatives and PCB and waste disposal technologies; (iv) to promote with other countries the regional and global cooperation on technology transfer .

Unavailability of and limited access to information

50. The concepts of POPs reduction and control are still relatively new to China. Much basic information regarding their properties, harms and impacts are still unavailable and needs to be transferred from the developed countries to China. The existing information is largely stored in the academia and in government departments independently and needs to be transformed into reader-friendly database that they can be well disseminated and welcomed among the public. The various platforms and channels to produce and distribute environmental awareness raising materials for POPs should be integrated through partnerships.

Weak institutional capacity for planning, guiding and enforcement for the Convention compliance

51. Firstly, the national Convention implementation structure has insufficient capacity for comprehensive coordination, decision making support, organization and execution and monitoring and supervision. The National Coordination Group (NCG) is not well supported for scientific decision making. Decisions are often made hastily, without a well-conducted consultation with experts from technology, economy, environment and sociology disciplines, and often with a risk of lack of consultation with a broad range of stakeholders and a neglect of a deep social survey in advance. The CIO, a pivot of the Convention implementation in China, is extremely understaffed, with only 3 regular staff and a few short-term contracted staff, whose capacity is too small to effectively accomplish its mission and needs to be strengthened.

52. Secondly, barriers exist in capacity weakness in mainstreaming the requirements of the Convention compliance into current environmental management instruments. As far as the current environmental management instruments are concerned, aspects of particular interest will be:

- the existing environmental impact assessment (EIA) that might be important in investment planning to prevent the establishment of new sources of unintentional production of POPs;
- the registration system for pollutant discharges;
- the total emission control system;
- the pollution levies system and non-compliance fines;
- the voluntary clean production programme as a vehicle for the progressive migration of industry to BAT/BEP; and
- the Law of Solid Waste pollution prevention and control and its associated listing of hazardous wastes.

53. Although the role of these current practices have not been brought into full action and their real impact are often questioned, mainly due to their inherent defects, which are often associated with systematic institutional changes that can not be completed in a short period of time, the integration of the requirements of the Stockholm Convention into the current practices will certainly create a concerted efforts in achieving national and global benefits and will also allow funds currently being invested to achieve local environmental benefits and thus achieve greater global environmental benefits simultaneously at an economic cost. To this point, the relevant stakeholders, in particular the government agencies at central and local level with different institutional mandates and responsibilities, have to cooperate to remove the associated barriers in coordination, organization and enforcement due to limited resources, information, knowledge, personnel and finance.

54. Thirdly, local governments are the major bodies for NIP implementation but their implementation capacities are the weakest. The environmental protection departments and other related departments at various local levels have not yet incorporated POPs into their routine agenda for monitoring and enforcement. So far, there has been a lack of approach and operational practices to devolve responsibilities for the Convention compliance to local government levels and to encourage the respective local community participation. Measures have to be taken to ensure the establishment of linkages between the Convention requirements and local economic, environmental and social development programs. With the related regulations, standards, guidelines, procedures and mechanisms to be established for POPs management, their institutional capacity for monitoring and enforcement on POPs issues needs a lot of improvement to meet the requirements of the Convention implementation.

55. Lastly, there is a lack of incentives for enterprises to take measures to comply with the Convention compliance. Enterprises are the main entities that bear the obligations of Convention. Their reaction and attitudes towards the POPs related policies directly affect the outcome of the implementation of the NIP. So far, many polluting enterprises are inefficient and can neither afford end-of-pipe treatment nor take up precautionary measures within-process changes and most industrial firms do not acknowledge that violating environmental laws and standards represents an offence. There are also perverse incentives for enterprises to take measures against pollution. Economic instruments are relatively under-developed and most of them are either only at the trial stage or generate adverse consequences through pricing distortion. For example, the system of pollution levies and non-compliance fines has been of limited impact as the levies and fines are set very low and enterprises opt simply to pay the fees rather than invest in pollution prevention and reduction facilities. The introduction of planned improvements to the system is hampered by the current weak monitoring capacity and public sensitivity to price adjustment, especially when the unemployment rate is rising in many areas.

56. Overcoming these barriers and integrating the requirements of the Convention will require considerable capacities at both national and provincial levels within the government, industry and a variety of key stakeholder communities.

57. As a first step to overcome the barriers mentioned above, the project has designed several activities as mentioned and grouped under Outcome 6. The intention is to (i) establish an expert consultation board to support the important decision making at top levels; (ii) enhance the implementation of NIP by devolving responsibilities to provincial government through developing provincial implementation plan (PIP) at focal provinces; (iii) promote, through planning, training and organization at central and provincial levels, the application of current available environmental protection instruments to meet the several obligations that are mentioned with deadlines in the Convention; and (iv) demonstrate enterprise self-discipline practices through encouraging voluntary elimination and reduction of POPs and establish respective incentive measures.

Lack of capacity for a continuous improvement of NIP implementation management

58. Constrained by resources, knowledge and information, NIP implementation is a process full of uncertainties. It is also a process of continuously providing feedback to enable the lessons and experiences be incorporated into further improvements in the NIP implementation. To this end, evaluation needs to be set up in order to obtain awareness of the impact of on-going activities and to get an insight of economic, environmental and social values after the completion of any plan/s or program/s.

59. Due to the importance of evaluation, the Convention has requested parties of conference to assess the effectiveness of Convention compliance four years after the date of entry came into force and periodically thereafter at intervals to be decided by the Conference of Parties. .

60. However, the evaluation, in particular the ongoing and post-evaluation, is the weakest link in China's policy process. As plans, programs and policies are seldom subject to the ongoing and post evaluation, the relevant administrative costs are always high and policy failures in enforcement cannot be altered in time. For example, the wide spread incineration of medical waste results in the increase in dioxin emission. However, such practice is not easy to change due to the inherent rigid decision making process that can not be adapted to the changing environment.

61. The project has designed activities under Output 8 to address the barrier. They mainly aim at building up evaluation institution to meet the requirements of the Convention and the continuous improvement in the NIP implementation.

Low awareness of POPs

62. During the NIP development, the stakeholders in various sectors and levels have been mobilized to participate in numerous training and consultation workshops. Their awareness of POPs issues, particularly at the national level, has been improved significantly. However, due to the limited time and resources allocated to awareness promotion campaign, awareness is still insufficient, particularly at the local levels where economic development is generally seen as of greater importance rather than environmental protection. The decision and lawmakers may be reluctant to mainstream POPs issues into the general policy and legislative framework and put them on their agenda as a priority. The enterprises have not been fully motivated to take measures on POPs. The public has little exposure to information on POPs and is far from being reactive to POPs concerns.

1.4 Domestic, Regional and Global Benefits

63. China is the largest developing country in the world with a population of 1,375 million in 2005. It is experiencing a rapid industrialization and is in the development of market economy. These factors represent significant challenges on efforts to protect the human health and the environment within China. Enabling China to comply with the obligations on Parties set out in the Convention will have a significant and positive influence not only on China's own chemicals management regime but also on the ultimate global success of the Convention to protect human health and the environment from the threat of POPs. Successful efforts moving towards compliance will also serve as a model for other developing countries.

64. While the proposed capacity building project does not intend to directly reduce or eliminate any POPs, it will lay down the solid foundation for the fulfilment of China's commitments to the Convention.

65. Domestic benefits: With this project, China will be able to have the required capacities for implementing the Convention and the NIP within the timeframe of 2006-2010. Improved regulatory framework, legislation enforcement, monitoring, and public awareness from implementing the proposed project will yield significant domestic benefits, including:

- Introduction of advanced concepts and management experience to harmonize Chinese practices with international levels;
- Promotion of technology transfer and application;
- Upgrade the industrial structure;
- Increase environmental friendliness of Chinese products;
- Promotion of cleaner production;
- Protection of the public health from POPs pollution.

66. Global benefits: With this project, China will be enabled to respond to the capacity building articles of the Convention effectively and efficiently. The regulatory framework and the institutional capacity to be strengthened by the project will upgrade China's management of POPs control and reduction to an internationally accepted level. The improved monitoring

capacity will help to produce a more reliable and comparable inventory of POPs releases in China. The various mechanisms, platforms and partnerships to be established will lay a fundamental basis for effective and efficient reduction and elimination of POPs in China and generate significant benefits for the protection of the global environment and human health. Global benefits can be also achieved through dissemination of experience of China, which could serve as a reference for other developing countries.

1.5 Special Features

Highly prioritized in NIP

67. China is under great pressure and in great need of capacity building to fulfil the objectives of the NIP. There are many objectives to be accomplished before 2010. For instance, registrations of specific exemptions of DDT as intermediate in the production of dicofol, chlordane, mirex and HCB as intermediate in production of Na-PCP, will expire by 2009. BATs for new sources in the categories listed in Part II of that Annex C shall be phased in as soon as practicable before 2008. China shall submit its first report by 31 December 2006 and submit the subsequent report every four years thereafter. Among the total of 106 actions of the NIP, the proposed project will address more than half of them from a capacity building point of view, leaving the other part, which is non-cross cutting and focus on specific themes to be carried out by thematic investment projects. Only with such arrangements can China be endowed with the capacity to meet the requirements of the Convention and the NIP.

Free-standing as an enabling activity project for cross-cutting capacity building

68. Capacity building is one of the most important activities in the thematic investment projects. However, with the development of the NIP, it is recognized that the thematic investment projects alone cannot provide all the required capacity for effective and efficient implementation of NIP. In fact, many essential cross-cutting capacity building activities will be left unaddressed without the project. The systematic, institutional and individual capacities, which are crucial and yet not dealt with, are highly prioritized and need to be strengthened. Therefore, the project is proposed as a stand-alone project focusing on a holistic way of nationwide capacity building with the outputs of the on-going capacity building activities inherently complemented to this project.

Cross-cutting

69. This project targets at cross-cutting capacity building activities identified from the NIP. The cross-cutting capacities include but are not limited to national policy, legal and regulatory framework, financial resources and technology transfer, incentive systems and market instruments, monitoring and observation, institutional mandates, management and performance, co-ordination and processes for interaction and co-operation between all stakeholders, networking with regions, mobilisation of science in support of decision-making, information management, negotiation, awareness and exchange of information, and individual skills and motivation.

Synergies with on-going and future thematic investment projects

70. Though the thematic capacity building elements identified in the NIP will be excluded from the proposed project, this project will create an enabling macro environment, which will greatly facilitate the high-quality implementation of the thematic investment projects. This project is highly cost-effective in the sense that it will provide essential capacity on which thematic investment project can be build upon.

Civil society involvement and participation

71. This project will widely involve stakeholders including international organizations, central and local governments, enterprises, industry associations, researchers, and the public into the capacity building process.

Country driven and consistent with national development programs

72. The project design is consistent with China's 11th Five Year Program (2006-2010). Taking this opportunity, the implementation of the Five Year Program will provide strong support to this project from the related central and local governments and other stakeholders, and constitute the baseline of the project. For instance, Guidelines of the 11th Five Year Program sets the targets for "boosting the optimization and upgrade of industrial structure", "building up a resource-efficient and environmentally friendly society", and "promoting recycling economy". Wise exploitation of potential synergies with these national development programs can considerably facilitate the Convention implementation.

Advanced programs demonstrated in selected provinces

73. The advanced programs for POPs control and reduction will be demonstrated in pilot provinces to generate experience and lessons for replication throughout the country.

2. RATIONALE FOR GEF INTERVENTION

74. This project will respond effectively to the articles of the Convention, including:

- Article 9: Each Party shall facilitate or undertake the **exchange of information**. Each Party shall designate a national focal point for the exchange of such information.

- Article 10: Each Party shall, within its capabilities, promote and facilitate **awareness** among its policy and decision makers with regard to persistent organic pollutants, provision to the public of all available information, development and implementation of educational and public awareness programs, public participation, training of workers, scientists, educators and technical and managerial personnel, development and exchange of educational and public awareness materials at the national and international levels, and development and implementation of **education and training** program at the national and international levels.

- In addition, Article 10 also states that each Party shall, within its capabilities, ensure that the public has access to public information and that the information is kept up-to-date. Each Party shall, within its capabilities, encourage industry and professional users to promote and facilitate the provision of the information at the national level and, as appropriate, sub-regional, regional and global levels. Each Party shall give sympathetic consideration to developing **mechanisms,** such as pollutant release and transfer registers, **for the collection and dissemination of information** on estimates of the annual quantities of the chemicals listed in Annex A, B or C of the Convention that are released or disposed of.

- Article 11: The Parties shall, within their capabilities, at the national and international levels, encourage and/or undertake appropriate **research, development, monitoring and cooperation** pertaining to persistent organic pollutants and, where relevant, to their alternatives and to candidate persistent organic pollutants. The Parties shall, within their capabilities, support national and international efforts to strengthen national scientific and technical research capabilities, particularly in developing countries and countries with economies in transition.

- Article 12: The Parties shall cooperate to provide timely and appropriate technical assistance to developing country Parties and Parties with economies in transition, to assist them, taking into account their particular needs, to develop and **strengthen** their **capacity** to implement their obligations under this Convention.

- Article 16: Comparable and reliable monitoring data is the basis for the **effectiveness evaluation**. Therefore, each Party has the obligation to allocate such **monitoring data**, in accordance with their technical and financial capacities, using existing programmes and mechanisms to the extent possible and promoting harmonization of approaches.

75. Article 13 of the Convention sets out the principles on which "developed country Parties shall provide new and additional financial resources to enable developing country Parties and Parties with economies in transition to meet the agreed full incremental costs of implementing measures that fulfil their obligations under the Convention". Article 14 of the Convention states that "The institutional structure of the Global Environment Facility (GEF)… shall, on an interim basis, be the principal entity entrusted with the operations of the financing mechanism referred to in Article 13…".

76. In response, the Council of the GEF agreed at its 19th meeting in May 2002 to amend the Instrument of the Facility to enable it to serve as an entity entrusted with the operation of the financing mechanism of the Convention. The Council having reviewed document

GEF/C.19/14 recommends that the GEF Assembly designate "Persistent Organic Pollutants (POPs)" as a focal area (OP#14) in support to the implementation of the Convention.

77. According to OP#14, the GEF will provide funding, on the basis of agreed incremental costs, for three types of activities to address POPs issues – capacity building, on-the-ground interventions and targeted research. The activities under capacity building include: 1) strengthening of human and institutional capacity; 2) strengthening and harmonization of the policies and regulations; 3) strengthening of monitoring and enforcement capacity; 4) developing capacity to assess technologies and management practices, and promoting and facilitating the transfer of viable and cost-effective options and management practices; 5) developing and implementing public awareness/information/environmental education programs; and 6) facilitating dissemination of experiences and lessons learned and promoting information exchange. Most all of these activities are contained in this project.

78. GEF-3 efforts focused on supporting NIPs. Therefore, activities from GEF-4 will be characterized by a shift from preparation to implementation. In order to achieve the long-term success of the POPs Convention, strong emphasis will be placed on the sustainability of GEF interventions, focusing especially on countries whose policies and actions demonstrate their firm intention to follow-through on their commitment to the Convention. While completing the NIP development in China, this SIRE project design is consistent with the second Strategic Objectives for the period of GEF-4 in the focal area of POPs, which include:

- Continuing the GEF's National Implementation Plan (NIP) Program.

- **Strengthening national capacities for NIP implementation**, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of chemicals.

- Partnering in investments needed for NIP implementation to achieve impacts in POPs reduction.

- Partnering in the demonstration of feasible, innovative technologies and practices for POPs reduction.

3. PROJECT OBJECTIVES, OUTPUTS AND ACTIVITIES

3.1 Objectives

79. The **overall objective** of this project is to assist China to effectively and efficiently implement the Stockholm Convention by strengthening the institutions, regulations and enforcement and to enhance the capacities for the sound management of POPs at national and local levels.

80. The **concrete objective** of this project is to create an enabling environment in China by establishing/amending laws, regulations and standards, strengthening institutions for monitoring, improving research and development (R&D), promoting technology transfer, facilitating data and information collection, enhancing supervision, enforcement and evaluation for continuous improvement and awareness raising of stakeholders on POPs issues.

3.2 Scope

Time frame

81. The project is assumed to start in 2007 and last for 5 years (till 2011). During this period, the following events will take place:

- Registrations of specific exemptions of DDT as intermediate in production of dicofol, chlordane, mirex, and HCB as intermediate in production of Na-PCP will expire by 2009;
- Pursuant to Article 5, best available techniques for new sources in the categories listed in Part II of that Annex C shall be phased in as soon as practicable but no later than four years after the entry into force of the Convention for that Party;
- Pursuant to Article 15 and SC-1/22 of COP1, each Party shall submit its first report by 31 December 2006 and subsequent reports every four years thereafter.

Geographic coverage

82. The project will be implemented throughout the country to ensure the smooth implementation of the Convention. All the 23 provinces, 5 autonomous regions and 4 municipalities directly under the central government will be involved in the nationwide activities such as implementation of NIP, monitoring and enforcement, reporting, public awareness raising and education.

83. The NIP states that advanced POPs management and control programs shall be phased in through demonstrations. According to the strategy, this project will consider to select pilot provinces for demonstration and eventually promote the best practices at the provincial level. Due to the significant regional disparity and imbalance of economic development and different management capacities among the eastern, central and western parts of China, 3 pilot provinces will be selected for demonstration activities such as establishing detailed provincial POPs inventory, testing for on-line data collection and transmission, developing provincial implementation plan, exploring mechanisms of co-financing for POPs reduction and disposal, etc.

84. Selection of the 3 pilot provinces will follow the criteria below:

- Typical in terms of POPs production, usage and pollution;
- Highly risky areas such as drinking water source areas, densely populated areas, etc.;
- Willingness, commitment and capacities of the provincial government;

- Regionally representative;
- Complementary with on-going projects.

Target capacities- Linkages to the NIP

85. The NIP has given an extensive analysis of the context under which it will be implemented. Capacity building under the SIRE project will be conducted at three levels: systemic level, institutional level and individual level.

86. The NIP has defined the strategic objectives for China to implement the Convention, included all the action plans required by the Convention and identified the needs for capacity building and funding to carry out all the action plans. All the actions have been identified with different extents of cross-cutting nature, leaving those identified as totally self-standing to be addressed by regular demonstration and replication projects for substantive phase out or elimination and those totally cross-cutting to be addressed by this project (see Annex E in the Project Executive Summary).

Table 1: Classification of NIP elements to cross-cutting nature

NIP element	Number	Number of cross cutting elements				
		Yes	Yes>No	Yes=No	Yes<No	No
Component	17	4	5	2	1	5
Subcomponent	14	5	6	3	0	0
Action	75	32	0	21	0	21

87. Table 1 shows that 41 out of 106 elements of the NIP are totally cross-cutting and falls in the scope of this project for strengthening of institutions, regulations, enforcement and awareness raising. Twenty-six elements are totally self-standing and thus will be addressed by on-going and prospective regular demonstration/replication projects and to be excluded from this project. Thirty-eight elements are partially cross-cutting or self-standing and will be undertaken by either this proposed project or regular projects depending on the cross-cutting nature of the specific sub-elements.

Project framework

88. The proposed project will focus on the capacity building at the three levels and follows the framework diagrammatically shown in Figure 2 below.

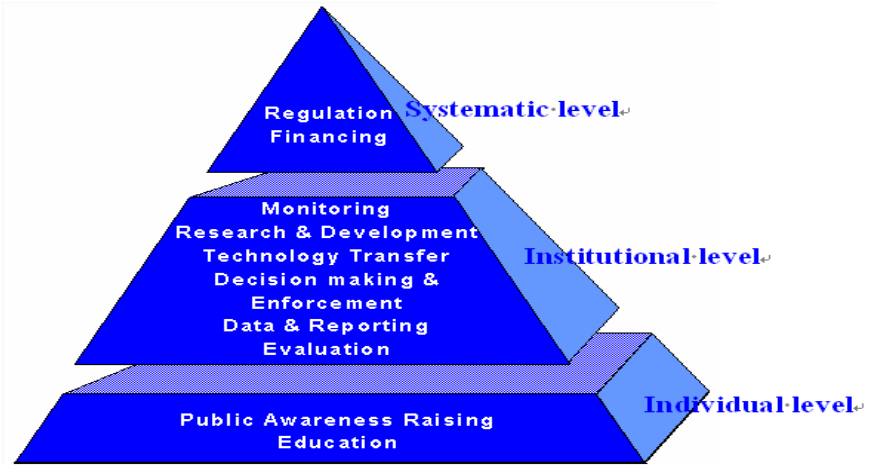


Figure 2: SIRE Project Framework

89. At the systemic level, capacity building is concerned with the creation of "a sound enabling environment", i.e. the overall policy, economic, regulatory and accountability frameworks, which institutions and individuals will operate to implement the POPs Convention. Capacity building at the institutional level focuses on overall organisational performance and functioning capabilities, as well as the ability of an organisation to adapt to change. A knowledge base supported by environmental monitoring, research and development and technology transfer will also be built up at the institutional level. The individuals, including professionals and the public, will be targeted for the improvement of their knowledge, competence and awareness, which will in turn catalyze changes of attitudes and behaviours.

90. A project management structure will be established to ensure the quality delivery of project management and oversight. Further detailed information on the above is elaborated in activities for Output 11 under section 3.3.

3.3 Outcomes/Outputs and Activities

Outcome 1: Strengthened policy and regulatory framework for more effective implementation of the Stockholm Convention and NIP

91. The effectiveness of the implementation of the Stockholm Convention and NIP will be strengthened by creating a sound enabling environment on:

- **Regulatory framework:** Laws and regulations relevant to POPs production, use, import and export, wastes and releases, will be prepared at the central and local government levels; local legislation in several pilot provinces will be developed in order to support and contribute to central government legislation preparation. Standards and technical guidelines will also be formulated and/or amended. Successful experiences will be disseminated nationwide.

- **Economic policies and financial mechanisms:** Activities have been designed to develop and pursue opportunities for co-financing on a nationwide basis and through targeted demonstration activities in a key province or provinces, the results of which will then be replicated to other areas.

Output 1. Improvement of policy and regulatory framework

92. There is an incomplete policy and regulatory framework for POPs. There is no specific policy and regulation regarding POPs management and control, the stipulations related with POPs management are dispersed in different laws and regulations that are hard to coordinate where some stipulations are impracticable.

93. The NIP has identified the list of laws, regulations and standards of the environmental protection legislation system in relation to POPs for revision or establishment in order to create a sound policy and regulatory regime for POPs management. Taking a cross-cutting principle, the proposed project has further selected the laws, regulations and standards for study, revision or establishment during 2007-2010 as shown in Table 2below.

Table 2: Legislative pieces for creation of an enabling policy and regulatory framework

Tier	Laws, regulations, rules and technical standards	Action	Responsibility
Tier 1: Laws and regulations	Law on Recycling Economy	Study	NPC
	Law on Control of Toxic and Hazardous Chemical Substances	Study	NPC
	Law on Ecologic Protection	Study	NPC

	Law on Prevention and Control of Soil Pollution of PRC	Study	NPC
	Law on Ecologic Protection of PRC	Study	NPC
	Law on Biologic Safety of PRC	Study	NPC
	Law on Compensation for Damages of Environmental Pollution of PRC	Study	NPC
	Environment Protection Law of PRC	Study	NPC
	Law on Environmental Impact Assessment of PRC	Study	NPC
	Law on the Prevention and Control of Atmospheric Pollution of PRC	Study	NPC
	Regulation on Environmental Pollution Control and Deadline Treatment	Study	SC
	Regulation on the Administration of Environmental Inspection	Study	SC
	Regulation on the Work of Environmental Supervision	Study	SC
	Regulation on the Administration of Deadline Treatment of Environmental Pollution	Study	SC
	Regulation on the Environment Protection of Countryside	Study	SC
	Regulation on Environmental Management for Construction Project	Study	SC
	Regulation on the Administration of Pesticide	Study	SC
	Regulation on Safety Administration of Hazardous Chemical	Study	SC
	Regulation on Environmental Administration of the First Import of Chemicals and the Import and Export of Toxic Chemicals	Study	SC
	Regulation on the Administration of the Prevention and Control of Pollution in Protected Areas for Drinking Water Sources	Study	SC
	Regulation on Administration of Reducing and Eliminating POPs	Study	SC
Tier 2: Administrative Rules	Measures on Administration of Reducing and Eliminating POPs	Study	SEPA
	Rules on Environmental Administration of the First Import of Chemicals and the Import and Export of Toxic Chemicals	Amending	SEPA
	Implementing Measures on Regulation on Environmental Administration of the First Import of Chemicals and the Import and Export of Toxic Chemicals	Amending	SEPA
	Rules on Preventing the electric equipments including PCBs and their wastes polluting environment	Amending	SEPA
	Rules on the operation Administration of the electric equipments including PCBs	Amending	SEPA
	Measures on the Environmental Administration of Polluted Sites	Study	SEPA
	Rules on the Administration of Operation Licenses for Hazardous Wastes	Study	SEPA

	Rules on the Administration of the Import and Export of Solid Wastes	Study	SEPA
	Measures on Assessment of Damage of Environmental Pollution	Study	SEPA
	Measures on Compensation and Payment of Damage of Transboundary Environmental Pollution	Study	SEPA
	Administrative Regulations on POPs Reduction and Control	Making	Provincial congress
Tier 3: Technical policies, guidelines, and standards	Guiding Catalogue for Adjustment of Industrial Structure	Amending	NDRC
	Catalogue of Names of Hazardous Goods	Amending	SEPA
	Catalogue of Hazardous Chemicals	Amending	SEPA
	Guideline of Environment Impact Assessment Technologies of Construction Projects – General	Amending	SEPA
	Ambient Air Quality Standard(GB3095-1996)	Amending	SEPA
	Environmental Quality Standard for Surface Water (GB3838-2002)	Amending	SEPA
	Environmental Quality Standard for Ground Water (GB/T14848-93)	Amending	SEPA
	Standards for Irrigation Water Quality (GB5084-92)	Amending	SEPA
	Environmental Quality Standard for Soils (GB 15618-1995)	Amending	SEPA
	Water Quality Standard for Fisheries (GB 11607-89)	Amending	SEPA
	Sea Water Quality Standard GB3097-1997)	Amending	SEPA
	Air and Exhaust Air –PCDD/Fs Measurement	making	SEPA
	Isotope Dilution/ HR Gas Chromatography- HD Mass Spectrum Method	making	SEPA
	Air and Exhaust Air – PCDD/Fs Measurement Biology Screening Method	making	SEPA
	Water Quality- PCDD/Fs Measurement	making	SEPA
	Isotope Dilution/ HR Gas Chromatography- HD Mass Spectrum Method	making	SEPA
	Water Quality - PCDD/Fs Measurement Biology Screening Method	making	SEPA
	Soil-Aggradations - PCDD/Fs Measurement	making	SEPA
	Isotope Dilution/ HR Gas Chromatography- HD Mass Spectrum Method	making	SEPA
	Soil-Aggradations - PCDD/Fs Measurement Biology Screening Method	making	SEPA
	Solid Waste - PCDD/Fs Measurement	making	SEPA
	Isotope Dilution/ HR Gas Chromatography- HD Mass Spectrum Method	making	SEPA
	Solid Waste - PCDD/Fs Measurement Biology Screening Method	making	SEPA
	Cleaner Production Standards – Compulsory Cleaner Production Audit Procedure and Method	making	SEPA
	Cleaner Production Standards – Compulsory Cleaner Production Audit Assessment Method	making	SEPA

	General Design Rules of Gaseous Contamination Control Engineering- Catalysis Method	making	SEPA
	General Design Rules of Particulate Contamination Control Engineering	making	SEPA
	General Design Rules of Gaseous Contamination Control Engineering	making	SEPA
	Design Rules of Gaseous Contamination	making	SEPA
	Control Engineering-Absorption Method	making	SEPA
	General Design Rules of Bag-type Dust Removing Engineering	making	SEPA
	Design Rules of Gaseous Contamination Control Engineering- Adsorption Method	making	SEPA
	Guideline of Planning Environment Impact Assessment Technologies –Industry	making	SEPA

NPC: National People's Congress
SC: State Council

94. The project focuses on the three tiers of legislation: i) Tier 1: laws and administrative regulations that can be established or revised only by the National People's Congress, the Standing Committee of the National People's Congress, or the State Council, ii) Tier 2: administrative rules and provincial regulations that can be established or revised by ministries and provincial congresses, and iii) Tier 3: technical policies, guidelines, standards, and catalogues that can be established or revised by ministries. For Tier 1, recommendations for relevant revisions or establishment will be provided by this project. For Tier 2, most of the legislative pieces will be enacted. All the technical policies, standards, guidelines and catalogues listed in Tier 3 will be issued.

Activities for Output 1

Activity 1.1 Provide suggestions to the establishment or amendment of the laws and regulations related to POPs. 21 laws/regulations and 11 administrative rules in Tier 1 and 2 are to be focused;

Activity 1.2 Draft *National Administrative Rules on POPs Reduction and Control* of Tier 2 to comprehensively govern the POPs production, distribution, use, import and export, waste, stockpiles and contaminated site, taking into account the experience and results from Activity 1.5;

Activity 1.3 Incorporate Convention requirements defined in NIP into the first 3 technical policies of Tier 3;

Activity 1.4 Develop or revise the 30 technical policies, guidelines, standards of Tier 3 by the time defined in the NIP in order to establish the standards system regarding POPs management in terms of environmental quality, product quality, pollutant emission, and cleaner production;

Activity 1.5 Promulgate and bring into effect the *Provincial Administrative Regulations on POPs Reduction and Control* to strengthen the provincial legislation regarding the Convention and NIP implementation in three demonstration provinces and disseminate the experience for replication in other provinces.

Output 2. Strategy development for co-financing

95. According to the NIP, China will need about US$ 4.3 million in total to accomplish the identified actions in the 10 years to come (2006-2015). It can be seen from Table 3 that most of the fund is needed for actions on UPOPs. According to the NIP, one-fourth of the fund will be needed to demonstrate the adoption of BAT/BEP before 2010 and much larger amount of the fund for widespread replication afterwards.

Table 3: Estimated fund needs for NIP implementation

NIP components	Estimated cost (1,000 RMB)	Estimated cost (1,000 US$)	Percentage (%)
Capacity building	432,400	55,436	1.28
Pesticide POPs and PCBs	1,185,811	152,027	3.50
UP-POPs	28,312,210	3,629,771	83.48
Stockpile and wastes	2,365,278	303,241	6.97
Research & Development	1,617,404	207,359	4.77
Total	**33,913,103**	**4,347,834**	**100.00**

96. Apparently, the earmarked US$ 282 million to the focal area of POPs in GEF-4 (2007-2010) is far from being sufficient to support China, the largest developing country, to implement the NIP. Therefore, to study on the establishment of a viable co-financing mechanism is of both urgency and importance on the agenda, which hopefully can mitigate the significant gap in funding. To that end, the mechanism to channel the needed fund from multilateral and bilateral sources, central and local governments, enterprises and the public will be studied by this project.

Activities for Output 2

Activity 2.1 Identify the principal stakeholders including central and local governments, enterprises, international communities and the public;

Activity 2.2 Determine the principles and mechanism for responsibility sharing among the stakeholders for different types of activities, e.g. non-profitable and profitable activities;

Activity 2.3 Explore public-private partnerships to involve private sectors and introduce competitions in investing and operating POPs reduction and control projects and study the economic and financial policies that will ensure the reasonable rate of return of the investments;

Activity 2.4 Develop the strategy on financing mechanism for China to implement the Convention and NIP;

Activity 2.5 Hold fund raising workshops by inviting key stakeholders at home and abroad, including related ministries, multi-lateral organizations, bilateral countries, financial institutions, private sectors and the public;

Activity 2.6 Implement the strategy in one of the demonstration provinces to channel sufficient co-financing from multiple sources and improve the fund using efficiency in implementing POPs reduction and control activities;

Outcome 2: Strengthened institutions for more efficient implementation of the Stockholm Convention and NIP

97. Outcome 2 will establish and strengthen the following institutional capacities, which will bring about more and wider participation and coordination among stakeholders, adoption of harmonized approaches and operations in environment protection programs, plans, and projects to obtain both national and international benefits and improved institutional management relevant to Stockholm Convention compliance.

- **Monitoring:** Human resources will be developed through intensive trainings. Management systems will be strengthened to enable existing national monitoring facilities to properly perform its monitoring functions.

- **Research and Development:** Cooperation among ministries and principal funding sources relevant to R&D programs will be improved so as to allow them to be more effective in communication and coordination in addressing POPs related issues. A GEF supported tracking and incentive mechanism to mainstream NIP requirements into national R&D programs will be developed so that the national and global benefits can be achieved simultaneously.

- **Technology transfer**. A technology transfer center to strengthen linkages among research bodies, enterprises and government agencies to address POPs issues will be established.

- **Data and information collection:** Data and information collection mechanism will be established and strengthened to meet the requirements of Stockholm Convention and Conference of Parties (COP) as well as support decision-making.

- **Enforcement of policy and regulations at national and local levels** via strengthening organization, coordination and management, and mainstreaming the requirements of the Convention and the NIP implementation in the existing environment protection instruments and practices.

- **Evaluation:** Establishing evaluation-oriented institutional capacity to meet the Convention requirements for performance appraisal and allowing for continuous improvement in the NIP implementation.

Output 3. Environmental monitoring

Activities for Output 3

Activity 3.1 Develop a unified monitoring program for monitoring of POPs in environmental and human samples for Effectiveness Evaluation in line with Article 16 of the Convention;

Activity 3.2 Organize national training on monitoring of pesticide POPs and PCBs in environmental samples for the provincial environmental monitoring stations and 3 such trainings for the municipal and county environmental monitoring stations in the 3 demonstration provinces;

Activity 3.3 Organize training for the existing dioxins monitoring laboratories on pre-treatment and monitoring of dioxins in sources and environmental and human samples;

Activity 3.4 Organize a national training on monitoring of pesticide POPs and PCBs in human samples for the Center for Disease Control and Prevention (CDC) laboratories in each province and 3 such trainings for the municipal and county laboratories of CDC in 3 demonstration provinces;

Activity 3.5 Organize inter-laboratory comparisons and calibrations with the participation from all the trained laboratories;

Output 4. Research and Development

Activities for Output 4

Activity 4.1 Establish the coordination mechanism between CIO/SEPA and the main R&D financial sources such as MOST, NSFC, MOE so as to incorporate the 10 priority topics for R & D defined in NIP into the Application Guidelines of main resources for R&D during the period of 11th Five Year Program;

Activity 4.2 Regularly evaluate the progress of national R&D activities related to POPs and their contributions to the Convention implementation;

Activity 4.3 Establish an incentive program for promoting R&D results that can effectively and efficiently support the Convention implementation,;

Activity 4.4 Promote the exchange and communication of R&D progresses between the international and national academia.

Output 5. Technology transfer

Activities for Output 5

Activity 5.1 Establish a assistance-oriented Technology Transfer Promotion Center for the Convention Implementation (TTPC) to promote accessibility to the needed technologies by the Chinese enterprises;

Activity 5.2 Enable the center to work as a technology information clearinghouse: to survey the technological status and demands of the enterprises in China and to provide the potential users with the information on commercially viable international and domestic technologies;

Activity 5.3 Provide enterprises with assistance in optimizing the technical and engineering design to meet the requirements of the Convention including training of enterprises to adopt BAT/BEP in key sectors of UPOPs releases;

Activity 5.4 Establish a technological coordination and cooperation platform with the participation of international organizations, relevant governmental agencies, technology vendors, industry associations and enterprises to promote introduction and transfer of technologies from the technology suppliers to demanders;

Activity 5.5 Evaluate the barriers in technology transfer and propose the instruments to remove the barriers for continuous improvement of the TTPC performance.

Output 6. Institutional strengthening for data collection, processing and reporting

98. According to the requirements of the Convention and its COPs, POPs data should be collected and processed to meet the reporting requirements. Parties shall:

- Pursuant to Article 15, report to the Conference of the Parties on the measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention;
- Pursuant to para 2, Article 16, provide comparable monitoring data on the presence of the chemicals listed in Annexes A, B and C of the Convention as well as their regional and global environmental transport;

- Pursuant to para (g) of Part II in Annex A and adhering to the requirement and format issued by COP1 for PCBs reporting, transmit every 5 years a progress report on PCBs elimination;
- Pursuant to para 4 of Part II in Annex B and adhering to the requirement and format decided and issued by the Conference of the Parties in consultation with the World Health Organization (WHO), provide every three years to the Secretariat and the WHO information on the amount used, the conditions of such use and its relevance to that Party's disease management strategy.

99. In addition to the Convention requirements, the NIP has also identified the capacity building for information management as a priority action. Detailed planning was made in Action 39, Action 54, Action 55, Action 57, Component 12, Component 14, and Component 15 for:

- Establishing a dynamic monitoring and data reporting mechanism for the release sources in key sectors by 2015;
- Improving the dynamic database system for stockpiles and wastes; and
- Establishing a dioxin contained waste declaration and registration system by 2015;

100. During the development of the NIP, the CIO has established the POPs information center for managing the information system of projects. The POPs management information system (POPs MIS) is made up of a three-tier network system including an internal platform for supporting decision making, a collaborative platform for information exchange and an internet website for information dissemination.

101. However, the POPs MIS has not been made fully functional to meet the POPs data collection, processing and reporting mainly due to the lack of a feasible and effective information collection mechanism among relevant ministries and industry associations, staff shortage at the CIO, and low awareness and capacity for POPs information collection and reporting at local levels. These constraints will be addressed in the proposed project.

Activities for Output 6

Activity 6.1 Identify the needs of information required by the Convention Secretariat, COPs, relevant international organizations and domestic agencies and develop the guidelines for information collection, analysis and dissemination;

Activity 6.2 Strengthen the integration of the information collected by the on-going regular projects and projects under planning into the POPs MIS;

Activity 6.3 Establish information collection channels for the chemicals included in Annex A and B of the Convention by POPs type mainly through the ministries and industry associations as defined in the NIP;

Activity 6.4 Establish and implement the procedures for information collection on UPOPs included in Annex C of the Convention based on the current Pollutants Discharge Reporting and Registration System in demonstration provinces;

Activity 6.5 Analyze and disseminate information mainly through the website of the POPs information center.

Output 7. Institutional strengthening for decision making and legislation enforcement

102. To ensure that the Convention is implemented and its obligations met, China has set up a high-level intra-ministerial National Coordination Group (NCG) chaired by SEPA and consisting of other 10 related ministries and a Stockholm CIO within SEPA. This NCG will be supported to

make more scientific decisions and effective coordination by 3 advisory boards to be established in the fields of policy, technical and scientific researches. In order to successfully achieve the objectives of the NIP and sustainably undertake POPs reduction and control, POPs issues must be first incorporated into the legislative framework. A wide array of stakeholders must be mobilized to strengthen the enforcement of the legislation, particularly at the local levels. Environmental protection departments at all levels and many national centers promoting environmental management, environmental impact assessment and cleaner production should incorporate POPs issues into their working agenda and be equipped with necessary capacity to carry out the new tasks. Other relevant departments should be trained to be aware and responding to POPs issues within their administrative domains. The public and civil society should be instigated to play a supervisory role. Under external supervisions, the enterprises should be instructed to exercise self-disciplined practices and adopt cleaner production to improve their environmental image and product competitiveness.

Activities for Output 7

Activity 7.1 Strengthen the coordination of NCG and support its decision-making on important events by establishing the national advisory boards; and build up the CIO with needed infrastructure and trained human resources for efficient and effective implementation of NIP;

Activity 7.2 Establish a Local Convention Implementation Unit and develop a provincial implementation plan (PIP) in each of the 3 demonstration provinces based on the experience derived from the NIP development;

Activity 7.3 Develop training materials and conduct training for the environmental protection departments at the central, regional, and local levels and for the national technical management centers in charge of EIA and cleaner production promotion;

Activity 7.4 Launch joint inspections with relevant departments to inspect the compliance of the key POPs producing and releasing enterprises;

Activity 7.5 Instigate NGOs, third-party environmental certificating and auditing institutions, and individuals to supervise POPs management within their respective areas of interests;

Activity 7.6 Establish and strengthen self-policing and supervision by training internal environmental supervisors in selected demonstration enterprises to conduct internal environmental supervision within enterprises and interact with CIO.

Output 8. Institutional strengthening for evaluation and follow-up

103. The Convention states that commencing four years after the date of entry into force and periodically thereafter at intervals to be decided by the Conference of Parties, the COP shall evaluate the effectiveness of this Convention.

104. Meanwhile, China needs the findings, conclusion or recommendations of evaluations to judge the performance of NIP programs, facilitate improvements, generate knowledge and support decision-making. By undertaking evaluation, the CIO and other participants can make changes in procedures and practices. Such participatory evaluations can help to enhance shared understanding and communications among stakeholders, support and reinforce the NIP program intervention, increase engagement, self determination and ownership, nurture an evaluation culture within the CIO and other related organizations.

Activities for Output 8

Activity 8.1 Establish a working team for evaluation led by CIO and composed of the representatives from advisory committees, governments, industry associations, enterprises and the public

Activity 8.2 Train the evaluation staff on the requirements of the Convention and develop capacity for qualified evaluation reports, make recommendations for proper administrative adjustments, update the strategies and action plans and generate experience and knowledge for dissemination;

Activity 8.3 Evaluate the results and impacts of the NIP implementation by conducting all the evaluations outlined in the NIP, taking into account the guidance from the Convention for effectiveness evaluation:

- Monitor and evaluate, in terms of output delivery, the overall progress of various implementing stakeholders
- Evaluate the results and impacts from implementation of action plans on pesticide POPs, PCB, UPOPs and strategy on stockpile, wastes and contaminated sites;
- Conduct the comprehensive evaluation of the effects of the NIP implementation by integrating the above evaluation results.

Activity 8.4 Further assess the capacity needs for the Convention implementation, focusing on the industries and provinces;

Activity 8.5 Hold a workshop to discuss and disseminate the evaluation findings to international and domestic stakeholders and widely disseminate the results through various forms of media including Internet, publications, CDs and brochures.

Outcome 3: Changed attitudes and behaviors to promote environmental protection

105. POPs related public awareness would be improved through an awareness raising campaign and other public education activities, such as:

- Preparation of materials on POPs environmental damage;
- Motivating media channels to disseminate POPs information; and
- Working with relevant ministries for integrating POPs topics into existing education and training systems.

Output 9. Public awareness

106. Public awareness needs to be addressed through:

- **Awareness raising:** Present gaps include absence of popular materials/media containing information about POPs, no related content in existing programmes of environmental protection dissemination and education and insufficient participation of relevant organizations.
- **Making information accessible:** The judgement should be based on facts. These must be collected from research results, evaluated and organised and transformed into accessible information via different routes: websites, educational and informational printed matter, broadcasts, etc. Since there is still a lack of data, and many data are very uncertain, these shortcomings should also be clearly communicated.
- **Creating opportunities for participation:** Individuals may not restrict their decisions to concern protection measures for themselves as individuals. They may also wish to influence the decisions of others, such as industries or legislators. Present gaps include a very weak tradition of public participation and lack of channels for such participation.

Activities for Output 9

Activity 9.1 Establish a platform for effective POPs information distribution by mobilizing various

news media, including TV, radio, newspaper and Internet;

Activity 9.2 Establish partnerships with environmental protection promotion programs, campaigns, NGOs, community based organizations (CBOs), academia and schools as vehicles for raising public awareness of POPs issues;

Activity 9.3 Prepare materials including popular readings, TV programs, movies, brochures, posters, etc. for raising public awareness of POPs issues;

Activity 9.4 Distribute POPs information and publicity materials that take advantages of the established platform and partnerships;

Activity 9.5 Implement a special program for public awareness promotion to prepare peasant tailored materials and avail POPs information to rural areas using special distribution channels such as mobile minibuses mobilizing NGO volunteers.

Output 10. Education

107. According to the Convention, the targeted groups for educations should mainly include:
   1. Managerial personnel, e.g. government officers;
   2. Technical personnel, e.g. scientists, engineers, workers;
   3. Educators and students.

108. Based on the current environmental education and communication network, the following activities are designed to establish a POPs education system.

Activities for Output 10

Activity 10.1 Study the related education curriculum to identify gaps in meeting the requirements of the Convention and develop proposals to relevant agencies to modify the related curriculum;

Activity 10.2 Prepare textbook and training materials and train at least 1 teacher or researcher of environmental studies from each of the 100 universities, colleagues and research institutes to enable them to impart POPs knowledge to students;

Activity 10.3 Prepare textbook and training materials and train at least 1 teacher from each of the 300 middle schools and primary schools to enable them to popularize POPs knowledge to students;

Activity 10.4 Carry out demonstrations of POPs education in selected universities, middle schools and primary schools; evaluate the experience derived from the demonstration in order to make improvements on the POPs education system;

Activity 10.5 Design and implement an on-line POPs education program involving high-quality teachers organized by the CIO and university students attending the program with approval by their schools;

Activity 10.6 Organize training workshops for mayors of cities.

Outcome 4: Project management and oversight

109. A project management and oversight component is designed to provide effective and efficient management support for the implementation of the project.

110. In order to strengthen the harmonization with and coordination between the implementation of the seventeen action plans and the action plans defined in the NIP, activities under this Outcome will support the operation of the national coordination mechanism and extend the operation of the Technical Coordination Group (TCG) established for NIP development.

Output 11. Project management, monitoring & evaluation

111. China has established the NCG for the Convention implementation, chaired by SEPA and comprising of 11 ministries and state administrations, to ensure that actions required for the Convention implementation could be taken and coordinated at the highest levels. The group will continue its roles to coordinate and ensure that those discrete NIP activities including review, reporting, evaluation and updating of the NIP could be efficiently and coherently undertaken in time.

112. At international level, SEPA will continue to convene TCG meetings at the milestone stages of NIP implementation. The TCG has provided active inputs and contributions in the stage of NIP development, and will continue its roles in reviewing and commenting on the outputs, providing guidance at macro-level, helping disseminate findings and achievements and assisting in financing raising for the implementation of the NIP related action plans and activities.

113. Besides a normally established structure for project management, monitoring and evaluation, the project will support the continuous operation of the national and international coordination mechanisms mentioned above for the effective and efficient implementation of NIP.

Activities for Output 11

Activity 11.1 Establish the national project management office (PMO) for the project to be in charge of the management, implementation and coordination of the project activities under the guidance of the CIO; recruit a National Project Manager (NPM) to be responsible for the day-today project management; and recruit supporting staff for the manager;

Activity 11.2 Establish 3 local project implementation units (PIU) in three demonstration provinces to coordinate and organize trainings, awareness raising and inspections, supervise the project implementation at local level, and collect information and compile progress reports;

Activity 11.3 Establish a Project Coordination Group (PCG) to provide guidance to the project at the macro-level, review and comment upon project outputs, and help disseminate project findings and outputs;

Activity 11.4 Recruit and sustain employment of national experts and subcontractors as necessary to deliver project outputs;

Activity 11.5 Prepare, in consultation with relevant responsible ministries or administrations as well as international and bilateral agencies involved, annual implementation plans, progress reports and evaluation plans, and present to the Leading Group of SEPA and the NCG;

Activity 11.6 Prepare and hold meetings of the TCG, to introduce the plans and progress of each action plan for comments and recommendations and mobilize the broadest participation and support for the implementation of the work plans;

Activity 11.7 Designate a project focal point within UNIDO to provide project management and coordination; recruit international experts and provide technical advice and other services as necessary to assist SEPA;

Activity 11.8 Conduct Project Implementation Reviews;

Activity 11.9 Provide independent management and financial reviews and undertake a final project evaluation according to GEF M & E procedures at the end of the project.

4. RISKS, SUSTAINABILITY AND COMMITMENT

4.1 Possible Risks

114. Potential risks and the mitigation measures to be taken into account for this project are described in the following table.

Table 4: Potential risks and mitigation measures

Potential Risks	Proposed Mitigation Measures	Rating
Enduring and effective cooperation between concerned agencies at all levels of government is unable to be achieved for the implementation of the project.	This risk is addressed by involving all stakeholders through national and local leading groups and coordination offices. It will also involve training and workshops aimed at increasing awareness of the need for cross-sectoral cooperation and the improved mechanisms required to achieve it. The coordinating role of the Steering Committee and SEPA will facilitate cooperation and provincial government should have expressed commitment to the program, an important factor in facilitating local-level cooperation. As the project evolves, additional mechanisms for improved coordination will be explored. Local leaders will be targeted for training and awareness building under the project.	Low
Possible delays in development and implementation of anti-POPs related policies and standards,	Broad consultations with relevant stakeholder was made during the NIP development and it is assumed that related administrations have kept the requirements of the Convention in mind for the establishment and modification of relevant policies and standards defined in NIP. Furthermore, in the proposed project, some activities have been designed to push the administrations to fit POPs requirements into their schedules, such as the meetings of the NC G to ensure adequate follow-up actions, various trainings and consultation meetings to keep the administrations informed about the updated and detailed requirements.	Low
Lack of ability to develop appropriate arrangements to attract national and international private investment or secure support for the development and implementation of public/private partnerships.	This risk is addressed through support of a study for co-financing the NIP implementation. Furthermore, the project will support the development and implementation of a technology transfer promotion center to inform the private sector and NGOs of opportunities and to encourage their support.	Low
Difficulties of securing access to different sources of information within the public administration and private enterprises	During the project implementation, a systemic plan for institutional strengthening for data collection, processing and reporting will be implemented; corresponding training and public awareness have been designed to support the implementation of this plan.	Modest
The possibility of inadequate and ineffective stakeholder participation	The implementation of this project requires the willing participation of a broad range of stakeholders. During NIP development, a wide partnership on POPs was established through the participation of the TCG meeting. This project will continue to support the partnership mechanism in order to mobilize the widest stakeholder participation.	Modest

Weak coordination and harmonization of the project with other capacity building activities that will be undertaken by other on-going or potential projects	All POPs projects are and will continue to be supervised by the CIO, which will ensure regular communications and timely information exchange among project owners, implementers and stakeholders. Furthermore, the consultation mechanism initiated by the project among international and national stakeholders will avoid overlapping capacity building activities among and between the on-going and potential projects.	Low
Low availability of or weak accessibility to cost effective pesticide alternatives, PCB and waste disposal technologies, BAT/BEP	China is calling for economic restructuring, promotion of circular economy, and establishment of innovation-oriented country. Opportunities exist where POPs concern could be integrated into programs for national environmental protection and scientific and technology development. The project has also designed the R&D tracking system and technology transfer promotion centre to encourage the integrated activities. More specific technological issues will be addressed by other individual projects instead of this proposed project.	Modest
Government may not sustain its commitment to harmonize programs and budgets.	The project has designed activities to gain strong social support through awareness raising campaign and widespread education. Training and awareness raising will also specially target those trainees from media, national and local congress and social elites.	Modest
Insufficient project management capacities might lead to delays or restrict the achievement of full benefits of the project	A well defined project management system will be followed including: establishment and chair of a Project Steering Group, selection of skilled individuals, implementation of a well-defined monitoring system and close supervision of UNIDO, in order to ensure effective and timely delivery of the proposed outputs.	Modest
Overall risk rating		Modest

4.2 Sustainability, Replicability and Commitment

Sustainability

115. Sustainability implies not only the commitment of China and its development of a NIP that provides initiatives to mainstream the objectives of the Convention into the nation's broader development policies and strategies, but also its initiation on the basic and foundational capacity building that are intended to be permanent and will be able to ensure that China moves successfully from development to the subsequent implementation of its plan.

116. The project aims to establish basic, foundational and permanent capacities in the view of the obligations of the Convention to be implemented by 2010 nationwide and test the advanced approaches in the focal provinces. Project sustainability will be assured through a combination of the following: integration of the requirements of the Convention into the policy framework, active participation of stakeholders, institutional strengthening of the capacity for enforcement, establishment and/or strengthening of the capacity in the fields of monitoring, R&D, technology transfer, management information system and reporting, raising awareness among various stakeholders. It is expected that sustainability would be reached, characterised by the following:

- The obligations under the Convention are integrated into the existing environmental and chemicals management polices, national standards and guidelines accordingly;
- Enforcement capacities are strengthened and the requirements on management, inspection and supervision of POPs issues are taken into the routine tasks by relevant administrations.

- Relevant stakeholders are getting acquainted with the obligations of the Convention and are willing to take actions as required through various trainings;
- The established mechanism between CIO/SEPA and the main R&D financial sources for the purpose that the priority of the POPs R&D may be taken into consideration as the priority field of support;
- The foundational capacity for monitoring in the view of POPs established through improving the relevant methodologies for monitoring, strengthening the monitoring management and the capacity of existing monitoring and laboratories and taking measures in order to get comparable and reliable monitoring data.
- A permanent platform established for technology transfer promotion;
- The information collection channels established for the chemicals listed in Annex A and B of the Convention;
- MIS in central level improved;
- POPs concept are integrated in the education at all levels from kindergarten to university, including in education of teachers
- POPs issues come up from time to time in the public debate and participants from research, labour, industry and public interest have good access to knowledge to participate well in the debate
- There is an active interplay with transfer of knowledge between the central level and provinces, regions and municipalities.
- There is, as far as practicable, interplay between the capacity building for POPs with capacity building for other environmental issues and for the nation's broader development policies and strategies.
- During the fourth year of this project, a manual on POPs Management and Control will be compiled to integrate the relevant policy, experiences and lessons gained during the implementation of this project, and the experiences and lessons learned will be summarized and disseminated to other areas in China and other countries pending such experiences through a dissemination workshop and POPs website.

117. Nevertheless, it is recognized that capacity building and institutional strengthening proposed in this project could not cover all the scope of the capacity due to the complication of the measures on POPs control and the consequent development of the obligation under the Convention. For this reason, this project will help to develop and invite donor support for a proposal for the future capacity building capacity building programme, which will be based on the experiences gained and the broadened obligations in order to enable China to meet the obligations of the Convention continuously. It will assure the sustainability and continuous employment of locally recruited project personnel to take care of their post-project employment. They will continue their respective activities focusing on country-wide replication of project results and the Government will give commitment to keep them on payroll. With such an arrangement important institutional structures will also be sustainable.

Replicability

118. The project is attempting to improve the policy systems related chemicals and pesticides with the requirements of POPs in mind. Meanwhile, it will strengthen the enforcement and implementation capacity at various levels. The approach and outputs achieved will be appropriate to replicate for the management and control for other harmful chemicals and pesticides.

119. The Government is strongly committed to move ahead with replication as the existing policy and regulatory framework for POPs is incomplete and does not allow the effective and

efficient implementation of the Stockholm Convention's obligations. The first step in this direction would be the development and formulation of the new *National Administrative Regulations on POPs Reduction and Control* that will be based on the gap analysis of Chinese legislation made during the NIP preparation and will be carried out through this project.

120. This project is designed to enable China to establish the basic and foundational capacity for the Convention implementation and to test the advanced approaches at the 3 demonstration provinces in order to further strengthen the systemic enforcement and/or implementation capacity of the provincial level. The feasible experiences gained in the focal provinces would be disseminated which would eventually benefit other provinces of China.

121. The first stage of this program is designed from 2007-2010. In some aspects it sets out to test capacity building approaches for selected provinces and sectors. This is will be followed later by a stage where the modified approaches are replicated in all provinces and sectors.

122. The proposed project will be attempting to establish the pertinent capacity with regard to all the categories of POPs, including intentionally produced POPs, unintentionally produced POPs, POPs wastes and contaminate sites. In addition to introducing the actions, achievements and progress in the website as an important delivery of this project, a manual on POPs management and control will be compiled to integrated the policies and the experiences gained. A dissemination workshop is planned to introduce the experiences gained to the interested stakeholders and the participants from other countries, with a view to promoting the replication of the experiences with suitable modification to other countries.

123. Furthermore, the effective approaches to implement such project with multi-level objectives, broad stakeholder participation will be a good example for similar project implementation, especially, for the implementation of the further capacity project.

Commitment

Commitment of China

124. China has given high priority to the Stockholm Convention. It signed the Convention on the date when it opened for signature and completed the ratification procedures on 13 August 2004. China devoted large resources and solicited great international support to develop a National Implementation Plan (NIP) to be transmitted to the Secretariat of the Stockholm Convention in November 2006. China is committed to implement the Stockholm Convention and has started to develop and implement many priority demonstrations and a few capacity building projects with the financial support of GEF, and several bilateral donors such as Canada, Italy, Japan, Switzerland, the United States and others.

125. In order to effectively coordinate and guide the tasks with regard to the implementation of the Convention, a high-level National Coordination Group, which comprises of 11 relevant ministries/administrations, has been established in May 2005; a Convention Implementation Office was set up in SEPA with the specific responsibilities for the routine management with regard to the implementation of the Convention. A broad partnership for POPs management and control has been established and has provided strong support in the process of NIP development and the initiation of related activities.

Commitment of UNIDO

126. UNIDO is committed to assisting its developing country Member States in accordance with the Stockholm Convention. The GEF has approved Enabling Activities proposals submitted by UNIDO for more that 40 countries, including China and India that have opted to undertake NIP development via the GEF full project cycle. In addition, UNIDO is executing or

developing a range of demonstration and capacity building projects geared to support Convention implementation. UNIDO has made considerable effort to build this assistance programme. This commitment is based on a clear understanding that these activities are compatible with UNIDO's mandate and corporate strategy and will lead towards the Millennium Development Goals.

127. China is UNIDO's largest recipient of technical cooperation assistance. Activities undertaken in China by UNIDO include a range of measures related to investment, industrial efficiency and waste management. The experience gained in these projects will be of relevance in the proposed project in China. UNIDO's in-kind contribution to the project will comprise the establishment of a project focal point and the provision of the part-time assistance of senior staff within its Multilateral Environmental Agreements Branch to ensure the effective implementation of the project and to support project implementation. Likewise a dedicated staff will provide project support in UNIDO Office, Beijing.

128. In addition, UNIDO will continue to seek co-financing or associated financing for activities that further the objectives of the project and of implementation of the Stockholm Convention in China. More specifically, UNIDO co-financing to this project will contribute by assigning additional 2 more senior UNIDO staff and one junior UNIDO staff to the Beijing office to support project implementation.

5. STAKEHOLDER PARTICIPATION AND PROJECT IMPLEMENTATION/ INSTITUTIONAL FRAMEWORK/NATIONAL/REGIONAL INSTITUTIONS

5.1 Stakeholder Participation

129. The most concerned ministries and intergovernmental organisations have already been strongly involved in the development of the NIP and preparation of this Project Brief. A broad partnership has been established with the members from the ministries and administrations of the N CG of China, relevant international organizations including UNIDO, the World Bank, UNDP, UNEP, UNITAR, the bilateral governmental agencies from Germany, Italy, Japan, Norway, USA and others, relevant industrial associations, representative enterprises, interested institutes and universities together with other members of the donor community and development partners. In addition to funding support, the members of the partnership also provided assistance in reviewing and commenting upon project outputs, guiding NIP development at the macro-level and in disseminating project findings and outputs. It is intended that this partnership will continue and be extended in order to facilitate engagement with appropriate actors at key stages.

130. The capacity building program will at an early stage contain activities directed to addressing awareness raising, information and participation for an audience of all planning teams. This will help identify other concerned stakeholders representing the private sector, academia, workers and public interest for the respective activities that should be invited to participate in their implementation. Provinces and local administrations will mainly be represented in the legislative capacity building and the specific demonstration activities in selected provinces.

131. The responsibilities of other stakeholders will have to be delineated case by case during the above-mentioned activities on awareness promotion, information and participation. The table below gives an initial list of stakeholders and their means of involvement and participation to the proposed project.

Table 5: Involvement and participation of stakeholders

Output	Stakeholders	Means of involvement and participation
Output 1: Policy and regulatory framework	Relevant ministries in NCG, local government departments, industrial associations, enterprises and publics	Law making, and participating in seminars and hearing
Output 2: Mechanisms and tools for financing	SEPA, NDRC, MOF, local government departments, industrial associations, enterprises, investment banks, international organizations and potential cooperation countries.	Participating in thematic seminars
Output 3: Environmental monitoring (Knowledge basis)	SEPA, MOH, local government departments, monitoring stations or laboratories, enterprises, and international authorized labs	Participating in training workshops and monitoring activities
Output 4: Research and Development (knowledge basis)	SEPA, MOST, NSFC, MOE, research institutions, industrial associations, enterprises, international research organizations	Participating in seminars or forums, and undertaking subcontracts
Output 5: Technology transfer (Knowledge basis)	SEPA, TTPC, CIO, industrial associations, enterprises, consultant agencies, and international technology transfer organizations	Undertaking subcontracts, participating in training workshops and seminars.

Output	Stakeholders	Means of involvement and participation
Output 6: Institutional strengthening for decision making and legislation enforcement	NCG, CIO, local government departments, national advisory committee, enforcement and inspections departments, enterprises, NGOs and publics	Participating in coordination and decision-making meetings, undertaking subcontracts, participating in campaigns of enforcement and inspections, and lawsuit activities
Output 7: Data collection, processing and reporting	Relevant ministries in NCG, CIO, POPs information center, local government departments, consultant agencies, industrial associations, enterprises, and international organizations	Undertaking subcontracts and participating in training workshops
Output 8: Evaluations and follow-up	Relevant ministries in NCG, CIO, consultant agencies, industrial associations, enterprises, and international organizations	Participating in training workshops and undertaking subcontracts
Output 9: Public awareness	CIO, consultant agencies, media, community based organizations, NGOs, and public	Undertaking subcontracts and participating in public awareness raising activities
Output 10: Education	CIO, MOE, universities, colleges, research institutes, schools, and POPs management related officers	Undertaking subcontracts and participating in seminars and education activities
Output 11: Project management, monitoring and evaluation	CIO, PMO, Experts hired and Contractors, the members of TCG	CIO and PMO will manage and supervise the implementation of the project; Experts hired and Contractors will undertake their contracts Members of TCG will provide inputs by participate in the TCG meetings

5.2 Project Implementation Arrangement

132. SEPA, as the National Implementing Agency, is designated as the national leading agency and focal point of the implementation of the Convention. Within SEPA, a high-level Leading Group for Stockholm Convention, chaired by the Deputy Minister, will coordinate initiatives within its divisions and departments. CIO was formed to administer activities towards the implementation of the Stockholm Convention in China.

133. The Technical Coordination Group (TCG) chaired by SEPA and established during the NIP development will continue its functions for the implementation of this project. SEPA will establish independent peer review mechanisms at national level and commission independent international reviews at key milestones.

134. SEPA/FECO, as the national executing agency has about 15 years experience in the development, implementation and managerial oversight of projects and programmes funded by various MEAs and their funding mechanisms, including the GEF. It has wide experience of collaboration with various Intergovernmental Organizations, bilateral donors and enterprises in China. It has acted successfully as the national executing agency for several GEF-funded projects in the POPs focal area and has currently established Convention implementation measures that are intended to be permanent.

135. Managerial responsibilities for the full project will be delegated to a Project Management Group (PMO) to be established within FECO/SEPA, and a National Project manager (NPM)

will be recruited for day-to-day project management. The project manager will be assisted by a specialist competent in project management. Three Local Convention Implementation Units (LCIUs) will be established under the guidance of the CIO.

136. PMO will manage all local elements of the programme including, for example, the recruitment and supervision of project managers for suitable groups of activities. It will cooperate with UNIDO in the procurement and delivery of project inputs and the organisation of project activities. The PMO will prepare periodic forward planning and progress reports through FECO to UNIDO and TCG. The PMO will provide periodic financial reports to UNIDO.

137. Three Local Convention Implementation Units (LCIUs) will be established to facilitate the project implementation at the local level. Their responsibilities include planning, coordinating and organizing trainings, awareness raising and inspections, supervising the project implementation at local level, and collecting information and compiling progress reports (Part 3.3.7). A special institution/center will be established to be responsible for technology transfer promotion (TTPC) (Part 3.3.5). Both the three LCIUs and the TTPC will be directly under the PMO to perform their work. This work will include, among others (i) developing a provincial implementation plan (PIP) under the guidance of the LCIU and CIO and in accordance with the NIP framework to help local agencies integrate POPs issues into their environmental protection activities; and (ii) exploring innovative co-financing mechanisms in the demonstration provinces for the implementation of the PIPs.

138. China invited UNIDO to act as GEF Executing Agency with Expanded Opportunities for the SIRE project implementation. UNIDO will assist SEPA through the provision of timely assistance at key phases, in the review of investigations and reports prepared as outcomes to the project, and in guiding FECO/SEPA in relation to the requirements of the Stockholm Convention and GEF procedures. UNIDO also has responsibility to the GEF for the overall management of the project and its funds. It will provide periodic progress and financial reports to the GEF, as required.

139. UNIDO will assist FECO/SEPA in the execution of the project by holding and disbursing funding necessary for the recruitment of international expert and other related international expenditures.

140. A project focal point will be established within UNIDO to assist in project execution. This focal point will comprise of a small, dedicated staff. It will also benefit from the part-time services of professional and support staff colleagues, in particular of senior staff engaged in the management and coordination of UNIDO's programme of support to the Stockholm Convention. UNIDO will make these services available as part of its in-kind contribution to the project.

141. UNITAR will assist UNIDO in the execution of the activities with regard to the training and public awareness raising, in line of the Memorandum of Understanding signed by these two organisations.

142. The proposed management structure for the full project is shown diagrammatically in Figure 3 below.

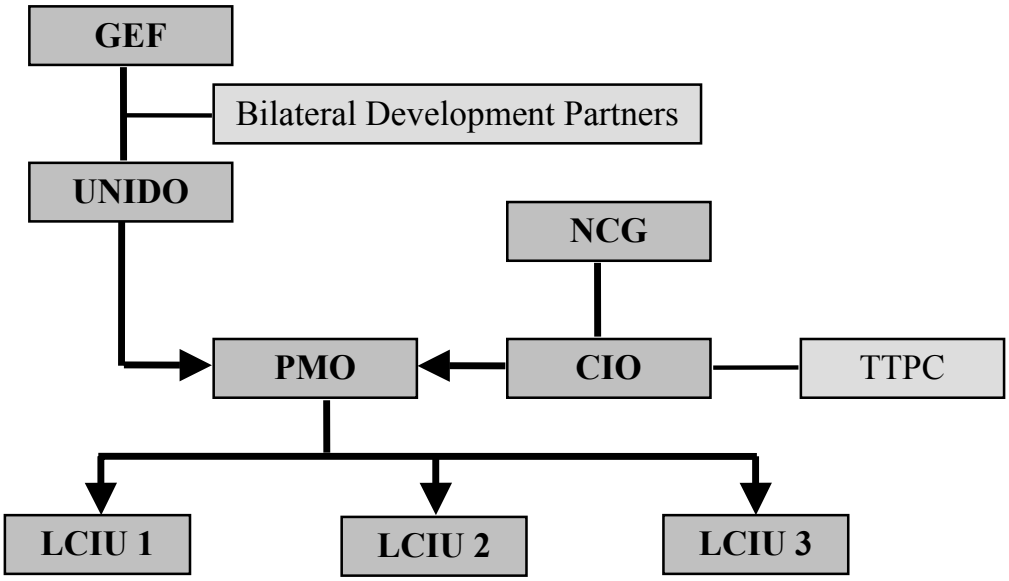


Fig. 3: Proposed Management Structure for the SIRE project

NCG: National Coordination Group for Implementation of the Stockholm Convention
CIO: Convention Implementation Office
PMO: Project Management Office
TTPC: Technology Transfer Promotion Center
LCIU: Local Convention Implementation Unit

Cost-effectiveness

143. This project focuses on the cross-cutting capacity building activities with regard to all categories of POPs obligated under the Convention. In general, such synergies can therefore be an effective way to ensure effectiveness and efficiency, and consequently, result in a significant cost-effectiveness.

144. Furthermore, the project aims to enhance China's implementation of the Convention. The increased implementation capacity would reduce the risk of implementation failure, reducing the cost of implementation in comparison with the baseline scenario.

145. As mentioned above under 4.1 Possible risks, there will be a large stress on project management capacity. Therefore an early and significant component will address Output 7 Institutional strengthening for decision-making and legislation enforcement. This is to emphasise the importance to both
- build capacity in general for effective and efficient management of the NIP implementation; and
- specifically strengthen the capacity for effective and efficient management of the project implementation.

6. INCREMENTAL COSTS AND PROJECT FINANCING

146. The GEF, as the financial mechanism for the Stockholm Convention will provide a proposed budget of US$ 5,410,000 incremental cost funding for the project. The Government of China will contribute a cash contribution of US$ 6,625,000 and in-kind contribution of US$ 1,500,000 from local Chinese NGOs (THU and RCEES). Italy has committed US$ 1,500,000 as cash and in-kind contribution to the project. UNIDO will provide US$ 200,000 as in-kind contribution for project management, monitoring and evaluation.

Baseline

147. Under the Baseline Scenario and absence of this project, China would face a significant shortage of capacities at various levels and would continue to encounter the existing barriers to cost-effective implementation of the Stockholm Convention, including:

- Lack of an enabling policy and regulatory environment
- Weak institutional capacity for planning, guiding and enforcement for the Convention compliance
- Weak monitoring capacity for POPs
- Lack of mechanisms for sustainable co-financing
- Lack of effective mechanism for orienting R&D toward the Convention implementation
- Lack of effective mechanism for technology transfer
- Under capacity of evaluation for continuous improvement
- Low awareness on POPs
- Unavailability of and limited access to information
- Lack of qualified human resources

148. It is recognized that some of the above barriers will be partially addressed to varying extents by thematic projects within their scope. However, due to the cross-cutting nature of these barriers and the limited scope of thematic projects, not one or combination of thematic projects can remove all of them to a full extent. Without this project, various mechanisms to integrate the sparse resources of the Convention implementation may not be able to be established, and some innovative practices that help to achieve the quality goals of the NIP effectively and efficiently may not be demonstrated first and replicated later.

Global Environmental Objective

149. Persistent Organic Pollutants (POPs) toxic chemicals that resist degradation, bio-accumulate and have the potential for long-range transport and therefore their exposure can harm human health and ecosystems at locations nearby the site from which they escape into the environment and also at very far distances from that site and can impact adversely on wildlife, aquatic and marine life, domestic animals and humans. Due to their unique properties, POPs do not respect national boundaries, and therefore pose a special kind of challenge that makes it impossible for any one-nation acting alone to remedy the problems and hence global action is warranted.

150. China is the largest developing country in the world with a population of 1,375 million in 2005. It is experiencing rapid industrialization (GDP has quadrupled since 1978) and is in the stage of transition into a market economy. These factors have brought heavy pressure to the

global and local protection of human health and the environment. Enabling China to comply with the obligations set out in the Stockholm Convention will have a significant and positive influence not only on China's own chemicals management regime but also on the ultimate global success of the Convention to protect human health and the environment from the threat of POPs adverse effects.

151. As a direct output of the NIP development project, this proposed project is designed to maintain the momentum that has been created during the preparation of the NIP. While contributing to the major elements influencing the reduction and elimination of POPs, the project will build up the regulatory and institutional enabling environment to provide comprehensive and indispensable support for effectively and efficiently implementing the ongoing and potential technical assistance projects.

152. Global benefits can also be achieved through dissemination of the experience gained by China on capacity building requirements, which could serve as a reference for other developing countries that face similar POPs related problems.

Alternative

153. With this project, China will be enabled to respond to the capacity building articles of the Convention effectively. The strengthened regulatory framework will upgrade the related standards of environmental quality, product quality, and POPs release to an internationally recognized level. The improved monitoring capacity will help to produce a more transparent inventory of POPs releases in China. The various mechanisms, platforms and partnerships to be established by this project will lay a fundamental basis for effective and efficient reduction and elimination of POPs in China and generate significant domestic and global benefits.

154. **Domestic benefits** of this project may include quicker and cheaper transition to:

- Increased competitiveness in the global market since products from China (food, industrial manufactured goods) will meet international standards with environmentally friendly alternatives for intentionally produced and used chemicals; these will reduce pollution to water, soil, organisms and ecosystems.
- Improved energy efficiency, reduced emission of SO_2, NOx CO_2 and other pollutants such as mercury, in the case of unintentional production.
- Spin-off effects concerning strong institutional management support, strengthening of environmental legal frameworks and environmental monitoring capacities for such actions.

155. China has one of the largest economies in the world with one of the fastest growing industrial productions. Although present release estimates are still uncertain, Chinese releases of POPs are likely to contribute to a significant and increasing part of the global releases. **Global benefits** may include more effective and efficient reduction and elimination of POPs that will reduce global harm to environment and human health.

Summary Incremental Cost Matrix in US$

Output	Baseline	Alternative	Increment	
			GEF	Co-financing (Other Sources)
Output 1. A sound policy and regulatory framework	1,400,000	2,440,000	740,000	300,000
Output 2. Mechanisms and tools for financing	320,000	760,000	340,000	100,000
Output 3. Environmental monitoring	300,000	1,470,000	420,000	750,000
Output 4. Research and Development	725,000	1,255,000	380,000	150,000
Output 5. Technology transfer	400,000	1,280,000	480,000	400,000
Output 6. Institutional strengthening for Data collection, processing and reporting	910,000	1,490,000	580,000	0
Output 7. Institutional strengthening for decision making and legislation enforcement	780,000	1,910,000	630,000	500,000
Output 8. Evaluations	400,000	930,000	330,000	200,000
Output 9. Public awareness	320,000	1,110,000	490,000	300,000
Output 10. Education	260,000	970,000	410,000	300,000
Output 11. Project management and M&E	810,000	1,620,000	610,000[1]	200,000
Total	**6,625,000**	**15,235,000**	**5,410,000**	**3,200,000**

[1] Project management represents $490,000 of this amount, or 9% of the total GEF contribution.

7. MONITORING AND EVALUATION

156. The **overall objective** of this project is to assist China in effectively and efficiently implementing the Stockholm Convention. Project success will be measured relative to its **concrete objectives** to create an enabling environment.

157. Project monitoring and evaluation will be conducted in accordance with established UNIDO and GEF procedures and will be provided by the project management group and the project's UNIDO focal point. The Logical Framework Matrix provides performance and impact indicators for project implementation along with their corresponding means of verification.

158. Table 7 below provides simplified impact indicators with baselines, targets, means of verification, sampling frequency and location for selected indicators. These indicators will form the basis for the project's Monitoring and Evaluation system.

159. SEPA, as the national implementing agency, will be responsible for preparation of progress reports as stipulated in the implementation agreement between UNIDO and SEPA, for Project Implementation Reviews (PIRs), for the Annual Project Review (APR) meeting, and for mid-term and terminal project evaluations.

160. UNIDO will make arrangements for an independent international terminal evaluation of the project according to Monitoring and Evaluation procedures established by the GEF.

161. The project's indicative M&E workplan is shown in Table 6 below.

Table 6: Indicative M&E workplan

Item	Responsible	Budget US$ *(Excluding project team Staff time)*	Time
Progress reports and financial statement	PMO	60,000	Refer to the Agreement between UNIDO and SEPA for project execution
PIRs	PMO and UNIDO focal point	80,000	Annual
Report of the Annual Review meeting	UNIDO focal point	(UNIDO)	Annual
Mid-term review report	UNIDO focal point	(UNIDO)	After two years of the start of the project
Terminal evaluation report	Independent expert	(Included in PIR cost)	At the end of the project
Financial audit report	Independent audit firm	30,000	At the end of the project
TOTAL indicative COST *Excluding project team staff time and UNIDO staff and travel expenses*		170,000	

Table 7. Selected indicators

Key Impact Indicator	Baseline	Target (at Year 4)	Means of Verification	Sampling frequency	Location
Number of new laws/regulations	0	21	Review Table 2 of Project Brief	End of each year	Central level
Number of new administrative rules	0	11	Review Table 2 of Project Brief	End of each year	Central level
Number of new policies/guidelines/standards	0	33	Review Table 2 of Project Brief	End of each year	Central level
Number of new advanced provincial regulations for POPs reduction and elimination	0	To be determined year 1	Review agreement from first year	Year 3 and 4	3 demonstration provinces
Group of monitoring stations and laboratories capable of undertaking standardized POPs monitoring: • existing environmental monitoring centers/laboratories network • laboratories for dioxin monitoring Centre for Disease Control and Prevention (CDC) laboratories for POPs related health monitoring;	To be determined year 1 To be determined year 1 To be determined year 1	265 13 33	For all: Capacity improvement shown in the results of new sampling and analyses. Report on the results of cross-laboratory inter comparisons and calibration	Year 4 Year 4 Year 4	Mainly 3 demonstration provinces Across China Across China
Convention compliance requirements mainstreamed into existing environmental protection instruments	As described in the NIP	All requirements transferred	Second national report on Convention implementation	Year 2010	Central level
No. of specialized organizations established, (provincial CIOs, information center, service-oriented Technology Transfer Promotion Center)	0	5	Annual Project Report	Each year	Central and 3 demonstration provinces
No. of enterprises trained	0	100	Annual Project Report	Each year	Central and 3 demonstration provinces
No. of individuals being trained	0	800	Annual Project Report	Each year	Central and 3 demonstration provinces
Functioning of coordination mechanism between the Implementing Agency, national executing agency and its partner stakeholders within and between the government, academia, enterprises and the public.	Performance to be assessed	Perceived by stakeholders as providing good opportunities for information and dialogue	Evaluation report	Year 0, 2 and 4	Central level
Percentage of the population in high-risk POPs exposure areas	Near 0	60	Survey report on the percentage	Year 2 and 4	Selected key areas

Key Impact Indicator	Baseline	Target (at Year 4)	Means of Verification	Sampling frequency	Location
aware of the need for protective action			that is aware		
No. of reports on relevant financing tools	To be determined year 1	To be determined year 1	Annual project report	Each year	Central and some provincial
No. of workshops and consultations on relevant financing tools	To be determined year 1	To be determined year 1	Annual project report	Each year	Central and some provincial

8. LESSONS LEARNED

162. Within the overall framework of Stockholm Convention implementation, the most extensive experience has been accumulated from the project for development of the NIP and its subprojects, as shown below:

Table 8: Lessons learned from the NIP development

Lesson	Comments	Impact on the design of the SIRE project
There could have been more careful and realistic planning	Drafting was often delayed and made under extreme pressure	Project management specialists will be allocated to the project
Resources and tasks should be matched	There have been many comments that the budgets are underestimated	A special review of the budget allotments will be done before the Project Document is finalised, and priorities set to achieve a better match between tasks and budgets
The necessity of strong stakeholder support from all levels for a successful project.	There was too little time for dialogue with some industries, researchers e.g. in social sciences, and public interest organisations	The design of stakeholder participation will be changed to encompass initial workshops involving a broader range of stakeholders
Continual efforts to foster and maintain working relationships between all project participants is necessary	Participants represented a wide range of competences and interests and some participants provided crucial information at a late stage	Early workshops on management and on Information and communication will also foster a common approach and spirit
Strong technical and administrative personnel are key to a successfully implemented project.	Internal capacity building within CIO and the project management staff should be strengthened	Some capacity building efforts are specially designed to this end.

163. Outputs 6, 7 and 8 deal with establishing a good management system for the NIP implementation. The experiences from these outputs will continuously be shared with the project management for the proposed project. Similarly, the experiences from other projects being implemented such as PCBs, chlordane and mirex, antifouling, medical waste and the like will be followed.

9. GEF PROJECT BUDGET (ESTIMATED)

Output	Activity	GEF (US$)	Co-finance (US$						Total (US$)
			UNIDO	MOF	SEPA	THU	RCEES	Italy	**Sub-total**	
Output 1. Policy and regulatory framework	Activity 1.1 Provide suggestions to the establishment or amendment of the laws and regulations	40,000		60,000					60,000	100,000
	Activity 1.2 Draft National Administrative Rules on POPs Reduction and Control	40,000		60,000					60,000	100,000
	Activity 1.3 Incorporate the Convention requirement defined in NIP into the first 3 POPs policies in Tier 3	50,000		60,000	40,000				100,000	150,000
	Activity 1.4 Develop or revise the 30 technical policies, guidelines, standards by the time defined in the NIP	550,000		300,000	800,000			300,000	1,400,000	1,950,000
	Activity 1.5 Promulgate and make into effect Administrative Regulations on POPs Reduction and Control in three demonstration provinces	60,000			80,000				80,000	140,000
Sub-total		**740,000**		**480,000**	**920,000**			**300,000**	**1,700,000**	**2,440,000**
Output 2. Mechanisms and tools for financing	Activity 2.1 Identify the principal stakeholders	30,000		30,000					30,000	60,000
	Activity 2.2 Determine the principles and mechanism for the responsibility sharing	60,000		60,000					60,000	120,000
	Activity 2.3 Explore public-private partnerships	80,000		50,000				50,000	100,000	180,000
	Activity 2.4 Develop the strategy on co-financing mechanism	80,000		50,000				50,000	100,000	180,000
	Activity 2.5 Hold fund raising workshops by inviting key stakeholders at home and abroad	30,000		50,000					50,000	80,000
	Activity 2.6 Implement the strategy in one of the demonstration provinces	60,000		80,000					80,000	140,000

Output	Activity	GEF (US$)	Co-finance (US$							Total (US$)
			UNIDO	MOF	SEPA	THU	RCEES	Italy	**Sub-total**	
Sub-total		**340,000**		**320,000**				**100,000**	**420,000**	**760,000**
Output 3. Environmental monitoring	Activity 3.1 Develop a unified monitoring program	40,000			50,000		30,000		80,000	120,000
	Activity 3.2 Organize national training on monitoring of pesticide POPs and PCBs in environmental samples	80,000			30,000		120,000		150,000	230,000
	Activity 3.3 Organize training for the existing dioxins monitoring laboratories	120,000		50,000	50,000		200,000		300,000	420,000
	Activity 3.4 Organize a national training on monitoring of pesticide POPs and PCBs in human samples	80,000		20,000			100,000		120,000	200,000
	Activity 3.5 Organize inter-laboratory comparisons and calibrations	100,000			100,000		300,000		400,000	500,000
Sub-total		**420,000**		**70,000**	**230,000**		**750,000**		**1,050,000**	**1,470,000**
Output 4. Research and Development	Activity 4.1 Establish the coordination mechanism between CIO/SEPA and the main R&D financial sources	100,000		50,000	80,000	70,000			200,000	300,000
	Activity 4.2 Regularly evaluate the progress of national R&D activities	120,000		50,000	90,000	80,000			220,000	340,000
	Activity 4.3 Establish an incentive program for promoting R&D results	100,000		200,000	195,000				395,000	495,000
	Activity 4.4 Promote the exchange and communication of R&D progresses	60,000			60,000				60,000	120,000
Sub-total		**380,000**		**300,000**	**425,000**	**150,000**			**875,000**	**1,255,000**
Output 5. Technology transfer	Activity 5.1 Establish an assistance-oriented Technology Transfer Promotion Center	120,000		70,000	20,000	160,000			250,000	370,000
	Activity 5.2 Enable the center to work as a technology information clearinghouse	80,000		80,000	20,000	100,000			200,000	280,000
	Activity 5.3 Provide enterprises with assistance in optimizing the technical and engineering design	100,000		40,000	20,000	60,000			120,000	220,000

Output	Activity	GEF (US$)	Co-finance (US$							Total (US$)
			UNIDO	MOF	SEPA	THU	RCEES	Italy	**Sub-total**	
	Activity 5.4 Establish a technological coordination and cooperation platform	100,000		50,000	50,000	50,000			150,000	250,000
	Activity 5.5 Evaluate the barriers in technology transfer and propose the instruments to remove the barriers for continuous improvement	80,000			50,000	30,000			80,000	160,000
Sub-total		**480,000**		**240,000**	**160,000**	**400,000**			**800,000**	**1,280,000**
Output 6. Data collection, processing and reporting	Activity 6.1 Identify the needs of information	50,000		50,000					50,000	100,000
	Activity 6.2 Strengthen the integration of the information	80,000		60,000					60,000	140,000
	Activity 6.3 Establish information collection channels for the chemicals included in Annex A and B	150,000		150,000					150,000	300,000
	Activity 6.4 Establish and implement the procedures for information collection on UP POPs	200,000		50,000	300,000				350,000	550,000
	Activity 6.5 Analyze and disseminate information mainly through the website of the POPs information center	100,000		10,000	290,000				300,000	400,000
Sub-total		**580,000**		**320,000**	**590,000**				**910,000**	**1,490,000**
Output 7. Institutional strengthening for decision making and legislation enforcement	Activity 7.1 Strengthen the coordination of NCG and support its decision-making	100,000			100,000			100,000	200,000	300,000
	Activity 7.2 Establish 3 Local Convention Implementation Units and develop their provincial implementation plans (PIP)	150,000		150,000				150,000	300,000	450,000
	Activity 7.3 Training the environmental protection departments at the central, regional, and local levels	80,000			100,000			80,000	180,000	260,000

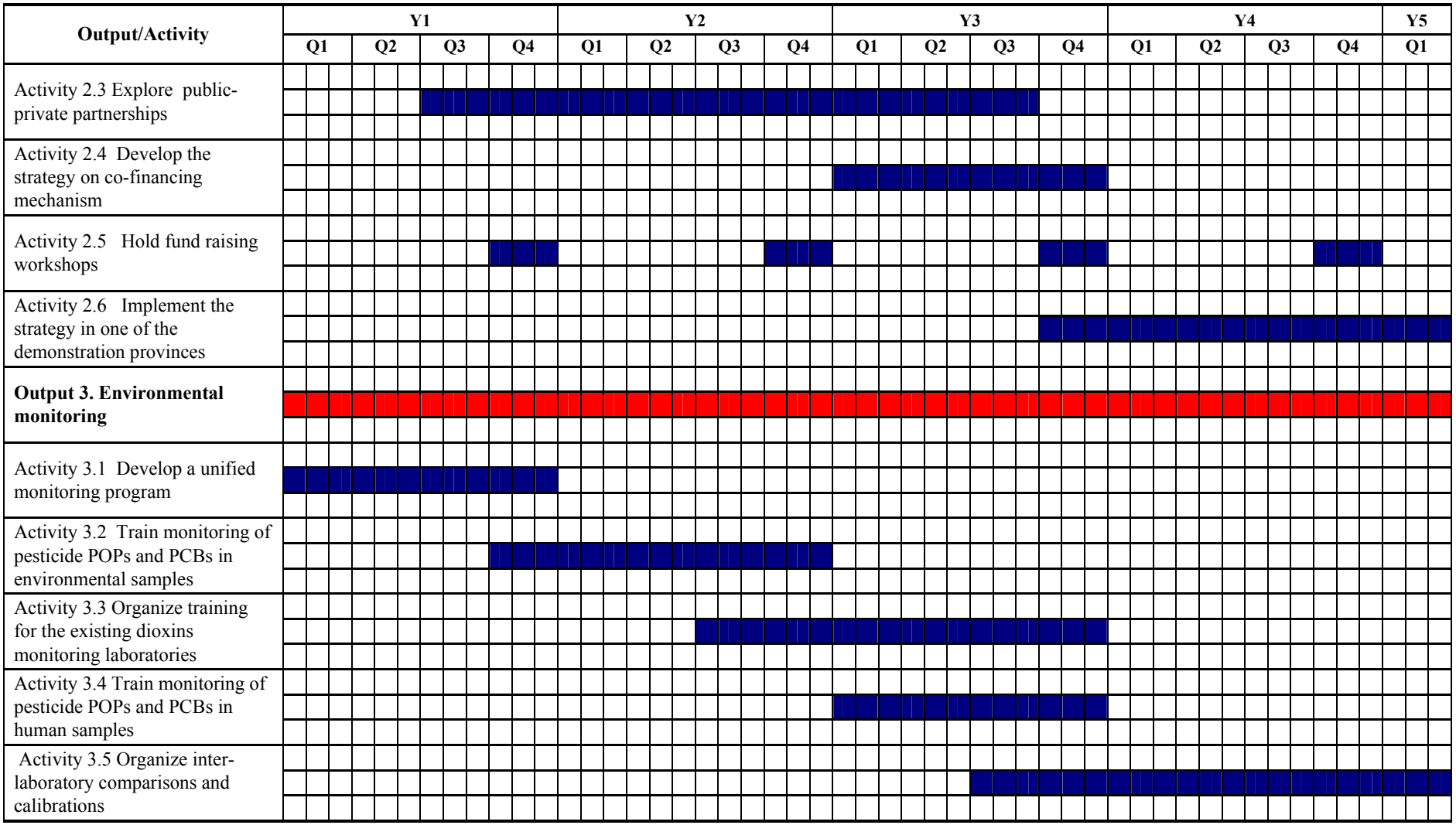
Output	Activity	GEF (US$)	Co-finance (US$							Total (US$)
			UNIDO	MOF	SEPA	THU	RCEES	Italy	**Sub-total**	
	Activity 7.4 Launch joint inspections to inspect the compliance of the key POPs producing and releasing enterprises;	120,000		200,000	150,000				350,000	470,000
	Activity 7.5 Instigate NGOs, third-party environmental certificating and auditing institutions, and individuals to supervise POPs management	100,000		50,000				50,000	100,000	200,000
	Activity 7.6 Establish and strengthen self-policing and supervision	80,000		30,000				120,000	150,000	230,000
Sub-total		**630,000**		**430,000**	**350,000**			**500,000**	**1,280,000**	**1,910,000**
Output 8. Evaluations	Activity 8.1 Establish a working team for evaluation	60,000		60,000					60,000	120,000
	Activity 8.2 Train the evaluation staff	60,000		20,000				80,000	100,000	160,000
	Activity 8.3 Evaluate the results and impacts of the NIP implementation	120,000		60,000	140,000			100,000	300,000	420,000
	Activity 8.4 Further assess the capacity needs for the Convention implementation	50,000			60,000			20,000	80,000	130,000
	Activity 8.5 Hold a workshop to discuss and disseminate the evaluation findings	40,000		60,000					60,000	100,000
Sub-total		**330,000**		**200,000**	**200,000**			**200,000**	**600,000**	**930,000**
Output 9. Public awareness	Activity 9.1 Establish a platform for effective POPs information distribution	60,000		80,000					80,000	140,000
	Activity 9.2 Establish partnerships with on-going environmental awareness promotion programs	60,000		80,000					80,000	140,000
	Activity 9.3 Make materials for raising public awareness of POPs issues	150,000				30,000		150,000	180,000	330,000
	Activity 9.4 Distribute POPs information	120,000		80,000		20,000		60,000	160,000	280,000
	Activity 9.5 Implement a special program for public awareness promotion	100,000		80,000				40,000	120,000	220,000

Output	Activity	GEF (US$)	Co-finance (US$							Total (US$)
			UNIDO	MOF	SEPA	THU	RCEES	Italy	**Sub-total**	
Sub-total		**490,000**		**320,000**		**50,000**		**250,000**	**620,000**	**1,110,000**
Output 10. Education	Activity 10.1 Study the related education curriculum	30,000		30,000					30,000	60,000
	Activity 10.2 Prepare textbook and training materials, and train university teachers	80,000		80,000				40,000	120,000	200,000
	Activity 10.3 Prepare textbook and training materials, and train primary and middle school teachers	80,000		80,000				40,000	120,000	200,000
	Activity 10.4 Carry out demonstrations of POPs education	100,000		50,000		90,000		10,000	150,000	250,000
	Activity 10.5 Design and implement an on-line POPs education program	80,000				60,000		40,000	100,000	180,000
	Activity 10.6 Organize training workshops for mayors of cities	40,000		20,000				20,000	40,000	80,000
Sub-total		**410,000**		**260,000**		**150,000**		**150,000**	**560,000**	**970,000**
Output 11 Project management, monitoring & evaluation, and follow-up	Activity 11.1 Establish the national project management office (PMO)	60,000		120,000					120,000	180,000
	Activity 11.2 Establish 3 local project implementation units (PIU)	120,000		200,000					200,000	320,000
	Activity 11.3 Establish a Project Coordination Group (PCG)	20,000		40,000					40,000	60,000
	Activity 11.4 Recruit and sustain employment of national experts and subcontractors	220,000		250,000					250,000	470,000
	Activity 11.5 Prepare annual implementation plans and reports			40,000					40,000	40,000
	Activity 11.6 Prepare and hold the meetings of the Technical Coordination Group	60,000		60,000					60,000	120,000
	Activity 11.7 Designate a project focal point within UNIDO		200000						200,000	200,000
	Activity 11.8 Conduct Project Implementation Reviews	80,000		100,000					100,000	180,000

Output	Activity	GEF (US$)	Co-finance (US$							Total (US$)
			UNIDO	MOF	SEPA	THU	RCEES	Italy	**Sub-total**	
	Activity 11.9 Provide independent management and financial reviews	50,000								50,000
Sub-total		**610,000**	**200,000**	**810,000**					**1,010,000**	**1,620,000**
Total		**5,410,000**	**200,000**	**3,750,000**	**2,875,000**	**750,000**	**750,000**	**1,500,000**	**9,825,000**	**15,235,000**

10. PROJECT WORK PLAN

Work plan																									
Output/Activity	**Y1**				**Y2**				**Y3**				**Y4**				**Y5**								
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**								
Output 1. Policy and regulatory framework																									
Activity 1.1 Suggest the establishment or amendment of the laws and regulations																									
Activity 1.2 Draft National Administrative Rules on POPs Reduction and Control																									
Activity 1.3 Incorporate the Convention requirement																									
Activity 1.4 Develop or revise the 30 technical policies, guidelines, standards																									
Activity 1.5 Promulgate and make into effect Administrative Regulations on POPs																									
Output 2. Mechanisms and tools for financing																									
Activity 2.1 Identify the principal stakeholders																									
Activity 2.2 Determine the principles and mechanism for the responsibility sharing																									


Output/Activity
Y1
Y2
Y3
Y4
Y5
Q1
Q2
Q3
Q4
Activity 2.3 Explore public-private partnerships
Activity 2.4 Develop the strategy on co-financing mechanism
Activity 2.5 Hold fund raising workshops
Activity 2.6 Implement the strategy in one of the demonstration provinces
Output 3. Environmental monitoring
Activity 3.1 Develop a unified monitoring program
Activity 3.2 Train monitoring of pesticide POPs and PCBs in environmental samples
Activity 3.3 Organize training for the existing dioxins monitoring laboratories
Activity 3.4 Train monitoring of pesticide POPs and PCBs in human samples
Activity 3.5 Organize inter-laboratory comparisons and calibrations

Output/Activity	Y1				Y2				Y3				Y4				Y5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Output 4. Research and Development																	
Activity 4.1 Establish the coordination mechanism																	
Activity 4.2 Regularly evaluate the progress of national R&D activities																	
Activity 4.3 Establish an incentive program for promoting R&D results																	
Activity 4.4 Promote the exchange and communication of R&D progresses																	
Output 5. Technology transfer																	
Activity 5.1 Establish an assistance-oriented Technology Transfer Promotion Center																	
Activity 5.2 Enable the center to work as a technology information clearinghouse																	
Activity 5.3 Assist enterprises in optimizing the technical and engineering design																	
Activity 5.4 Establish a technological coordination and cooperation platform																	

Output/Activity	Y1				Y2				Y3				Y4				Y5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Activity 5.5 Evaluate the barriers in technology transfer																	
Output 6. Data collection, processing and reporting																	
Activity 6.1 Identify the needs of information																	
Activity 6.2 Strengthen the integration of the information																	
Activity 6.3 Establish information collection channels																	
Activity 6.4 Establish procedures and collect information of UP POPs																	
Activity 6.5 Analyze and disseminate information																	
Output 7. Institutional strengthening for decision making and legislation enforcement																	
Activity 7.1 Strengthen the coordination of NCG and support its decision-making																	
Activity 7.2 Establish 3 Local Convention Implementation Units and develop PIPs																	

Output/Activity	Y1				Y2				Y3				Y4				Y5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Activity 7.3 Training the environmental protection departments at the central, regional, and local levels																	
Activity 7.4 Launch joint inspections																	
Activity 7.5 Instigate NGOs, etc. to supervise POPs management																	
Activity 7.6 Establish and strengthen self-policing and supervision																	
Output 8. Evaluations																	
Activity 8.1 Establish a working team for evaluation																	
Activity 8.2 Train the evaluation staff																	
Activity 8.3 Evaluate the results and impacts of the NIP implementation																	
Activity 8.4 Further assess the capacity needs for the Convention implementation																	
Activity 8.5 Hold a workshop to discuss and disseminate the evaluation findings																	

Output/Activity	Y1				Y2				Y3				Y4				Y5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Output 9. Public awareness																	
Activity 9.1 Establish a platform for effective POPs information distribution																	
Activity 9.2 Establish partnerships with other environmental awareness promotion programs																	
Activity 9.3 Make materials for raising public awareness of POPs issues																	
Activity 9.4 Distribute POPs information																	
Activity 9.5 Implement a special program for public awareness promotion																	
Output 10. Education																	
Activity 10.1 Study the related education curriculum																	
Activity 10.2 Prepare textbook and training materials, and train university teachers																	

Output/Activity	Y1				Y2				Y3				Y4				Y5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Activity 10.3 Prepare textbook and training materials, and train primary and middle school teachers																	
Activity 10.4 Carry out demonstrations of POPs education																	
Activity 10.5 Design and implement an on-line POPs education program																	
Activity 10.6 Organize training workshops for mayors of cities																	
Output 11 Project management, monitoring & evaluation																	
Activity 11.1 Establish the national project management office (PMO)																	
Activity 11.2 Establish 3 local project implementation units (PIU)																	
Activity 11.3 Establish a Project Coordination Group (PCG)																	
Activity 11.4 Recruit and sustain employment of national experts and subcontractors																	
Activity 11.5 Prepare annual implementation plans and reports																	

Output/Activity	Y1				Y2				Y3				Y4				Y5
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Activity 11.6 Prepare and hold the meetings of the Technical Coordination Group																	
Activity 11.7 Designate a project focal point within UNIDO																	
Activity 11.8 Conduct Project Implementation Reviews																	
Activity 11.9 Provide independent management and financial reviews																	