Independent terminal evaluation

The People's Republic of China

Strengthening institutions, regulations and enforcement (SIRE) capacities for effective and efficient implementation of the national implementation plan

Project number: GF/CPR/07/009- GEF ID: 3263

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO OFFICE FOR INDEPENDENT EVALUATION

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Acronyms and abbreviations

CBO	Community based Organization
CDM	Clean Development Mechanism
CSR	Corporate Social Responsibility
CTA	Chief Technical Advisor
ECC	Energy and Climate Change
EMB	Environmental Management Branch
FO	Field Office
GoC	Government of China
GDP	Gross Domestic Product
GEF	Global Environment Facility
GF	Global Forum
ICT	Information and Communication Technology
ISO	International Organization for Standardization
ITC	International Trade Centre
JICA	Japan International Cooperation Agency
JP	Joint Programme
MDGs	Millennium Development Goals
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
ODG/EVA	Office of the Director General/Office for Independent Evaluation
PAD	Project Allotment Document
PMO	Programme Management Office
POPs	Persistent Organic Pollutants
PSD	Private Sector Development
PSC	Programme Steering Committee
R&D	Research and Development
SC	Stockholm Convention
SME	Small and Medium Enterprises
TC	Technical Cooperation
TCB	Trade Capacity Building
ToR	Terms of Reference
TRTA	Trade Related Technical Assistance Programme

UNIDO	United Nations Industrial Development Organization
UR	UNIDO Representative
WB	World Bank
WTO	World Trade Organization

Glossary of evaluation terms

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the objectives of a development intervention were or are expected to be achieved.
Efficiency	A measure of how economically inputs (through activities) are converted into outputs.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Intervention	An external action to assist a national effort to achieve specific development goals.
Lessons learned	Generalizations based on evaluation experiences that abstract from specific to broader circumstances.
Logframe (logical framework approach)	Management tool used to guide the planning, implementation and evaluation of an intervention. System based on MBO (management by objectives) also called RBM (results based management) principles.
Outcome	The achieved or likely effects of an intervention's outputs.
Outputs	The products in terms of physical and human capacities that result from an intervention.
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed
Target group	The specific individuals or organizations for whose benefit an intervention is undertaken.

Executive summary

Introduction

This document contains the report of the Independent Terminal Evaluation (ITE) of the Global Environment Facility (GEF) project entitled "*Strengthening Institutions, Regulations and Enforcement Capacities for Effective and Efficient Implementation of the National Implementation Plan in China* (SIRE)", which was implemented from 2007 to 2015 by UNIDO and nationally executed by CIO/FECO with the following financing sources: GEF: $5,410,000; Italy and Government of China: $8,125,000; co-financing (cash and in kind): $1,700,000 for a total of $15,235,000.

The overall objective of the ITE was to assess in a systematic and objective manner this UNIDO intervention from 2007 up to date, to enable the Government, donor, counterparts, UNIDO and other stakeholders to assess project performance against the criteria of relevance, effectiveness, efficiency, sustainability and impact. As well, the extent to which the project made a significant contribution to reducing the effects of POPs on human health and the environment was assessed. The ITE also provides an analysis of the attainment of the main objective and specific objectives under the eleven core project outputs and includes a re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in chapter VI of the ToRs of the ITE. Finally, the ITE examines to what extent the findings and recommendations from the mid-term evaluation have been implemented in the project.

The evaluation field mission took place in April of 2015 and allowed the Evaluation Team (ET) to visit pilot sites in 2 provinces (Jinan and Tianjin), and meet with relevant stakeholders in Beijing, Tianjin, Jinan and Shanghai.

Key findings and conclusions

Design and relevance:

The design of the SIRE project was assessed as adequate, and the relevance as Highly Satisfactory. In particular the project was considered to be relevant at different levels including policy, environmental, economic and is overall considered to have provided an appropriate and timely response to a clearly defined and urgent challenge, that of facilitating compliance with the SC. The project document in general was assessed as being of good quality, containing relevant and concise information, which aimed to overcome the barriers to the enhancement of capacity for effective and efficient implementation of the NIP. The SIRE project was formulated based on the logical framework approach with a clear thematically focused development objective. Its design sought to facilitate the introduction of advanced concepts and management experience to harmonize Chinese practices with international ones, which included promoting technology transfer, upgrading the industrial structure, increasing environmental friendliness of Chinese product, promoting cleaner production and protecting the public health from POPs releases.

Effectiveness:

The effectiveness of the project was assessed as Highly Satisfactory, as it had met its objectives within an adequate timeframe. The outputs produced were of high quality and effectively delivered. Beneficiaries interviewed were highly satisfied with the support received and results obtained.

To strengthen policy and regulatory framework in order to implement the NIP more effectively, 27 POPs management polices, standards and technical guidelines were promulgated and implemented; POPs reductions and control measures were incorporated into the national environmental management and industrial policy standard system; SC requirements were incorporated into the "Industrial Restructuring Catalogue (2011)" and "Key hazardous chemicals directory for environmental management"; domestic investment was stimulated through international funding and the implementation of international cooperation projects were facilitated; etc.

To strengthen institutions for more efficient implementation of the SC and NIP, a network of laboratories was strengthened/established through the POPs monitoring in environmental and human samples; the progress of POPs-related R&D activities was evaluated; the Technology Transfer Promotion Center (TTPC) was established and four pilot technologies successfully transferred; the POPs MIS project information management system for the collection and integration of project related information was established; the National Coordinating Group (NCG) was strengthened and an Expert Committee set up to ensure the smooth operation and daily management of the multi-agency national coordination mechanism; the NIP terminal evaluation plan was developed in order to deliver a thorough evaluation on NIP implementation; etc.

To change attitudes and behaviours to promote environmental protection, the effective publicity channels and platforms for POPs related information were built-up through TV, radio, newspaper and Internet mainstream media resources; cooperative partnerships with environmental protection projects, environmental campaigns, NGOs, CBOs, academy and schools were established; textbooks and training materials for teachers in 130 colleges and 320 middle and primary schools were compiled; and, over 300 environmental protection bureau chiefs at prefecture-level were trained, etc.

To establish a system to manage, monitor and evaluate progress, 14 local project offices were set-up and meetings were organized as required to promote project implementation and carry out the annual review/prepare the following year's work plan; to organize the annual three way review meeting; to complete the PIRs in accordance with GEF requirements; to organize the annual technical coordination meetings; and, last but not least, to organize the fiscal audit.

Efficiency:

The efficiency of the project was assessed as Satisfactory given that most project outputs were delivered on target, and were implemented in a cost-effective and efficient manner. With 48 contracts fully completed (out of 50) for an implementation rate of 96%, the project is assessed as having met its objectives efficiently and within an adequate timeframe. Delays can be explained and are not considered to be the responsibility of the implementers.

Sustainability of Project Outcomes:

The sustainability of project outcomes was assessed as Likely, and Replication as Likely as it appears in particular that the conditions for replication of the pilots are present, however additional resources and support will be required in order for these to be disseminated and reach all of the provinces. The same can also be said of other initiatives, including the network of laboratories, as China has a large territory to cover and needs to comprehensively improve monitoring capabilities, to ensure that no less-economically developed provinces are left behind.

Project Coordination and Management:

Project management was rated as Highly Satisfactory. The Project's management, coordination and implementation were considered to be adequate to ensure on-time delivery of all of the outputs. The stakeholders at all levels expressed their full satisfaction with FECO coordination and management activities. UNIDO management, quality control and technical inputs were also assessed as Highly Satisfactory. UNIDO was commended for having played a key role in the implementation of the project through its supervisory capacity.

The overall rating for the project based on the evaluation findings is Highly Satisfactory.

Conclusions

The central and provincial authorities were very supportive and assessed strategic cooperation with UNIDO very positively.

UNIDO and in particular the access it provides to innovative technologies and expertise are very positively considered. Technical and scientific support/expertise and, transfer of knowledge are highly regarded by stakeholders and the Government of China (GoC) in general.

The mixed form of agency execution and national execution is considered to have been an effective/efficient implementation modality; however this is only possible in cases where the national and provincial capacities are sufficiently developed.

The strong overall support of the GoC, facilitating business participation and strengthening, and ensuring the effective enforcement of the legislative framework are also considered to have contributed positively to the successful delivery of the project.

Country drivenness, strong government, committed stakeholders and a high level of co-funding are also considered to have been key factors in the successful implementation of the project.

Integrating the objectives of the project into national & provincial economic, environmental and social development plans provided a good opportunity to mobilize financial support, and helped to demonstrate that a high level of co-funding is available in the GOC for projects that are aligned with development priorities.

However, the magnitude of the task still at hand is considered to be daunting, and it is highly likely that full implementation of the SC will require access not only to

avant-garde technical knowledge but most importantly to access to financial resources beyond the current capacity of the GoC.

Key recommendations

Government of China should continue to provide its support to activities initiated by the SIRE project including:

- Promoting the replication of demonstration pilots;
- Ensuring continued awareness raising/education and monitoring activities;
- Facilitating further integrated cooperation between national and provincial authorities so as to not loose momentum gained and capacities developed; and,
- Considering developing mechanisms to facilitate the further development and promotion of the Technology Transfer Promotion Centre (TTPC) to ensure widespread reach to all provinces.

UNIDO should strongly consider:

- Continuing to proactively support the Government of China (GOC) as it seeks to design new programs to address evolving Stockholm Convention (SC) targets;
- Maintaining close ties to the Technology Transfer Promotion Centre (TTPC) in order to:
    - Ensure that it has access to the most up-to-date technical knowledge and information;
    - Facilitate the establishment/strengthening of direct connections with technology suppliers; and,
    - Facilitate the establishment of direct links with industrial associations, other professional technology transfer institutions and large-scale industrial parks.
- Carrying out an impact evaluation in the near future (five years) as the size of this project would be ideal for this exercise and could provide valuable lessons for future work in China.

1. Introduction and background

1.1 Introduction

This report presents the findings of the Independent Terminal Evaluation (ITE) of one of UNIDO's interventions in China: Strengthening Institutions, Regulations and Enforcement (SIRE) Capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) developed under the Stockholm Convention and funded by the Global Environment Facility (GEF). It assesses the implementation and results of this project from 2007 to date.

The evaluation team (ET) was comprised of Mr. Cristóbal Vignal, International Evaluation Consultant, and Team leader and, Mr. Liu Xinhui, National Evaluation Consultant.

The key question of the terminal evaluation is whether the project has achieved or is likely to achieve the project objective of making "a significant contribution to reducing the effects of POPs on human health and the environment".

1.1.1Rationale and objectives

As outlined in the Terms of Reference (ToR), included as Annex A, the ITE was undertaken as a forward-looking exercise to identify best practices, areas for improvement and lessons to be incorporated in future UNIDO interventions in China and in other UNIDO programmes and projects, as/if applicable.

The overarching objective of this ITE was to assess in a systematic and objective manner this UNIDO intervention from 2007 up to date, to enable the Government, donor, counterparts, UNIDO and other stakeholders to assess project performance against the criteria of relevance, effectiveness, efficiency, sustainability and impact. As well and the extent to which the project has made a significant contribution to reducing the effects of POPs on human health and the environment will be assessed.

The ET is also expected to provide an analysis of the attainment of the main objective and specific objectives under the eleven core project outputs. Furthermore the assessment includes a re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in chapter VI of the above-mentioned ToR. Finally, the terminal evaluation will also examine to what extent the findings and recommendations from the mid-term evaluation have been implemented in the project.

The key users of this evaluation are UNIDO management and staff at Headquarters and the UNIDO Country Office in China, the Government of China, counterpart agencies and other organizations in the country cooperating with UNIDO, donors, experts, and project beneficiaries.

The evaluation findings and recommendations are expected to provide key inputs for the planning and continual improvement of future cooperation activities.

1.1.2Scope, approach and methodology

The scope of this ITE was from 2007 to date, and the evaluation field mission took place in April of 2015. The field visits allowed the Evaluation Team (ET) to visit pilot sites in 2 provinces (Jinan and Tianjin), and meet with relevant stakeholders in Beijing, Tianjin, Jinan and Shanghai.

UNIDO (ODG/EVA) Office for Independent Evaluation was responsible for the quality control of the evaluation process and report. The Team Leader liaised with the ODG/EVA to keep them informed and shared correspondence and draft documents for review on the conduct of the evaluation and, methodological issues.

The evaluation was conducted in accordance with UNIDO Evaluation Policy, the UNIDO Guidelines for the Technical Cooperation Programmes and Projects, the GEF's 2008 Guidelines for Implementing and Executing Agencies to Conduct Terminal Evaluations, the GEF Monitoring and Evaluation Policy from 2010 and the Recommended Minimum Fiduciary Standards for GEF Implementing and Executing Agencies.

It was carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project were kept informed and regularly consulted throughout the evaluation. The ET used different methods to ensure that data gathering and analysis delivered evidence-based qualitative and quantitative information, based on diverse sources: desk studies and literature review, statistical analysis, individual interviews, focus group meetings, surveys and direct observation. This approach not only enabled the ET to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings.

The methodology applied included a review of written documentation and other sources of information, interviews with project managers at UNIDO HQ, Country Office (CO) staff and in-country stakeholders, including beneficiaries and government representatives. The documentation review was carried out during April of 2015 and included project related documents, available evaluations, monitoring reports, and also contextual documents on Government of China (GoC) policies and recent economic and social development in China.

Initial interviews were conducted with UNIDO HQ project manager and other relevant staff members in March of 2015, prior to the evaluation mission, and served to obtain more information on project design and implementation. These interviews were semi-structured and focused on origins of the project, inputs from GoC and other stakeholders, institutional arrangements for implementation, achieved and expected results, strengths and weaknesses difficulties encountered and missed opportunities.

The field mission interviews allowed new lines of questioning to be followed if/when necessary, particularly with regard to reconstructing the history of the project (from beneficiaries perspectives). The interviews were conducted in presence of the two evaluators and notes taken and analysis were triangulated against documentary evidence. While maintaining the independence of the

evaluation, the approach was participatory and open in order to facilitate cordial and constructive dialogue with all stakeholders.

The evaluation consultants were contracted by UNIDO and their tasks are specified in the job descriptions attached to these ToR (Annex A). The members of the evaluation team were not directly involved in the design and/or implementation of the project.

1.1.3 Information availability and sources and, validity of the findings

Through the documentary information and the information collected in the field, the evaluators consider that there was sufficient evidence to allow them to establish a baseline for the project; sources of information were sufficient to verify and document the progress and constraints encountered during the assessment; data and information derived from interviews were qualitatively satisfactory and this was verified through comparison of figures from different sources and through crosschecked interviews with relevant actors in an independent way, showing that respondents views and contributions were in full agreement.

In addition, the information obtained allowed the ET to verify that progress to date corresponds to the activities, outputs and outcomes set out in the logical framework of the project and that they are measured by the indicators defined in the logical framework.

The list of interviews carried out satisfactorily (See Annexes) ensured that the views and experiences of all relevant stakeholder categories (men/women, project/programme staff and project/programme participants, beneficiaries and non-beneficiaries) were appropriately included.

1.1.4 Limitations of the evaluation

The major limitation the ET faced regarded the shortness of time allotted for the field missions. It would have been beneficial for the overall assessment of the project to visit, if not all of the 14 pilot projects, more than 2. This would have allowed for a statistically meaningful analysis of results. This represented a significant challenge given that a thorough evaluation requires the ability to carry out field verification, and ideally extensive triangulated interviews and surveys.

As regards funds available for M&E systems, current best practices for M&E indicate that these should represent 10% of the overall project budget. Although the ET attempted to reconstitute the budget available for M&E based on the factual information presented below, this was not possible given the level of detail provided.

The Project Management, Monitoring & Evaluation and Follow-Up budget, as presented in the Project Document [1] is US$1,010,000[2].

[1] p.58, Project Logframe, Output 11

[2] This covers, in addition to M&E, management of the project (i.e. Chief Technical Advisor, National Project Manager, administrative support, equipment, etc.)

The Monitoring & Evaluation budget, as presented in the Project Document [3] is US$170,000, *"excluding project team staff time and UNIDO staff and travel expenses"*.

[3] p.59 Table 5: Indicative M&E Workplan

2. Country and project background

2.1 Socioeconomic overview

2.1.1 Geography and population

China is located in the east of Asia and west of the Pacific. The land area of China is about 9.6 million square kilometers and the sea area is about 4.73 million square kilometers. The border stretches 32,000 kilometers (including 18,000 kilometers of coastline). In 2014, the total population of China already approached 1.37 billion (excluding that of Hong Kong, Macau and Taiwan), among which the male population and female population account for 51.23% and 48.77%, and the urban population and rural population account for 53.73% and 46.27%, respectively.

2.1.2 Political profile

According to the Constitution of the People's Republic of China, the organs for Chinese people to exercise state power are the National People's Congress and local People's Congress at different levels. The state administrative organs, judicial organs, and procuratorial organs, are all selected by the People's Congress.

The National People's Congress (NPC) is the organ of supreme power of the People's Republic of China, whose standing body is the Standing Committee of the National People's Congress. The NPC and its Standing Committee exercise the legislative power of the state. The People's Congress at local levels are local organs of state power. They guarantee compliance and implementation of the Constitution, laws and administrative regulations within their own administrative regions.

The State Council of the People's Republic of China, i.e. the Central People's Government, is the executive body of the organ of supreme power. Based on the Constitution and laws, the State Council formulates administrative regulations, issues decisions and orders, and leads the overall work of all ministries and commissions and local administrative agencies at different levels. Based on laws, as well as on the administrative rules and regulations, decisions and orders of the State Council, the ministries and commissions issue orders, instructions and rules within their own authority.

Local People's Governments at different levels are the executive institutions of local organs of state power and the local government administrative organs. According to the authority granted by relevant laws, the People's Governments at the county level conduct administration on economy, environmental protection, education, science, culture, sanitation, physical training, urban and rural construction, finance, civil affairs, public security, ethical affairs, judicial administration, supervision, family planning and other administrative work within their own administrative regions. They issue decisions and orders, appoint and remove, train, check, reward and punish administrative personnel. The People's

Governments at the township level implement the resolutions made by the People's Congress at its level and decisions and orders made by administrative organs at higher levels. They conduct administration within their own administrative regions.

2.1.3 Economic profile

Since 1978, China has maintained a favorable situation as regards economic development. In 2014， the GDP of China reached 63.6 trillion Yuan (Approximately $10 billion), and China became one of the fastest-growing major economies in the world. The underlying feature supporting progress is based on the fact that China's economic development is becoming better coordinated and more sustainable.

The economic structure was upgraded in 2014. The grain output reached 605 million metric tons; the contribution of consumption toward economic growth rose by three percentage points to 51.2%; the value added of the service sector increased from 46.9% to 48.2% of the GDP; and there was a constant stream of new industries, new types of business, and new business models. The central and western regions grew faster in economic terms than the eastern region.

The country drew on further opening up to boost reform and development and worked to keep exports stable and increase imports, and China's international market share in exports continued to increase. Foreign direct investment (FDI) actually made in China reached $119.6 billion, making the country the world's top destination for FDI. Meanwhile China's outward FDI reached $102.9 billion. China's free trade zone arrangements with Iceland and Switzerland were officially launched, and China completed substantive talks on free trade zones with the Republic of Korea and Australia. Major progress was made in cooperation with other countries in fields such as railways, electric power, oil, natural gas, and communications.

Economic development among different regions of China is unbalanced. The costal areas in East China are comparatively developed and the GDP of only five provinces (municipalities) in the southeast coastal area (Guangdong, Jiangsu, Shandong, Zhejiang and Shanghai) accounts for 40% of the whole country, while the economy in the middle and western areas is comparatively lagging behind. Meanwhile, there are disparities between the eastern and western areas in terms of technical level, enterprise scale and environmental awareness.

2.2 Policy and legal framework

2.2.1Environmental policies

Environmental protection is a basic national policy of China and a basic function of governments at various levels. Since the 1980s, according to the environmental protection laws and related laws, administrative departments in charge of environmental protection under governments at different levels have conducted unified supervision and management of environmental pollution prevention and control within their own administrative regions, and other related departments have conducted supervision and management of pollution prevention and control within their mandates. Governments at different levels are responsible for the environmental quality within their administrative regions.

Environmental policies of China include the four following aspects. (1) For new, rebuilding and expanding projects and regional development projects, systems such as environmental impact assessment, "three simultaneities"[4] and cleaner production should be carried out to reduce pollutant generation and emission. (2) Local governments are responsible for environmental quality within their administrative regions. (3) The principle of "the one who pollutes shall treat". (4) Through establishment and perfection of the environmental supervision and management system, the public is encouraged to participate in environmental oversight and management.

2.2.2 Sustainable development policies

After the United Nations Conference on Environment and Development in 1992, the Chinese government formulated the sustainable development strategy China 21st Century Agenda to promote sustainable development through industrial policies.

These policy measures include the four aspects. (1) Adjusting the industrial structure to constrain or prohibit production and use of equipment and techniques with high consumption, high pollution and inconsistent with industrial policies. (2) Formulating and implementing policies on saving resources, and improving utilization rates of resources and energies. (3) Promoting clean production and a circular economy, and accelerating transformation of the economic growth mode. (4) Encouraging public participation, promoting sustainable consumption and accelerating transformation of the consumption mode.

2.2.3 Legal framework

The Constitution of China clearly states that "the nation protects and improves the living environment and the ecological environment, prevents and controls pollution and other public hazards." China has formulated 9 environmental protection laws such as Environmental Protection Law, Law on Water Pollution Prevention and Control, Law on Marine Environmental Protection, Law on Air Pollution Prevention and Control, Environmental Impact Assessment Law, Clean Production Promotion Law and Law on Prevention and Control of Radioactive Pollution, 15 nature conservation laws, and more than 50 administrative regulations such as Provisional Regulation on Promoting Industrial Structure Adjustment, Regulation on Construction Projects Management for Environmental Protection, Detailed Rules on Implementation of the Water Pollution Prevention and Control Law, Regulation on Safety Management of Hazardous Chemicals, Regulation on Management of Pollutant Emission Fee Collection and Use, Measure on Management of Hazardous Wastes Business Permission, Regulation on Protection of wild Plants and Regulation on Safety Management of Agricultural Transgenetic Organisms. It has also issued regulatory documents such as: the State Council's Decision on Implementing the Scientific Development Concept and Strengthening Environmental Protection, the State Council's Opinions on Accelerating Development of Circular Economy, the State

[4] The "Three Simultaneities" system refers to the system whereby the design, construction and operation of pollution treatment facilities are managed according to the same schedule as that of the core project. This system applies to newly-developed projects, modification and expansion works, projects undergoing technological modifications and regional development projects.

Council's Notification on Recent Work for Constructing the Energy Saving Society, and the Notification on Accelerating Structural Adjustment of Industries with Surplus Energy Generation. Ministries under the State Council, local People's Congress and local governments have formulated and promulgated more than 660 rules and local regulations for implementation of national environmental protection laws and regulations, according to their mandates.

China has established a system of environmental protection standards. Environmental protection standards include the environmental quality standard, the pollutant emission (control) standard, the environmental standard sample standard, and so on. At present, the state had issued over 800 national environmental protection standards and provinces (municipalities directly under the State Council) such as Beijing, Shanghai, Shandong and Henan had formulated over 30 local environmental protection standards. The key laws, regulations and standards related to POPs are given in the below table.

Key laws, Regulations and Standards associated to POPs

Law/regulation/standard		Date of issuance
Laws	Environmental Protection Law of China	December 1989
	Law of China on the Prevention and Control of Environmental Pollution Caused by Solid Waste	April 2005
Policies	NIP for POPs	April 2006
	Technical Policy for the Prevention and Control of Pollution Caused by HW	December 2001
	Circular Concerning Implementation of Charging System for Disposal of Hazardous Wastes to Promote Industrialization of HW Disposal	April 2005
Regulations	Pesticide Management Rules	July 2001
	Regulation on Safe Use of Pesticides	October 1982
	National Catalogue of Hazardous Waste	July 1998
	Measures for the Administration of Operating Licenses for Hazardous Waste	May 2004
	Measures for Manifest Management on Transfer of Hazardous Waste	October 1999
	Measures for the Prevention and Control of Environment Pollution by Discarded Hazardous Chemicals	October 2005
	National Program for Hazardous and Medical Waste Disposal Facilities Construction	January 2004
Standards	Standard on Identification of HW	October 2007
	Pollution Control Standard for HWI	January 2002
	Standard for Pollution Control on Hazardous Waste Storage	July 2002
	Standard for Pollution Control on the Safe Landfill for Hazardous Waste	July 2002
	Technical Requirements on Engineering Construction for Safe Landfill and Disposal of Hazardous Waste	January 2004

2.2.4 The Stockholm Convention in China – overview of implementation modalities

As the world's largest developing country, China has been an active participant in the negotiations of the Stockholm Convention (SC) since 1998. China signed the

SC on POPs in May 2001, the first day it was opened for signature, and the National People's Congress ratified the SC in June 2004. The Convention entered into force in the country on 11 November 2004. China has participated in 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.

A National Coordination Group (NCG) has been established, appointing the vice minister of the Ministry of Environmental Protection (MEP) as the group leader and the director-generals of the related ministries as the coordinators and focal points, within their ministries. A Convention Implementation Office (CIO) under the NCG 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 MEP and respective ministries, including the Ministry of Construction, State Electricity Regulatory Commission, Ministry of Agriculture, etc.

The development of the National Implementation Plan (NIP) in China has been undertaken by the Foreign Economic Cooperation Office (FECO) of MEP. It was supported by a full size project approved by the GEF Council in May 2003 and initiated on 21 September 2004. The State Council approved the NIP, which was been submitted to the Convention Secretariat on 18 April 2007 and thereafter served as overall guidance for implementing the Stockholm Convention.

2.3 Sector specific issues of concern

It was stated at the time of the drafting of the project that in order to achieve the NIP objectives by 2015 and meet the SC requirements at various levels, China was facing a significant shortage of capacities. In particular the following were described as the existing barriers to cost-effective implementation of the SC that China would continue to encounter:

- 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.

In order to meet the SC requirements, a need for strengthened capacity was foreseen in a range of areas.

The priority area for capacity building during the period of 2007-2012 was specifically determined based on the overall performance assessment of the results of all of the Convention implementation activities.

3. Project summary

3.1 Project fact sheet

Project Title	**Strengthening Institutions, Regulations and Enforcement (SIRE) capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) in China**
GEF ID Number	**3263**
UNIDO ID (SAP Number)	**GF/CPR/07/009**
Country	**China**
GEF Focal Area and Operational Program	**GEF Operational Programme 14 on POPs: the objective of the Programme is to provide assistance, on the basis of incremental costs, to developing countries and countries with economies in transition to reduce and eliminate releases of POPs into the environment.**
GEF Agencies (Implementing Agency)	**UNIDO**
Project Executing Partner	**State Environmental Protection Administration (SEPA)/Foreign Economic Cooperation Office (FECO), Government of China**
Project Implementation Start Date	**October 2007**
Project Duration (Months)	**60**
GEF Grant (USD)	**$ 5,410,000**
UNIDO Agency Fee (USD)	**$ 541,000**
UNIDO Inputs (USD)	**$ 200,000**
Counterpart Inputs - Co-financing (USD) at CEO Endorsement	**$ 9,825,000**

3.2 Project description

3.2.1 Overview 3.2.1

The project will carry out crosscutting activities in regulatory and institutional strengthening and will lay a foundation for the future implementation of NIP activities, which will not and cannot be effectively undertaken by any other thematic projects.

3.2.2 Project goal and objective

The overall goal of this project is to assist China to “effectively and efficiently implement the Stockholm Convention (SC) by strengthening 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; and,
- Enhancing supervision, enforcement and evaluation for continuous improvement and awareness raising of stakeholders on POPs issues.

3.2.3 Expected outcomes and outputs

The Strengthening Institutions, regulations and Enforcement (SIRE) project was designed to overcome the barriers faced by China to cost-effective implementation of the Stockholm Convention (SC) by creating and/or putting in place a more coherent, consistent and responsive framework of laws, regulations, administrative rules and technical standards to support compliance. In particular the project was expected to strengthen China’s institutional capacities directly or indirectly for enforcement and to significantly increase public and stakeholders' awareness. The Project Document describes the four main expected outcomes as:

1. **Strengthened policy and regulatory framework for more effective implementation of the SC and NIP. This will be achieved via 2 outputs:**

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.

2. **Strengthened institutions for more efficient implementation of the SC and the NIP. This will be achieved via 6 outputs:**

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 centre 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.

3. **Changed attitudes and behaviors to promote environmental protection. This will be achieved via 2 outputs:**

Materials for public awareness: POPs related public awareness would be improved through an awareness raising campaign and other public education activities, including preparation of materials on POPs environmental damage; motivating media channels to disseminate POPs information;

Education: working with relevant ministries for integrating POPs issues into existing education and training systems; carrying out of POPs education; design and implementation of on-line education programme; training workshops.

4. **Project management and oversight. This will be achieved via 1 output:**

Project management and M&E: Establishing the Project Management Office (PMO) and local project implementation units; conduct project reviews; independent evaluation and financial reviews.

The benefits expected from the achievement of the above mentioned outcomes are two fold, first at the national level, and second at the regional one. National benefits should be derived from an increased capacity to implement the SC and the NIP within the 2006-2010 timeframe. In particular an improved regulatory framework, legislation enforcement, monitoring, and public awareness are expected to yield significant benefits including:

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

At the global level, benefits stem from the fact that China will be enabled to respond to the capacity building objectives of the SC, effectively and efficiently. Global benefits can be also achieved through dissemination of China's experience, which could serve as a reference for other developing countries.

Implementing a strengthened regulatory framework and institutional capacity will upgrade China's management of POPs control and reduction to an internationally accepted level. The improved monitoring capacity will also help to produce a more reliable and comparable inventory of POPs releases in China.

Overall, the different mechanisms, platforms and partnerships to be established will lay the basis for effective and efficient reduction and elimination of POPs and generate significant benefits for the protection of the global environment and human health.

3.2.4 Budget

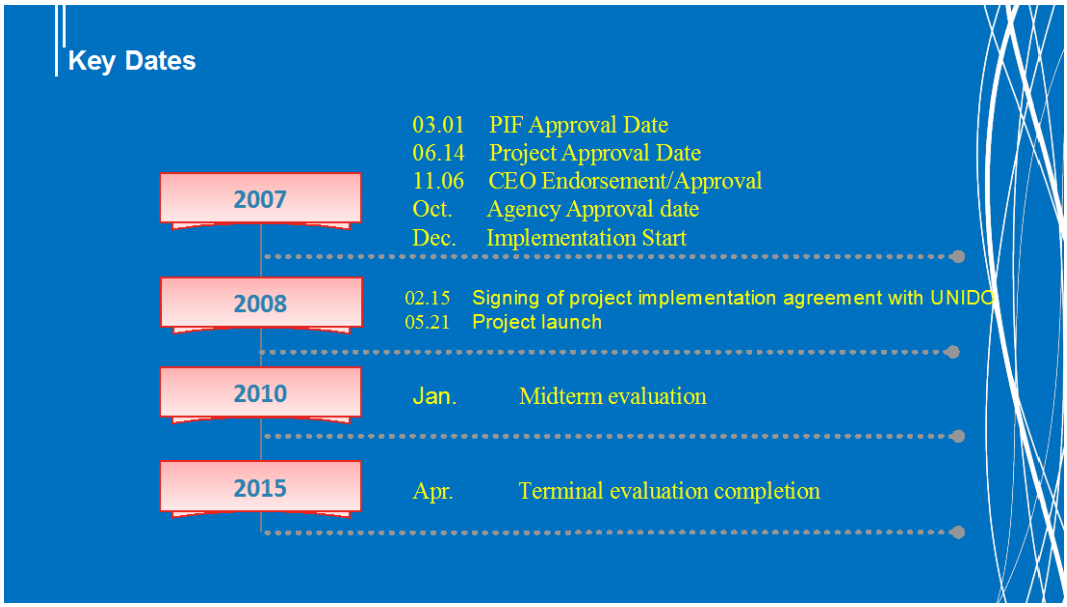
UNIDO, as GEF Implementing Agency (IA) for the project, was well positioned to act as an effective implementer of activities, based on its comparative advantage in this area. It was responsible for the overall management of the project and its funds and assisted the National Executing Agency (NEA) through provision of timely support at key phases of project implementation, in the disbursement of funds necessary for the recruitment of international experts and other related international expenditures and in guiding the National Implementing Agency (NIA) to fulfill its obligations under the SC. UNIDO also provided periodic progress and financial reports to the GEF, as required.

		CO-FINANCE (US$)						
Output	**GEF (US$)**	**UNIDO**	**MOF[5]**	**MEP**	**THU[6]***	**RCESS***	**Italy**	**Co-Financing Total**
1. Policy and Regulatory framework	**740,000**		480,000	920,000			300,000	**1,700,000**
2. Mechanisms and tools for financing	**340,000**		320,000				100,000	**420,000**
3. Environmental Monitoring	**420,000**		70,000	230,000		750,000		**1,050,000**
4. Research and Development	**380,000**		300,000	425,000	150,000			**875,000**
5. Technology Transfer	**480,000**		240,000	160,000	400,000			**800,000**
6. Data collection, processing and reporting	**580,000**		320,000	590,000				**910,000**
7. Institutional strengthening for decision making and legislation enforcement	**630,000**		430,000	350,000			500,000	**1,280,000**
8. Evaluation	**330,000**		200,000		200,000		200,000	**600,000**
9. Public awareness	**490,000**		320,000		50,000		250,000	**620,000**
10. Education	**410,000**		250,000		150,000		150,000	**560,000**
11. management, monitoring & evaluation and follow-up	**610,000**	200,000	810,000					**1,010,000**
GRAND TOTAL	***5,410,000***	***200,000***	***3,750,000***	***2,875,000***	***750,000***	***750,000***	***1,500,000***	***9,825,000***

Overall Cost & Financing (including co-financing) – Source: ProDoc

[5] The Chinese Ministry of Finance (MOF)
[6] Local Chinese NGOs (THU and RCESS)

3.3 Project implementation



Source: FECO – A Summary of SIRE, 2015

As mentioned above, UNIDO acted as GEF IA for the project and provided support to the Ministry of Environmental Protection (MEP), which is the designated national leading agency and focal point of the implementation of the SC in China. Within MEP a High-level Leading Group for the SC, the Convention Implementation Office (CIO), chaired by the Deputy Minister, coordinates initiatives within its divisions and departments and administers activities towards the implementation of the SC in China. Given the above, for the purposes of the project, the MEP acted as NIA.

The Foreign Economic Cooperation Office (FECO) of the MEP acted as the National Executing Agency (NEA). MEP/FECO has about 20 years experience in the development, implementation and managerial oversight of projects and programmes funded by various IAs and their funding mechanisms, including the GEF. It has wide experience of collaboration with various Intergovernmental Organizations, bilateral donors and enterprises in China and has acted successfully as NEA for several GEF-funded projects in the POPs focal area. It has currently established Convention implementation measures that are intended to be permanent.

Managerial responsibilities for the full project are delegated to a Project Management Office (PMO), which was established within FECO/MEP, and a National Project Manager (NPM), recruited for the day-to-day project management. A specialist competent in project management assisted the NPM.

The PMO managed all local elements of the project including the recruitment and supervision of project managers (for the 4 LCIUs) for suitable groups of activities. It cooperated with UNIDO in the procurement and delivery of project inputs and the organization of project activities. The PMO prepared periodic forward planning and progress reports through FECO to UNIDO and TCG. The PMO was also to provide periodic financial reports to UNIDO.

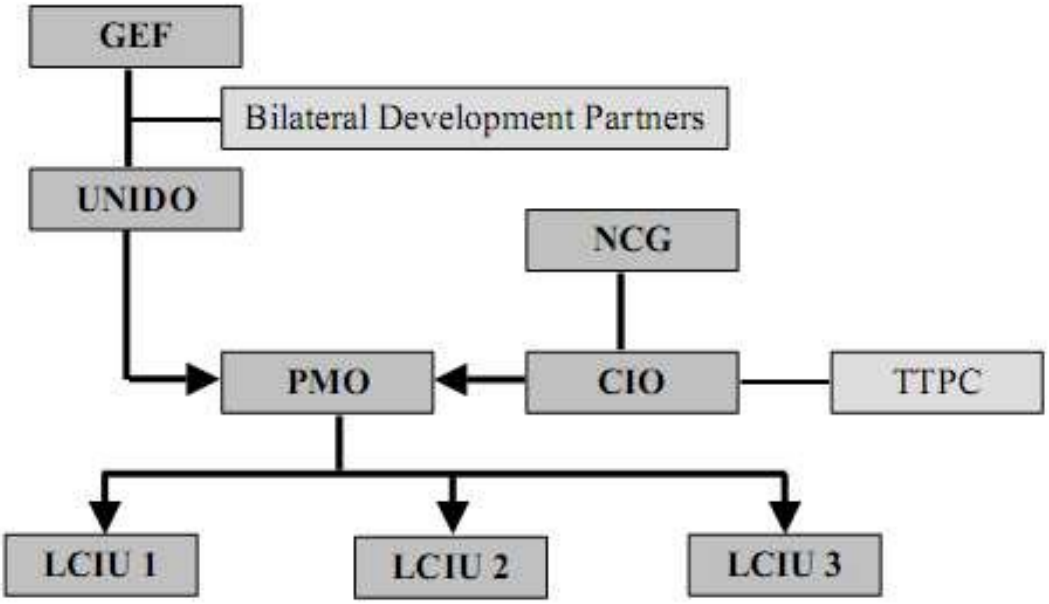


Fig.1 SIRE Project implementation arrangements

NCG: National Coordination Group for Implementation of the SC CIO: Convention Implementation Office

PMO: Project Management Office

TTPC: Technology Transfer Promotion Centre

LCIU: Local Convention Implementation Unit

3.4 Positioning of the UNIDO project

China is UNIDO's largest recipient of technical cooperation assistance and activities undertaken by UNIDO - including a range of measures related to investment, industrial efficiency and waste management – and the experience gained, are considered to have been relevant to this project.

UNIDO is committed to assist its developing country Member States in accordance with the SC, and in this context, the GEF approved an Enabling Activities proposal for China, which opted to undertake the NIP development through the GEF full project cycle.

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 [7].

In addition, as stated in the 2011 Independent UNIDO Country Evaluation, it is clear that the main areas of UNIDO cooperation with China are well aligned with the priorities of the country.

[7] UNIDO-China-SIRE-Prodoc, 17 October 2007, revised (p.19)

3.5 Counterpart organization(s)

The overarching counterpart coordinating entity is the National Coordination Group for Convention Implementation (NCG). This mechanism of the Chinese government for implementation of the SC is responsible for reviewing and implementing national guidelines and policies on POPs management and control, and coordinating issues related to POPs management and convention implementation. It consists of the following 14 agencies:

- Ministry of Environmental Protection (MEP)
- National Development and Reform Commission (NDRC)
- Ministry of Foreign Affairs (MOFA)
- Ministry of Finance (MOF - GEF Focal Point in China)
- Ministry of Commerce (MOCom)
- Ministry of Science and Technology (MOST)
- Ministry of Agriculture (MOA)
- Ministry of Health (MOH)
- Ministry of Housing and Urban-Rural Development (MOHURD)
- Ministry of Industry and Information Technology
- General Administration of Customs (GAC)
- General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ)
- State Administration of Work Safe (SAWS)
- State Electricity Regulatory Commission (SERC)

The National Coordination Group for Convention Implementation Office (CIO) acts as the focal point for China's implementation of the SC. It is responsible for establishment and improvement of convention implementation management information mechanisms, as well as organization, coordination and management of convention implementation activities.

Three Local Convention Implementation Units (LCIUs) were established under the guidance of the CIO to facilitate project implementation at the local level. Their responsibilities include planning, coordination and organization of trainings, awareness raising and inspections, supervising the project implementation at local level, and collecting information and compiling progress reports.

Their work included, among others:

i. The development of 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 Convention.

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 (MoU) signed by these two organizations.

Technical Coordination Group (TCG): All bilateral and multilateral agencies working on POPs in China have formed a group to exchange information about their POPs programmes and projects in the country. It was chaired by MEP and established during the NIP development and continued its functions for the implementation of this project.

The members of the TCG include relevant domestic stakeholders, international executing agencies and implementing agencies, bilateral donors, private sectors and non-governmental organizations.

4. Assessment

4.1 Design and relevance

The design of the project was assessed as adequate, and the relevance as **Highly Satisfactory**, as detailed below. In particular the project is considered to be relevant at different levels including policy, environmental, economic and is overall considered to have provided an appropriate and timely response to a clearly defined and urgent challenge, that of facilitating compliance with the Stockholm Convention.

The project document in general is assessed as being of good quality, containing relevant and concise information, which aims to overcome the barriers to the enhancement of capacity for effective and efficient implementation of the NIP and address the problems at hand [8]. Overall, the duration of the project and the budget are considered adequate to achieve the expected outcome of effective and efficient implementation of the SC and NIP as well as that of improved awareness and education on POP's. Funding is indeed considered adequate to achieve standard results; it is however important to note that large "unplanned" amounts of cofinancing boosted the project results significantly.

The SIRE project was formulated based on the logical framework approach with a clear thematically focused development objective. The development of the project proposal followed a participatory approach, involving key national stakeholders and international agencies. This contributed to the build up of a high sense of ownership, which was documented at all levels i.e. Central, Provincial and, of the enterprises.

Its design sought to facilitate the introduction of advanced concepts and management experience to harmonize Chinese practices with international ones. This included promoting technology transfer, upgrading the industrial structure, increasing environmental friendliness of Chinese product, promoting cleaner production and protecting the public health from POPs releases. The approval and implementation of the project also directly aimed to support China in its efforts to implement the NIP within the 2006-2010 timeframe, while achieving significant domestic and global benefits.

The four main Outcomes and 11 Outputs - targeting the preparation/amendment of 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 – are considered to concur with the project's concrete objective of creating an enabling environment for the implementation of the Stockholm Convention in China.

Regarding relevance, the ET can only concur with the findings of the Mid term Evaluation (MTE), which concludes that the project is considered highly relevant,

[8] Mid Term Evaluation (MTE), August 2011

especially with reference to the countries planning processes (Five-Year-Plans 2005-2010 and 2010-2015), to the NIP and the target groups. The ownership is also assessed as high. These findings were verified and are confirmed by the ET.

This said the ET did identify a minor design flaw as it considers that the project did not properly assess the existing laboratory capacities to be strengthened and, underestimate the time required to fully establish these.

With hindsight it is now possible to explain that prior to 2010 there were only a handful of laboratories in operation, which were mostly in economically advanced regions, while others were only, in the best of cases, nearing completion or in the process of being established.

Although it was made abundantly clear that this type of project is "considered as extremely important", it was also clearly stated that "the objective was never to finish the project, but to improve" or in the words of yet another interviewee "it was not to do the project for the sake of a project, but to strengthen national capabilities".

Given the above, it is clear that completing the training prior to all laboratories being "strengthened" would have created a situation where less advanced provinces would have missed "a golden opportunity", in the words of an interviewee, and realization of the situation led to the need to request (and obtain) a "Project Extension" to 30 June 2015. This in great part explains why a 5-year project was implemented in 8.

4.2 Effectiveness

The ET considers the effectiveness of the project as **Highly Satisfactory**, based on the review of the activities carried out to complete the expected outputs, as detailed below. These are considered to have been effectively delivered and to be of high quality and interviewed beneficiaries were assessed as being highly satisfied with the support received and results obtained.

The following section describes results of the Outcomes, Outputs and respective activities in detail as per the outline below:

1. **Strengthened policy and regulatory framework for more effective implementation of the SC and NIP**
    1) Improved policy and regulatory framework
    2) Co-financing strategy developed
2. **Strengthened institutions for more efficient implementation of the SC and NIP**
    3) Environmental Monitoring
    4) Research & Development
    5) Technology Transfer
    6) Institutional strengthening for data collection, processing & reporting

7) Institutional strengthening for decision making & legislation enforcement

8) Institutional strengthening for evaluation and follow-up

3. Changed attitudes and behaviors to promote environmental protection

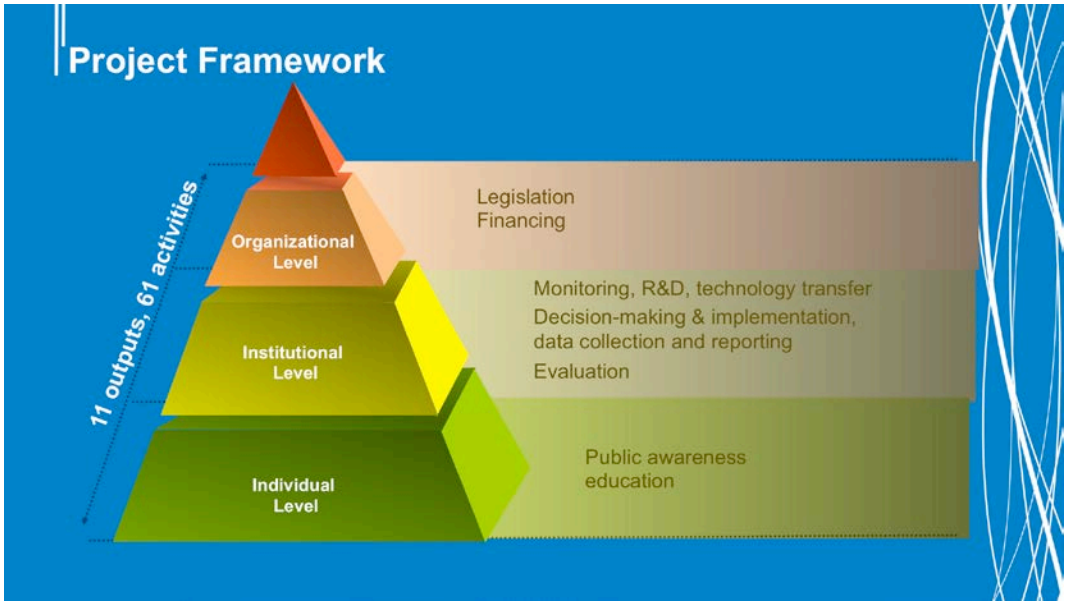
9) Public awareness

10) Education

4. Project management and oversight

11) Project Management and Monitoring & Evaluation

For reference, the **4 main Outcomes** assessed below are supported by 11 Outputs and 61 Activities, as per the diagram below:



Source FECO – A Summary of SIRE, 2015

Outcome 1 - Strengthened policy and regulatory framework for more effective implementation of the SC and NIP

1) Improved policy and regulatory framework

The overarching goal for this Output was to strengthen policy and regulatory framework in order to implement the NIP more effectively. With the support of the College of Beijing University and University of Chinese Academy of Sciences, research was completed and proposals issued to assist in the formulation and revision of relevant policies, regulations and standards at the Central level (Laws and Regulations); Departmental level (Regulations); and, Technical level (Policy Guidelines and Standards). The ET documented the realization of activities that:

- Supported the promulgation and implementation of 27 POPs management polices, standards and technical guidelines
- Incorporated POPs reductions and control into the national environmental management and industrial policy standard system
- Incorporated SC requirements into the “Industrial Restructuring Catalogue (2011)” and “Key hazardous chemicals directory for environmental management”
- Carried out in-depth research regarding the formulation and revision of a total of 112 relevant standards and technical guidelines - as proposed in the NIP - preparing suggestions for formulation and/or revision (Report published)
- Carried out a systematic comparative analysis of relevant policies and regulations covering 23 POPs in developed countries (US, Japan and EU – Report to be published)
- Promoted the formulation of 13 local policies and regulations in 5 provinces of which 6 have been implemented, providing institutional safeguards for POPs prevention and control (see below).

Province/City	Titles	Progress
Jilin	**"Jilin regulations on the control of electrical equipment containing PCBs and its waste"**	**promulgated & implemented**
Shandong	**"Shandong industrial furnace air pollutant emission standards"**	**promulgated & implemented**
	"Shandong Iron and Steel Industry emission standards"	**promulgated & implemented**
	"Opinions on strengthening the dioxin pollution control work in Shandong"	formulation completed
	"Management measures regarding POPs contaminated sites in Shandong"	formulation completed
Guangdong	**"Termite control technical standards"**	**promulgated & implemented**
	"Guangdong POPs reduction and control management measures"	formulation completed
	"Guangdong metal refining dioxin emissions standards"	formulation completed
	"Pollution monitoring technical standards on POPs of imported waste non-ferrous metal industry"	formulation completed
	"Pollution monitoring technical standards on POPs of imported waste plastics industry"	formulation completed
Henan	**"Non-ferrous metal regeneration, solid waste incineration, steel and machinery industry dioxin pollution control technical guidance"**	**promulgated & implemented**
Sichuan	"Sichuan Province Solid Waste Pollution Prevention Regulations"	formulation completed
Ningbo	**"Ningbo POPs reduction and control regulations"**	**promulgated & implemented**

2) <u>Cofinancing strategy developed</u>

The overarching goal of this Output was to conduct research on co-financing mechanisms, striving to broaden the financing channels for POPs management. With the support of the Chinese Academy for Environmental Planning, the project specifically carried out the following activities:

- Identified key stakeholders including central and local governments, enterprises, international community and the public

- Conducted research on international capital, domestic fiscal funds, enterprises and social financing channels, and offered industry specific financing suggestions

Activities included carrying out of an in depth assessment of funding requirements for different priority areas (Elimination of pesticide POPs, elimination of PCBs, BAT/BEP to control U-POPs, treatment of wastes, to name a few).

This was followed by an analysis of the available funding channels (International, domestic fiscal financing, enterprise and social financing) and ultimately led to the implementation of financing solutions for projects in the areas of dioxin emissions reduction, waste disposal, contaminated site remediation, as well as a technology replacement project.

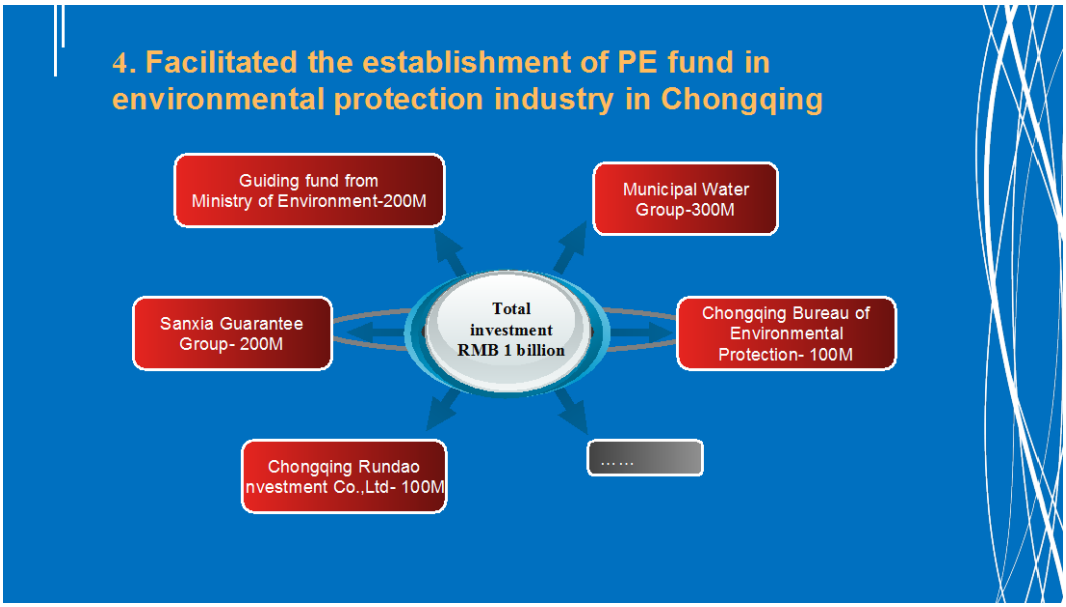
As a result of these activities the ET was informed that the project stimulated domestic investment through international funding, by mobilizing slightly under USD 200 million (GEF and bi-lateral grants), which in turn facilitated the implementation of international cooperation projects that mobilized USD 600 million in support funds (domestic and foreign sources).

In addition, the project promoted the establishment of a green financing system implemented through the Industrial Bank Co, which by end of 2013 had approved 19 proposals (out of 26 submissions) for a total amount of approximately USD 225 million. The main areas of investment for these funds are described as hazardous waste, fly ash, medical waste, etc.

- Conducted social financing demo activities in Ningbo and Chongqing

Under the following general guiding principle stating that *"Those who cause damage should repair; those who benefit should compensate; those who discharge waste should pay"*, a social financing demonstration project was launched in Ningbo city. This was based on a study of areas requiring funding, an analysis of the financial situation as well as an analysis of the available funding channels, and ultimately led to specific funding suggestions. In particular this resulted in a public-private partnership (PPP) demonstration project in the waste incineration industry, specifically a power generation project in Yuyao city. The owner is responsible for financing, project construction and operation - for a period of 30 years (excluding construction stage) - after which he hands the keys over to the government (gratis). At the time of the ITE the construction of the facility was almost nearing completion (started in 2011).

In addition, the establishment of a Private Equity fund (PE) was facilitated for the environmental protection industry in Chongqing as per the diagram below, and this mobilized a total investment of 1 billion Yuan (approximately USD 161 million):



- Formulated a financing strategy for China to implement the Convention, NIP and the ""12th Five Year Plan" on POPs prevention and control in key industries"

This last activity under output 2 was carried out with the support of the Chinese Academy for Environmental Planning. As a result of this collaboration, a series of reports were prepared and released, amongst which the National POPs financing assessment; the summary report on social financing channels for POPs control and management; the relevance and feasibility study on POPs control and management and financing channels. These included proposals for key projects for the "12th Five Year Plan on POPs prevention and control in key industries" to be included in relevant special fiscal funds allocations. In addition, conference materials and the Annual report on international financing of China POPs implementation were released.

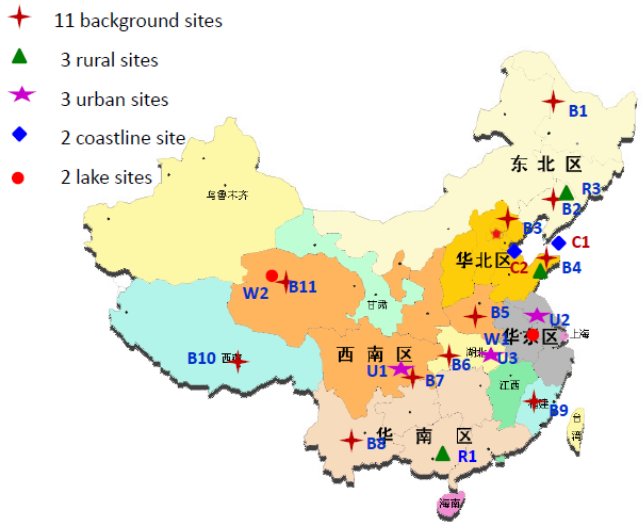
Outcome 2- Strengthened institutions for more efficient implementation of the SC and NIP

3) Environmental Monitoring

The overarching and self-described goal of this Output was to conduct results evaluation and, improve monitoring capacity. To this effect:

- The First National Monitoring Plan was formulated[9] covering monitoring of POPs in environmental and human samples (serum and breast milk) through active and passive sampling from 17 different sites (see map below). From 2008 to 2013, five rounds of activities were completed covering Aldrin, Cyclohexane, DDT, Dioxins, Endosulfan, HBCD, HCH, Heptachlor, Hexachlorobenzene, PBB, PCB, PBDE, PFOS, Mirex and, Toxaphene.

[9] The First National POPs Monitoring Report was prepared between 2007 and 2008 and was updated in 2014



- For this a network of laboratories was strengthened/established and capacity building activities were undertaken with the support of China Environmental Monitoring Station and the Institute for Environment Hygiene and Health Related Product Safety of the Chinese Centre for Disease Control and Prevention (CDC). This included training programs for monitoring of 17 POPs including new POPs, pesticidal POPs, PCB and dioxins in environmental samples in the laboratories of provincial environmental monitoring stations across the country. In addition monitoring training targeting technicians, took place at provincial/municipal/county environmental monitoring stations nation-wide. Provincial and city level human sample of pesticidal POPs,PCBs and dioxin training conducted by CDC was completed in Jiangsu, Jilin and the Ningxia Hui Autonomous Region. This included a total of 16 training sessions for monitoring technicians, covering nation-wide environmental monitoring stations as well as a number of labs in the CDC system. Overall more than 1,000 were trained. It is important to note that China has a large territory and the need to comprehensively improve monitoring capability has not been fully met.
- Finally a number of laboratories participated in domestic and/or international inter-laboratory comparison and verification exercises and the results achieved were considered to be highly satisfactory.

4) Research & Development

The overarching goal of this Output was to evaluate the progress of R&D activities, identify key technologies and promote their commercial application, which included the following activities:

- Conducted research leading to the preparation of a situational analysis on funding available for technology for POPs implementation from national science and technology programs[10]
- Carried out joint research into science and technology support projects in 10 priority areas (as defined in the NIP), evaluating the progress of POPs-related R&D activities. This included the classification, assessment and verification of available key technologies according to the 5 categories established by the Scientific and Technical Advisory Panel of the GEF (STAP)[11]. These categories are used to help streamline the design, development, review, implementation and execution of GEF funded POPs disposal projects. To date there are 3 technologies for which technical evaluations have been completed and an additional 7 are in the final stages of the verification process
- Proposed a mechanism for promoting technology commercialization covering the government, enterprises, universities, research institutions, financial organizations and intermediaries to promote commercial development of the selected technologies
- Actively participated in and organized numerous international and domestic academic exchanges and conferences and conducted R&D progress exchange and dialogue related activities

5) Technology Transfer

The overarching goal of this Output was to promote the establishment of the Technology Transfer Promotion Center (TTPC) in order to facilitate technology transfer. This was successfully achieved and the following activities were delivered:

- Established the Technology Transfer Promotion Center (TTPC) - jointly with Tsinghua University and UNIDO - to promote technology application and transfer in key fields such as POPs alternatives, reduction and disposal. The activities of the TTPC include technical assessments, promotion, training and consulting and have successfully contributed to the development and transfer of 4 pilot technologies (see below) and over 20 additional ones are currently under negotiations for transfer.

Key technologies	Partner
Catalytic decomposition technique for fumes containing dioxins	Shandong AIR Environmental Protection Co. Ltd
Alternatives for antifouling paint containing DDT	Zhejiang Yutong Paint Co. Ltd
	Marine Chemical Research Co.

[10] Including Plan 863, the Science and Technology Support Plan, Plan 973 and the National Natural Science Foundation

[11] The critical elements in POPs technology selection are outlined in the STAP Advisory Document of 2011

Key technologies	Partner
	Ltd
Plasma disposal incineration fly ash technology	Anhui Julong Environmental Protection Co. Ltd
Thermal desorption technology	BCEG Environmental Remediation Co. Ltd

- Established the POPs emission reduction technologies website (WWW.POPS-TTPC.ORG), to service industry groups, provide the latest information, technical overview at home and abroad and cases of successful transformation, and to effectively connect research institutions with the environmental protection industry
- Provided support to relevant enterprises to carry out technical exchanges and training, providing cutting-edge technology and expertise, and promoting technology transfer and application. In total 11 sessions were organized for over 700 trainees

6) Institutional strengthening for data collection, processing and reporting

The overarching goal of this Output was to deliver data collection and reporting in accordance with requirements of the SC and the conference of the parties (COP), which was achieved through the following activities:

- Developed and supported the promulgation of a system, building on existing and/or new channels, to collect information on pollutants included under appendixes A and B, and UPOPs. This was supported by the country's implementation coordination system and led to the yearly statistical statement system of sources and releases (registry) currently active across the country (since 2011). This also included the provision of support to demonstration provinces to strengthen their existing information systems
- Established POPs MIS project information management system for the collection and integration of project related information
- Developed and launched the "POPs Action in China" website for information exchange and publicity (WWW.CHINA-POPS.ORG)

7) Institutional strengthening for decision making & legislation enforcement

The overarching goal of this Output was to improve management, decision-making and law enforcement capabilities of relevant institutions for the implementation of the SC, and to raise businesses' responsibility awareness. To this effect activities were completed that:

- Strengthened the National Coordinating Group (NCG) and set up an Expert Committee to ensure the smooth operation and daily management of the multi-agency national coordination mechanism. The NCG coordinates the work of three "branches" i.e. the MOEP acting as "Group Leader" and including the Implementation Coordination Group Office, over a dozen "member" ministries and state administrations, the "Expert Committee". As

well, a provincial level coordinating structure for SC implementation was set up in 14 regions. Overall this activity singlehandedly facilitates the implementation of the SC as well as pollution prevention and control

- Assisted provinces, municipalities and autonomous regions to formulate provincial-level "12th five year plan" on combating POPs pollution
- Conducted management trainings to raise corporate social responsibility awareness for government authorities (central, regional and local environmental protection departments, and national management centres for clean production technology), for environmental supervision and law enforcement departments and for key emitters
- Worked with relevant departments and carried out law enforcement inspections in 19 enterprises in Tianjin, Hebei, Jiangsu and Zhejiang, where DDT, chlordane, Mirex and Hexachlorobenzene were used. In 2011， an inspection group consisting of the MOEP, Ministry of Technology, MIIT, Ministry of Commerce, Ministry of Health, AQSIQ, and relevant experts, carried out joint inspection on the implementation of *"Guidelines on enhancing the prevention and combating of Dioxin pollutionthe*Finally in 2013, the MOEP, Ministry of Technology, MIIT, NHFPC, AQSIQ and the National Energy Bureau conducted joint on-site inspections on the implementation of the 12th five-year plan in Jiangxi and Guangdong provinces
- Offered management skills trainings for demonstration enterprises in terms of POPs reduction and control, and raised corporate social responsibility awareness to accept public supervision. This included training for corporate environmental protection personnel in Dioxin emission reduction and control as well as senior training courses on Dioxin pollution prevention and control, and clean production

8) Institutional strengthening for evaluation and follow-up

The overarching goal of this Output was to evaluate and publicize the achievements of the implementation of the SC. To this effect the following activities took place:

- Developed the NIP terminal evaluation plan in order to deliver a thorough evaluation on the implementation of the NIP. This included the creation of an Evaluation Group, the determination of the most appropriate methodology, and the definition of participating institutions[12]. The provincial level capacity evaluation plan was developed for 14 provinces, municipalities, autonomous regions and cities specially designated in the state plan[13] and covered implementation mechanisms, institutional strengthening, local regulations and standards, local planning and programming and, the reduction, control, monitoring and evaluation of POPs. To this effect, experts were supported and conducted evaluation on the implementation capacities of the selected

[12] Peking University, Tsinghua University, CAS ecology center, Academy of environmental science, Peking Normal University, etc., as well as independent experts

[13] Guangdong province, Shaanxi province, Shanghai, the Ningxia Hui autonomous region and Ningbo city

demonstration areas, which resulted in the need assessment for follow-up capability building

- Finally a Technical Coordination Meeting is convened on an annual basis to publicize progress in the implementation of SC through participation in important global meetings and events including the COP and the world expo, and using various publicity methods including the internet, publications, CD, exhibition, side-line meetings and promotional materials

Outcome 3 – Changed attitudes and behaviours to promote environmental protection

9) Public awareness

The overarching goal of this Output was to raise public awareness and encourage public participation. This was achieved through:

- Leveraged TV, radio, newspaper and Internet mainstream media resources to establish effective publicity channels and build platforms for POPs related information and themed campaigns
- Established cooperative partnerships with environmental protection projects, environmental campaigns, NGOs, CBOs, academy and schools. Compiled and published promotional materials and popular science documents, produced publications, TV shows, movies, brochures and posters, to raise public awareness on POPs
- Conducted campaigns, produced publicity materials for farmers, workers, teachers, managers, children and the public at large, and distributed materials through various channels (website, Wechat, public service adds, etc.). This included facilitating the participation of Chinese youth in the Global Youth Art Contest organized in celebration of the 10th anniversary of the SC, for which China received various awards in different categories

It is worthy of mention that in a 2011 survey, over 57% of respondents were assessed as having initial understanding of the environmental risks of POPs and their associated health hazards. For example, 53.8% of these are reported to know that POPs are synthetic chemicals; 64.8% know that POPs remain for a long time once it enters the environment or living organisms; and, 57.4% know about POPs cancer causing, teratogenic and mutagenic effects.

10) Education

The overarching goal of this Output was to incorporate POPs into the education system, and the activities through which this was accomplished were:

- Launching an analysis of the existing education system, assessing the status of information/courses available for higher education, middle and primary schools, in order to integrate POPs related information into existing teaching systems
- Compiling textbooks and training materials for teachers in 130 colleges and 320 middle and primary schools
- Launching and evaluating the effectiveness of demonstration POPs education activities in selected colleges, middle and primary schools, to improve POPs

education system. It is notable that in November of 2013, the National Environmental Knowledge and POPs Contest for middle and primary school students elicited the participation of more than 140,000 students from 13,000 schools

- Launching online POPs education courses (222 students involved from 21 universities, being replicated in 1 other). The online courses will also be applied in 6 schools of the Tsinghua university, including the school of environment
- Training over 300 environmental protection bureau chiefs at prefecture-level on POPs, and integrating POPs into the training books for environment chiefs

Outcome 4 – Project Management and Oversight

11) Project Management and Monitoring & Evaluation

The overarching goal of this Output was to establish a system to manage, monitor and evaluate progress. Overall this was accomplished by setting up the required structures and diligently following GEF and UNIDO monitoring and evaluation requirements.

To this end, 14 local project offices were set-up and meetings were organized as required to promote project implementation and carry out the annual review/prepare the following year's work plan; to organize the annual three way review meeting; to complete the PIRs in accordance with GEF requirements; to organize the annual technical coordination meetings; and, last but not least, to organize the fiscal audit.

4.3 Efficiency

The ET assessed the efficiency of the project as **Satisfactory** given that most project outputs were delivered on target, and were implemented in a cost-effective and efficient manner. This rating is notable in light of the fact that the project suffered implementation delays in its first phase (design flaw), however the results and in particular the unintended co-benefits, have pushed the rating up. The success of the mixed institutions implementation modality also contributes to this rating, as was also pointed out in the MTE.

Overall, with 48 contracts fully completed (out of 50) for an implementation rate of 96%, the project is assessed as having met its objectives efficiently and within an adequate timeframe. As explained previously, delays can be explained and are not considered to be the responsibility of the implementers.

Overview of project expenses as at October 2014

Budget line	Item	Expenditure in 2012	Expenditure in 2013	Expenditure in 2014 (USD)	Total Expenditure (USD)
1100	International consultants	298,129.93	48,691.06	124,674.42	471,495.41
1500	Project related travels	123,031.64	22,824.39	45,408.03	191,264.06

1700	National short time consultants	250,561.64	0	15,159.25	265,720.91
2100	Sub contracts	4,320,650.00	0	0	456,984.97
3000	Trainings	2,678.81	0	5,062.50	7,741.31
3500	International Meetings	32,655.78	107.78	0	32,763.56
5100	Sundries	3,833.35	3,344.83	51.57	40,504.87
Total	Total	5,031,541.17	74,968.06	190,355.77	5,296,865.00

Source SAP: UNIDO budget (GEF funding excluding agency support cost)

4.4 Sustainability of Project Outcomes

The ET considers that the sustainability of project outcomes is **Likely** - Replication **Likely** as it appears in particular that the conditions for replication of the pilots are present, however additional resources and support will be required in order for these to be disseminated and reach all of the provinces. The same can also be said of other initiatives, including the network of laboratories, as China has a large territory to cover and needs to comprehensively improve monitoring capabilities, to ensure that no less-economically developed provinces are left behind.

It is said that the past can be a good indication of the future, and in this sense the ET considers that the clear expressions it received from government (Central and Provincial) regarding the intention of continuing to support project related activities --in addition to the demonstrated and very high rate of cofinancing mobilized by the project-- can be assessed as being a very positive factor in support of sustainability.

Regarding the latter, it is notable that although initially the GOC had expected to mobilize approximately USD 10 million in co-financing, final and documented co-financing amounts actually stand at approximately 4.5 times that, or USD 44.5 million.

Project Component	Activity Type	GEF Financing (in $)		Co-financing (in $)	
		Approved	Actual	Confirmed at CEO Endorsement	Mobilized at project completion
1.Strengthening of policy and regulatory framework	-Policy standards -Financial strategy	436,800	348,361	2,120,000	565,490.18
2.Strengthening of institutional capacity	Environment monitoring	298,400	194,284		27,326,777,36
	R&D	268,400	251,238	875,000	189,796.82
	Technology transfer	388,400	386,125	800,000	961,205
	Data collection and report	98,400	107,642	910,000	1,620,858.04
	Strengthening capacities of decision making and implementation	158,400	181,939	1,280,000	1,084,691.74
	Evaluation	118,400	68,135	600,000	139,345
3.Promotion of environmental protection	Education of public awareness	535,400	521,354	1,180,000	608,018.65
4.Project Management	Project monitoring and management	128,050	313,980	1,010,000	4,171,181.37
5. Demonstration Provinces	Strengthening capacities of demonstration areas	1,890,000	1,947,592		4,555,985
	Enterprises				3,229,348
6.Management fee		129,620	129,620		
7.UNIDO		959,730	959,730		
Total		5,410,000	5,410,000	9,825,000	44,452,696.94

In addition POPs management has been integrated in national and local 5 year plans and been introduced into daily workplans of the central and provincial structures and project implementation is effectively monitored via established systems also at central and provincial levels, as well as by major stakeholders (with FECO support). The ET considers that FECO has a robust internal management system, and is subjected to stringent financial controls, amongst others.

UNIDO has also built strong relations with the Government (FECO), and there is evident support for continued collaboration, an additional factor that contributes to significantly raise project sustainability prospects.

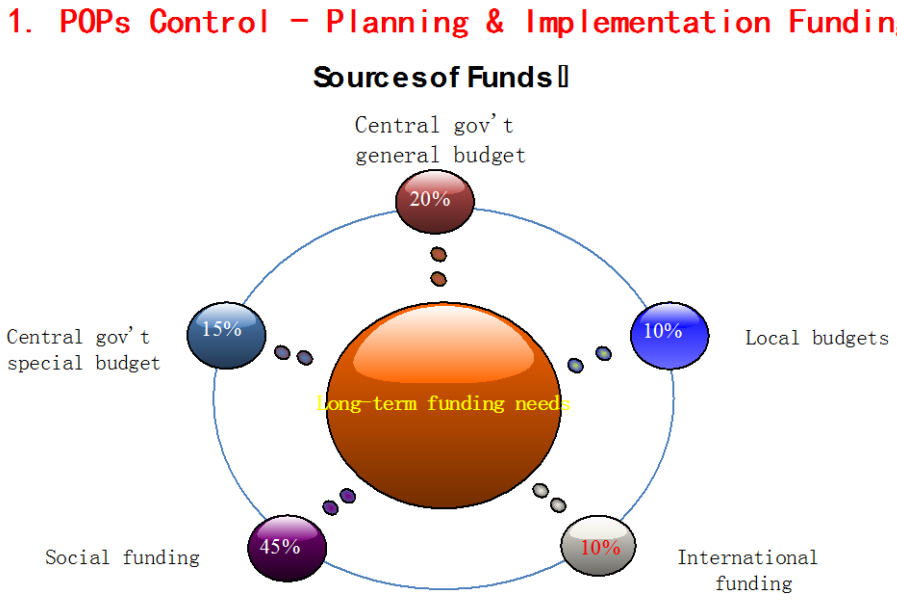
This said the sustainability of results at a broader level requires the continued support of the country and of the institutions, which seems assured. What is not assured at this stage is the capacity of the country to, at least in the near future, ensure compliance with the fast evolving SC (as new substances are added regularly). The table below, prepared by the Chinese Academy for Environmental Planning estimates the funding needs as follows:

NIP Content	Estimated Cost (1,000 RMB)	Estimated Cost (1,000 USD)	Percentage （%）
SIRE Capacities	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**
Inventory and waste	2,365,278	303,241	6.97

NIP Content	Estimated Cost (1,000 RMB)	Estimated Cost (1,000 USD)	Percentage （%）
R&D activities	1,617,404	207,359	4.77
Total	**33,915,105**	**4,347,83**	**100.00**

These costs are based on a basic projection forecasting a need for 33.9 billion Yuan, of which 13.9 billion is incremental costs and 20 billion are baseline costs. This also takes into account a number of uncertainties (new POPs demands, economic growth, rapid growth of related industries, etc.). What is however clear, is that the funding needs can not be met by China alone, at least not in the immediate future.

In particular, as was evidenced by another of the results from the analysis of the Chinese Academy for Environmental Planning, although China is projected to mobilize approximately 90% of the funding necessary to implement the NIP under the Stockholm Convention, the remaining 10% is still required to successfully achieve this result.



For the above reasons the ET considers that the successful implementation of the next actions in support of full compliance with the SC are very likely to require continued and strong international support.

4.5 Monitoring and Evaluation Systems

As mentioned above, these are considered to be more than adequate to allow for the timely and effective monitoring and evaluation of the day-to-day activities of the project.

4.6 Processes Affecting Achievement of Results

The ET did not evidence issues as regards preparation and readiness to implement this project, nor regarding quality at entry, which is considered to have been adequate. Country ownership, cofinancing, financial planning, project outcomes and sustainability and, stakeholder involvement were assessed positively throughout this evaluation. As well, UNIDO support, as also mentioned below, is considered positively.

4.7 Project Coordination and Management

Management was rated as Highly satisfactory. The Project's management, coordination and implementation were considered to be adequate to ensure on-time delivery of all of the outputs. The stakeholders at all levels (from enterprises up to central institutions) expressed their full satisfaction with FECO coordination and management activities.

UNIDO management, quality control and technical inputs were also assessed, by all interviewed stakeholders, as having been Highly Satisfactory. UNIDO was commended for having played a key role in the implementation of the project through its supervisory capacity (including but not limited to country missions). Promotion of a problem solving approach and provision of advice/guidance as regards the timely completion of activities was also appreciated, as well as the proactive support to prepare reports and ensure their quality met international standards.

4.8 Gender Mainstreaming

No issues with gender mainstreaming or lack thereof were evidenced and this does not appear to be a concern in China. The ET informally verified that the demographics of the country seem to be reflected in the composition of the enterprises visited. As was described in the relevant chapter, China's population is composed approximately of 51% men and 49% women.

4.9 UNIDO procurement process

As mentioned above, UNIDO procurement was not involved in the project as all contracts are managed and executed by FECO.

4.10 Ratings overview

Criterion	Evaluator's Summary Comments	ET Rating
Attainment of project objectives and results (overall rating)	Overall highly satisfactory	**HS**
Relevance	Considered highly relevant by all sectors	**HS**
Effectiveness	Assessed as highly effective at all levels	**HS**
Efficiency	Rating affected by one year delay	**S**
Sustainability of Project outcomes (overall rating)	Assessed as likely	**L**
Economic dimension	Funds must continue to be mobilized, both nationally and internationally	**L**
Social dimension		**L**
Environment dimension		**L**
Project Management	No shortcomings were identified	**HS**
National Management		**HS**
UNIDO Management		**HS**
Monitoring and Self-Evaluation		**HS**
Synergies		**HS**
UNIDO specific ratings	No shortcomings were identified	**HS**
Quality at entry	High level of buy in and ownership resulted in very high cofinancing mobilization	**HS**
Implementation approach		**HS**
Overall Rating	Even with minor shortcomings in Efficiency,	**HS**

Criterion	Evaluator's Summary Comments	ET Rating
	Relevance and Effectiveness being critical criteria, overall the project is assessed as HS	

RATING OF PROJECT OBJECTIVES AND RESULTS

- Highly Satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency;
- Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency;
- Moderately Satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency;
- Moderately Unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency;
- Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency;
- Highly Unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Please note: Relevance and effectiveness will be considered as critical criteria. The overall rating of the project for achievement of objectives and results may not be higher than the lowest rating on either of these two criteria. Thus, to have an overall satisfactory rating for outcomes a project must have at least satisfactory ratings on both relevance and effectiveness.

RATINGS ON SUSTAINABILITY

Sustainability will be understood as the probability of continued long-term outcomes and impacts after the project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits beyond project completion. Some of these factors might be outcomes of the project, i.e. stronger institutional capacities, legal frameworks, socio-economic incentives /or public awareness. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes.

On each of the dimensions of sustainability of the project outcomes will be rated as follows.

- Likely (L): There are no risks affecting this dimension of sustainability.

- Moderately Likely (ML): There are moderate risks that affect this dimension of sustainability.
- Moderately Unlikely (MU): There are significant risks that affect this dimension of sustainability
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an Unlikely rating in either of the dimensions then its overall rating cannot be higher than Unlikely, regardless of whether higher ratings in other dimensions of sustainability produce a higher average.

RATINGS OF PROJECT

The Project management will be rated as follows:

- Highly Satisfactory (HS): There were no shortcomings in the project management;
- Satisfactory (S): There were minor shortcomings in the project management;
- Moderately Satisfactory (MS): There were moderate shortcomings in the project management;
- Moderately Unsatisfactory (MU): There were significant shortcomings in the project management; and,
- Unsatisfactory (U): There were major shortcomings in the project management.

5. Conclusions, recommendations and lessons learned

5.1 Conclusions

As noted in the evaluation, central and provincial authorities are very supportive and assess strategic cooperation with UNIDO very positively. UNIDO and in particular the access it provides to innovative technologies and expertise are very positively considered.

Technical and scientific support/expertise and, transfer of knowledge are highly regarded by stakeholders and the Government of China (GoC) in general. This is particularly important given that the Stockholm Convention (SC) is an evolving convention, progressively taking on new chemicals with very specific characteristics, which reinforces the hypothesis of a highly likely need for additional up-to-date technical backstopping.

The strong overall support of the GoC, facilitating business participation and strengthening, and ensuring the effective enforcement of the legislative framework are also considered to have contributed positively to the successful delivery of the project.

Country drivenness, strong government, committed stakeholders and a high level of co-funding are also considered to have been key factors in the successful implementation of the project.

Notwithstanding the above, the magnitude of the task still at hand is considered to be daunting, and it is highly likely that full implementation of the Stockholm Convention will require access not only to avant-garde technical knowledge but most importantly to access to financial resources beyond the current capacity of the GoC.

5.2 Recommendations

Government of China should continue to provide its support to activities initiated by the SIRE project including:

- Promoting the replication of demonstration pilots;
- Ensuring continued awareness raising/education and monitoring activities;
- Facilitating further integrated cooperation between national and provincial authorities so as to not loose momentum gained and capacities developed; and,
- Considering developing mechanisms to facilitate the further development and promotion of the Technology Transfer Promotion Centre (TTPC) to ensure widespread reach to all provinces.

UNIDO should strongly consider:

- Continuing to proactively support the Government of China (GOC) as it seeks to design new programs to address evolving Stockholm Convention (SC) targets;
- Maintaining close ties to the Technology Transfer Promotion Centre (TTPC) in order to:
    - Ensure that it has access to the most up-to-date technical knowledge and information;
    - Facilitate the establishment/strengthening of direct connections with technology suppliers; and,
    - Facilitate the establishment of direct links with industrial associations, other professional technology transfer institutions and large-scale industrial parks.
- Carrying out an impact evaluation in the near future (five years) as the size of this project would be ideal for this exercise and could provide valuable lessons for future work in China.

5.3 Lessons learned

The mixed form of agency execution and national execution is considered to have been an effective/efficient implementation modality, however this is only possible in cases where the national and provincial capacities are sufficiently developed.

Integrating the objectives of the project into national and provincial economic, environmental and social development plans provided a good opportunity to mobilize financial support, and helped to demonstrate that a high level of co-funding is available in the GoC for projects that are aligned with development priorities.

Annex A: Terms of Reference

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

Terms of Reference

Independent Terminal Evaluation of the UNIDO Project:

Project Number: GF/CPR/07/009

STRENGTHENING INSTITUTIONS, REGULATIONS AND ENFORCEMENT (SIRE) CAPACITIES FOR EFFECTIVE AND EFFICIENT IMPLEMENTATION OF THE NATIONAL IMPLEMENTATION PLAN (NIP) IN CHINA

MARCH 2015

Contents:

I. Project Background and overview

1. Project factsheet

Table 1 . Project Factsheet

Project Title	**Strengthening Institutions, Regulations and Enforcement (SIRE) capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) in China**
GEF ID Number	**3263**
UNIDO ID (SAP Number)	**GF/CPR/07/009**
Country(ies)	**China**
GEF Focal Area and Operational Program	**GEF Operational Programme 14 on POPs: the objective of the Programme is to provide assistance, on the basis of incremental costs, to developing countries and countries with economies in transition to reduce and eliminate releases of POPs into the environment.**
GEF Agencies (Implementing Agency)	**UNIDO**
Project Executing Partner	**State Environmental Protection Administration (SEPA)/Foreign Economic Cooperation Office (FECO), Government of China**
Project Implementation Start Date	**October 2007**
Project Duration (Months)	**60**
GEF Grant (USD)	**$ 5,410,000**
UNIDO Agency Fee (USD)	**$ 541,000**
UNIDO Inputs (USD)	**$ 200,000**
Counterpart Inputs - Co-financing (USD) at CEO Endorsement	**$ 9,825,000**

Source: Project Document

2. Project origin and objectives

The development of the National Implementation Plan (NIP) in China has been implemented by the Foreign Economic Cooperation Office (FECO) of Ministry of Environmental Protection (MEP) under a letter of agreement with UNIDO. It was supported by a full size project (GFCPR04002 “Building the capacity of the People’s Republic of China to implement the Stockholm Convention on POPs and develop a National Implementation Plan” – evaluated in

2008) approved by the GEF Council in May 2003, initiated on 21 September 2004 and completed in December 2008.

The overall objective of this successor project that is subject of this terminal evaluation: "Strengthening Institutions, Regulations and Enforcement (SIRE) capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) in China" 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. 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.

According to the Project Document, the expected outcomes are as follows:
Outcome 1: Strengthened policy and regulatory framework for more effective implementation of the Stockholm Convention and NIP;
Outcome 2: Strengthened institutions for more efficient implementation of the Stockholm Convention and the NIP;
Outcome 3: Changed attitudes and behaviors to promote environmental protection;
Outcome 4: Project management and oversight.

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; and
- Protection of the public health from POPs pollution.

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 China's experience, which could serve as a reference for other developing countries.

3. Relevance to GEF programmes

GEF-3 efforts focused on supporting the 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:

a. Continuing the GEF's National Implementation Plan (NIP) Program.
b. Strengthening national capacities for NIP implementation, including assisting those countries that lag farthest behind to establish basic, foundational capacities for sound management of chemicals.
c. Partnering in investments needed for NIP implementation to achieve impacts in POPs reduction.
d. Partnering in the demonstration of feasible, innovative technologies and practices for POPs reduction.

4. Project implementation arrangements

In order to guide the development of the NIP, China established a high-level intra-ministerial National Coordination Group (NCG) led by MEP (National Implementing Agency (NIA) for the project), 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 Foreign Economic Cooperation Office (FECO) of MOE will act as the national executing agency (NEA). The Convention Implementation Office (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.

UNIDO is the GEF Implementing Agency (IA) for the project. It is responsible for the overall management of the project and its funds. It assists the National Executing Agency (NEA) in the execution of the project through the provision of timely assistance at key phases of project implementation, in the review of investigations and reports prepared as outcomes to the project, in the disbursement of funds necessary for the recruitment of international experts and other related international expenditures and in guiding the NIA to fulfill its obligations under the Stockholm Convention.

Managerial responsibilities for the full project will be delegated to a Project Management Office (PMO) to be established within FECO/MEP, and a National Project Manager (NPM) will be recruited for the day-to-day project management.

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

Three Local Convention Implementation Units (LCIUs) were to be established under the guidance of the CIO to facilitate the project implementation at the local level. Their responsibilities include planning, coordination and organization of trainings, awareness raising and inspections, supervising the project implementation at local level, and collecting information and compiling progress reports. A special Technology Transfer Promotion Centre (TTPC) was to be established to act as technology information clearinghouse.

5. Budget Information

The total budget of the project (including support costs) is USD 15,235,000 with the majority of the co-funding coming from the private sector, national and local governments. The total budget provided by the GEF to UNIDO to implement the project was USD 5,410,000, excluding agency support cost of USD 541,000. So far, **97.91 (02 October 2014)** of the GEF-funded budget has been committed and/or spent.

a) Overall Cost and Financing (including co-financing):

		CO-FINANCE (US$)						
Output	**GEF (US$)**	**UNIDO**	**MOF[14]**	**MEP[15]**	**THU***	**RCESS***	**Italy**	**Co-Financing Total**
1. Policy and Regulatory framework	**740,000**		480,000	920,000			300,000	**1,700,000**
2. Mechanisms and tools for financing	**340,000**		320,000				100,000	**420,000**
3. Environmental Monitoring	**420,000**		70,000	230,000		750,000		**1,050,000**
4. Research and Development	**380,000**		300,000	425,000	150,000			**875,000**
5. Technology Transfer	**480,000**		240,000	160,000	400,000			**800,000**
6. Data collection, processing and reporting	**580,000**		320,000	590,000				**910,000**
7. Institutional strengthening for decision making and legislation enforcement	**630,000**		430,000	350,000			500,000	**1,280,000**
8. Evaluation	**330,000**		200,000		200,000		200,000	**600,000**
9. Public awareness	**490,000**		320,000		50,000		250,000	**620,000**
10. Education	**410,000**		250,000		150,000		150,000	**560,000**
11. management, monitoring & evaluation and follow-up	**610,000**	200,000	810,000					**1,010,000**
GRAND TOTAL	***5,410,000***	*200,000*	*3,750,000*	*2,875,000*	*750,000*	*750,000*	*1,500,000*	***9,825,000***

Source: Project document

[14] The Chinese Ministry of Finance (MOF)
[15] The Ministry of Environmental Protection (MEP)
* Local Chinese NGOs

b) UNIDO budget (GEF funding excluding agency support cost):

Budget line	Item	Expenditure in 2012	Expenditure in 2013	Expenditure in 2014 (USD)	Total Expenditure (USD)
1100	International consultants	298,129.93	48,691.06	124,674.42	471,495.41
1500	Project related travels	123,031.64	22,824.39	45,408.03	191,264.06
1700	National short time consultants	250,561.64	0	15,159.25	265,720.91
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3500	International Meetings	32,655.78	107.78	0	32,763.56
5100	Sundries	3,833.35	3,344.83	51.57	40,504.87
Total	Total	5,031,541.17	74,968.06	190,355.77	5,296,865.00

Source: SAP, 02 October 2014

II. Scope and purpose of the evaluation

The terminal evaluation will cover the whole duration of the project from its starting date in October 2007 to the estimated completion date in JUNE 2015. It will assess project performance against the evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact. The evaluation will assess the extent to which the project has made a significant contribution to reducing the effects of POPs on human health and the environment.

The terminal evaluation has an additional purpose to draw lessons of wider applicability for the replication of the experience gained in this project in other projects/countries.

The evaluation team should provide an analysis of the attainment of the main objective and specific objectives under the eight core project components. The assessment includes a re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in chapter VI. Furthermore, the terminal evaluation should examine to what extent have the findings and recommendations from the mid-term evaluation been implemented in the project.

The key question of the terminal evaluation is whether the project has achieved or is likely to achieve the project objective, i.e. whether the project has made a significant contribution to reducing the effects of POPs on human health and the environment.

III. Evaluation approach and methodology

The terminal evaluation will be conducted in accordance with the UNIDO Evaluation Policy, the UNIDO Guidelines for the Technical Cooperation Programmes and Projects, the GEF's 2008 Guidelines for Implementing and Executing Agencies to Conduct Terminal Evaluations, the GEF Monitoring and Evaluation Policy from 2010 and the Recommended Minimum Fiduciary Standards for GEF Implementing and Executing Agencies.

It will be carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project are kept informed and regularly consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Office for Independent Evaluation (EVA) on the conduct of the evaluation and methodological issues.

The evaluation team will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources: desk studies and literature review, statistical analysis, individual interviews, focus group meetings, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings. The concrete mixed methodological approach will be described in the inception report.

The evaluation team will develop interview guidelines. Field interviews can take place either in the form of focus-group discussions or one-to-one consultations.

The methodology will be based on the following:

1. A desk review of project documents including, but not limited to:
   (a) The original project document, monitoring reports (such as progress and financial reports to UNIDO and GEF annual Project Implementation Review (PIRs) reports), Mid-Term Evaluation Report, output reports (case studies, action plans, sub-regional strategies, etc.) and relevant correspondence.
   (b) Notes from the NPMT and Steering Group meetings.
   (c) Other project-related material produced by the project.

2. Since the project document contains a logical framework (included in annex 8 of the ToR), the evaluation team will assess performance against this framework. The validity of the theory of change will be re-examined through specific questions in the interviews and, possibly, through a survey of the following stakeholders: FECO / MOE, and the stakeholders from the financing.

3. Counterfactual information: In those cases where baseline information for relevant indicators is not available the evaluation team will aim at establishing a proxy-baseline through recall and secondary information.

4. Interviews with project management and technical support including Mr. Zenghyou Peng, UNIDO Project Manager; Mr. Heinz LEUENBERGER, UNIDO Director Environmental Management Branch; project staff in China and administrative staff associated with the project's financial administration if necessary.

5. Interviews with project partners, in particular those that have been selected for co-financing as shown in the corresponding sections of the project documents.

6. On-site observation of results achieved in demonstration projects, including interviews of actual and potential beneficiaries of improved technologies.

7. Interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project. The evaluator shall determine whether to seek additional information and opinions from representatives of any donor agencies or other organisations.

8. Interviews with the UNIDO Country Office in China that will be visited by the evaluation team, the project's management group (FECO/MEP), and the various national and sub-regional authorities dealing with project activities as necessary.

The evaluator shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.

9. Other interviews, surveys or document reviews as deemed necessary by the evaluator and/or UNIDO EVA.

10. The inception report will provide details on the methodology used by the evaluation team and include an evaluation matrix.

6. Evaluation team composition

The evaluation team will be composed of one international evaluation consultant acting as a team leader and one national evaluation consultant.

The evaluation team should be able to provide information relevant for follow-up studies, including evaluation verification on request to the GEF partnership up to two years after completion of the evaluation.

Both consultants will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions attached to these terms of reference.

Members of the evaluation team must not have been directly involved in the design and/or implementation of the programme/projects.

The Project Manager at UNIDO and the FECO / MOE in China will support the evaluation team. The UNIDO GEF Coordinator will be briefed on the evaluation and equally provide support to its conduct.

7. Time schedule and deliverables

The evaluation is scheduled to take February 2015 to March 2015. The field mission is planned for March 2015. At the end of the field mission, there will be a presentation of the preliminary findings for all stakeholders involved in this project in China.

After the field mission, the evaluation team leader will come to UNIDO HQ for debriefing and presentation of the preliminary findings of the Terminal Evaluation. The draft Terminal evaluation report will be submitted 4-6 weeks after the end of the mission.

8. Project evaluation parameters

The evaluation team will rate the projects. The ***ratings for the parameters described in the following sub-chapters A to I will be presented in the form of a table*** with each of the categories rated separately and with **brief justifications for the rating** based on the findings of the main analysis. An overall rating for the project should also be given. The rating system to be applied is specified in Annexes 1 and 2.

A. Project design

The evaluation will examine the extent to which:

- ✓ the project's design is adequate to address the problems at hand;

- ✓ a participatory project identification process was instrumental in selecting problem areas and national counterparts;
- ✓ the project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators;
- ✓ the project was formulated based on the logical framework (project results framework) approach;
- ✓ the project was formulated with the participation of national counterpart and/or target beneficiaries; and
- ✓ relevant country representatives (from government, industries and civil society) have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies.

B. **Project relevance**

The evaluation will examine the extent to which the project is relevant to the:

- ✓ national development and environmental priorities and strategies of the Government and population of China, and regional and international agreements. See possible evaluation questions under "Country ownership/driveness" below.
- ✓ target groups: relevance of the project's objectives, outcomes and outputs to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity building and training, etc.).
- ✓ GEF's focal areas/operational programme strategies: In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies of GEF? Ascertain the likely nature and significance of the contribution of the project outcomes to the wider portfolio of the GEF Operational Programme (OP) #14?
- ✓ UNIDO's thematic priorities: Were they in line with UNIDO's mandate, objectives and outcomes defined in the Programme & Budget and core competencies?
- ✓ Does the project remain relevant taking into account the changing environment? Is there a need to reformulate the project design and the project results framework given changes in the country and operational context?

C. Effectiveness: objectives and planned final results at the end of the project

- The evaluation will assess to what extent results at various levels, including outcomes, have been achieved. In detail, the following issues will be assessed: To what extent have the expected outputs, outcomes and long-term objectives been achieved or are likely to be achieved? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?
- Are the project outcomes commensurate with the original or modified project objectives? If the original or modified expected results are merely outputs/inputs, the evaluators should assess if there were any real outcomes of the project and, if there were, determine whether these are commensurate with realistic expectations from the project.
- How do the stakeholders perceive the quality of outputs? Were the targeted beneficiary groups actually reached?
- What outputs and outcomes has the project achieved so far (both qualitative and quantitative results)? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?

- Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these (see also below "monitoring of long term changes"). Wherever possible, evaluators should indicate how findings on impacts will be reported in future.

- Describe any catalytic or replication effects: the evaluation will describe any catalytic or replication effect both within and outside the project. If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out. No ratings are requested for the project's catalytic role.

D. Efficiency

The extent to which:

- The project cost was effective? Was the project using the least cost options?
- Has the project produced results (outputs and outcomes) within the expected time frame? Was project implementation delayed, and, if it was, did that affect cost effectiveness or results? Wherever possible, the evaluator should also compare the costs incurred and the time taken to achieve outcomes with that for similar projects. Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Are the disbursements and project expenditures in line with budgets?
- Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet requirements? Was the quality of UNIDO inputs and services as planned and timely?
- Was there coordination with other UNIDO and other donors' projects, and did possible synergy effects happen?

E. Assessment of sustainability of project outcomes

Sustainability is understood as the likelihood of continued benefits after the GEF project ends. Assessment of sustainability of outcomes will be given special attention but also technical, financial and organization sustainability will be reviewed. This assessment should explain how the risks to project outcomes will affect continuation of benefits after the GEF project ends. It will include both exogenous and endogenous risks. The following four dimensions or aspects of risks to sustainability will be addressed:

a. **Financial risks.** Are there any financial risks that may jeopardize sustainability of project outcomes? What is the likelihood of financial and economic resources not being available once GEF assistance ends? (Such resources can be from multiple sources, such as the public and private sectors or income-generating activities; these can also include trends that indicate the likelihood that, in future, there will be adequate financial resources for sustaining project outcomes.) Was the project successful in identifying and leveraging co-financing?
b. **Sociopolitical risks.** Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?
c. **Institutional framework and governance risks.** Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? Are requisite systems for accountability and transparency, and required technical know-how, in place?
d. Environmental risks. Are there any environmental risks that may jeopardize sustainability of project outcomes? Are there any environmental factors, positive or negative, that can

influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? The evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes.

F. Assessment of monitoring and evaluation systems

- **M&E design.** Did the project have an M&E plan to monitor results and track progress towards achieving project objectives? The Evaluation will assess whether the project met the minimum requirements for the application of the Project M&E plan (see Annex 3).
- **M&E plan implementation.** The evaluation should verify that an M&E system was in place and facilitated timely tracking of progress toward project objectives by collecting information on chosen indicators continually throughout the project implementation period; annual project reports were complete and accurate, with well-justified ratings; the information provided by the M&E system was used during the project to improve performance and to adapt to changing needs; and the project had an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project closure. Were monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impacts? Are there any annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance reviews take place regularly?
- **Budgeting and Funding for M&E activities.** In addition to incorporating information on funding for M&E while assessing M&E design, the evaluators will determine whether M&E was sufficiently budgeted for at the project planning stage and whether M&E was adequately funded and in a timely manner during implementation.

G. Monitoring of long-term changes

The monitoring and evaluation of long-term changes is often incorporated in GEF-supported projects as a separate component and may include determination of environmental baselines; specification of indicators; and provisioning of equipment and capacity building for data gathering, analysis, and use. This section of the evaluation report will describe project actions and accomplishments toward establishing a long-term monitoring system. The review will address the following questions:

a. Did this project contribute to the establishment of a long-term monitoring system? If it did not, should the project have included such a component?
b. What were the accomplishments and shortcomings in establishment of this system?
c. Is the system sustainable—that is, is it embedded in a proper institutional structure and does it have financing? How likely is it that this system continues operating upon project completion?
d. Is the information generated by this system being used as originally intended?
e.

H. Assessment of processes affecting achievement of project results

Among other factors, when relevant, the evaluation will consider a number of issues affecting project implementation and attainment of project results. The assessment of these issues can be integrated into the analyses of project design, relevance, effectiveness, efficiency, sustainability and management as the evaluators find them fit (it is not necessary, however it is possible to have a separate chapter on these aspects in the evaluation report). The evaluation will consider, but need not be limited to, the following issues that may have affected project implementation and achievement of project results:

a. **Preparation and readiness / Quality at entry.** Were the project's objectives and components clear, practicable, and feasible within its time frame? Were counterpart resources (funding, staff, and facilities), and adequate project management arrangements in place at project entry? Were the capacities of executing institution and counterparts properly

considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?

b. **Country ownership/drivenness.** Was the project concept in line with the sectoral and development priorities and plans of the country—or of participating countries, in the case of multi-country projects? Are project outcomes contributing to national development priorities and plans? Were the relevant country representatives from government and civil society involved in the project? Did the recipient government maintain its financial commitment to the project? Has the government—or governments in the case of multi-country projects—approved policies or regulatory frameworks in line with the project's objectives?

c. **Stakeholder involvement.** Did the project involve the relevant stakeholders through information sharing and consultation? Did the project implement appropriate outreach and public awareness campaigns? Were the relevant vulnerable groups and powerful supporters and opponents of the processes properly involved? Which stakeholders were involved in the project (i.e. NGOs, private sector, other UN Agencies etc.) and what were their immediate tasks? Did the project consult with and make use of the skills, experience, and knowledge of the appropriate government entities, nongovernmental organizations, community groups, private sector entities, local governments, and academic institutions in the design, implementation, and evaluation of project activities? Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process taken into account while taking decisions? Were the relevant vulnerable groups and the powerful, the supporters and the opponents, of the processes properly involved?

d. **Financial planning.** Did the project have appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds? Was there due diligence in the management of funds and financial audits? Did promised co-financing materialize? Specifically, the evaluation should also include a breakdown of final actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co- financing.

e. **UNIDO's supervision and backstopping.** Did UNIDO staff identify problems in a timely fashion and accurately estimate their seriousness? Did UNIDO staff provide quality support and advice to the project, approve modifications in time, and restructure the project when needed? Did UNIDO provide the right staffing levels, continuity, skill mix, and frequency of field visits for the project?

f. **Cofinancing and project outcomes and sustainability.** If there was a difference in the level of expected co-financing and the cofinancing actually realized, what were the reasons for the variance? Did the extent of materialization of cofinancing affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?

g. **Delays and project outcomes and sustainability.** If there were delays in project implementation and completion, what were the reasons? Did the delays affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?

h. **Implementation approach[16].** Is the implementation approach chosen different from other implementation approaches applied by UNIDO and other agencies? Does the approach comply with the principles of the Paris Declaration? Does the approach promote local ownership and capacity building? Does the approach involve significant risks?

The evaluation team will rate the project performance as required by the GEF. The ratings will be given to four criteria: Project Results, Sustainability, Monitoring and Evaluation, and UNIDO related issues as specified in Annex 2. The ratings will be presented in a table with each of the categories rated separately and with brief justifications for the rating based on the findings of the main analysis. An overall rating for the project should also be given. The rating system to be applied is specified in

[16] Implementation approach refers to the concrete manifestation of cooperation between UNIDO, Government counterparts and local implementing partners. Usually POPs projects apply a combination of agency execution (direct provision of services by UNIDO) with elements of national execution through sub-contracts.

the same annex. As per the GEF's requirements, the report should also provide information on project identification, time frame, actual expenditures, and co-financing in the format in Annex 5, which is modeled after the GEF's project identification form (PIF).

I. Project coordination and management

The extent to which:

- The national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions…)?
- The UNIDO HQ and Field Office based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits…)?
- The national management and overall coordination mechanisms were efficient and effective? Did each partner have specific roles and responsibilities from the beginning till the end? Did each partner fulfill its role and responsibilities (e.g. providing strategic support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions…)? Were the UNIDO HQ based management, coordination, quality control and technical inputs efficient, timely and effective (problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits…)?

J. Assessment of gender mainstreaming

The evaluation will consider, but need not be limited to, the following issues that may have affected gender mainstreaming in the project:

a. To which extent were socioeconomic benefits delivered by the project at the national and local levels, including consideration of gender dimensions?

K. Procurement issues

The following evaluation questions that will feed in the Thematic Evaluation on Procurement have been developed and would be included as applicable in all projects (for reference, please see Annex 6 of the ToR: UNIDO Procurement Process):

- To what extent does the process provide adequate treatment to different types of procurement (e.g., by value, by category, by exception)
- Was the procurement timely? How long the procurement process takes (e.g., by value, by category, by exception)
- Did the good/item(s) arrive as planned or scheduled? If no, how long were the times gained or delays. If delay, what was the reason(s)?
- Were the procured good(s) acquired at a reasonable price?
- To what extent were the procured goods of the expected/needed quality and quantity?
- Were the transportation costs reasonable and within budget. If no, pleased elaborate.
- Was the freight forwarding timely and within budget? If no, pleased elaborate.
- Who was responsible for the customs clearance? UNIDO FO? UNDP? Government? Other?
- Was the customs clearance handled professionally and in a timely manner? How many days did it take?
- How long time did it take to get approval from the government on import duty exemption?
- Which were the main bottlenecks / issues in the procurement process?
- Which good practices have been identified?
- To what extent roles and responsibilities of the different stakeholders in the different procurement stages are established, adequate and clear?

- To what extent there is an adequate segregation of duties across the procurement process and between the different roles and stakeholders?

9. Reporting

Inception report

This Terms of Reference provides some information on the evaluation methodology but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager the International Evaluation Consultant will prepare, in collaboration with the national consultant, a short inception report that will operationalize the ToR relating to the evaluation questions and provide information on what type of and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO Evaluation Officer. The Inception Report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology including quantitative and qualitative approaches through an evaluation framework ("evaluation matrix"); division of work between the International Evaluation Consultant and National Consultant; mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable[17].

Evaluation report format and review procedures

The draft report will be delivered to UNIDO EVA (the suggested report outline is in Annex 1) and circulated to UNIDO staff and national stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report provided by the stakeholders will be sent to UNIDO EVA for collation and onward transmission to the project evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

The evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feed-back in preparing the evaluation report. A presentation of preliminary findings will take place in China and at HQ after the field mission.

The terminal evaluation report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, exactly what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given in Annex 1.

Evaluation Work Plan

The "Evaluation Work Plan" includes the following main products:

1. Desk review, briefing by project manager and development of methodology: Following the receipt of all relevant documents, and consultation with the Project Manager about the documentation, including reaching an agreement on the Methodology, the desk review could be completed.
2. Inception report: At the time for departure to the field mission, the complete gamete of received materials have been reviewed and consolidated into the Inception report.

[17] The evaluator will be provided with a Guide on how to prepare an evaluation inception report prepared by the UNIDO Office for Independent Evaluation.

3. Field mission: The principal responsibility for managing this evaluation lies with UNIDO. It will be responsible for liaising with the project team to set up the stakeholder interviews, arrange the field missions, coordinate with the Government. At the end of the field mission, there will be a presentation of preliminary findings to the key stakeholders in the country where the project was implemented.
4. Preliminary findings from the field mission: Following the field mission, the main findings, conclusions and recommendations would be prepared and presented in the field and at UNIDO Headquarters.
5. A draft Terminal evaluation report will be forwarded electronically to the Office for Independent Evaluation and circulated to main stakeholders.
6. Final Terminal evaluation report will incorporate comments received.

Evaluation phases	Deliverables
Desk review	Development of methodology approach and evaluation tools
Briefing with UNIDO Office for Independent Evaluation, Project Managers and other key stakeholder at HQ	Interview notes, detailed evaluation schedule and list of stakeholders to interview during field mission
Data analysis	Inception Evaluation Report
Field mission Present preliminary findings and recommendations to key stakeholders in the field	Presentation of main findings to FECO and key stakeholders
Present preliminary findings and recommendations to the stakeholders at UNIDO HQ	Presentation slides
Analysis of the data collected	Draft Terminal Evaluation Report
Circulation of the draft report to UNIDO/relevant stakeholders and revision	Final Terminal Evaluation Report

10. Quality assurance

All UNIDO evaluations are subject to quality assessments by the UNIDO Office for Independent Evaluation. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process of UNIDO's Office for Independent Evaluation, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by the Office for Independent Evaluation). The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality, attached as Annex 4. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO's Office for Independent Evaluation should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by UNIDO Office for Independent Evaluation, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

Annex 1. Outline of an in-depth project evaluation report

Executive summary

- Must provide a synopsis of the storyline which includes the main evaluation findings and recommendations
- Must present strengths and weaknesses of the project
- Must be self-explanatory and should be 3-4 pages in length

I. Evaluation objectives, methodology and process

- Information on the evaluation: why, when, by whom, etc.
- Scope and objectives of the evaluation, main questions to be addressed
- Information sources and availability of information
- Methodological remarks, limitations encountered and validity of the findings

II. Country and project background

- Brief country context: an overview of the economy, the environment, institutional development, demographic and other data of relevance to the project
- Sector-specific issues of concern to the project[18] and important developments during the project implementation period
- Project summary:
  - Fact sheet of the project: including project objectives and structure, donors and counterparts, project timing and duration, project costs and co-financing
  - Brief description including history and previous cooperation
  - Project implementation arrangements and implementation modalities, institutions involved, major changes to project implementation
  - Positioning of the UNIDO project (other initiatives of government, other donors, private sector, etc.)
  - Counterpart organization(s)

III. Project assessment

This is the key chapter of the report and should address all evaluation criteria and questions outlined in the TOR (see section VI Project Evaluation Parameters). Assessment must be based on factual evidence collected and analyzed from different sources. The evaluators' assessment can be broken into the following sections:

A. Design
B. Relevance (Report on the relevance of project towards countries and beneficiaries)
C. Effectiveness (The extent to which the development intervention's objectives and deliverables were achieved, or are expected to be achieved, taking into account their relative importance)
D. Efficiency (Report on the overall cost-benefit of the project and partner Countries contribution to the achievement of project objectives)
E. Sustainability of Project Outcomes (Report on the risks and vulnerability of the project, considering the likely effects of sociopolitical and institutional changes in partner countries, and its impact on continuation of benefits after the GEF project ends, specifically the financial, sociopolitical, institutional framework and governance, and environmental risks)
F. Assessment of monitoring and evaluation systems (Report on M&E design, M&E plan implementation, and Budgeting and funding for M&E activities)
G. Monitoring of long-term changes
H. Assessment of processes affecting achievement of project results (Report on preparation and readiness / quality at entry, country ownership, stakeholder involvement, financial planning, UNIDO support, cofinancing and project outcomes and sustainability, delays of project outcomes and sustainability, and implementation approach)

[18] Explicit and implicit assumptions in the logical framework of the project can provide insights into key-issues of concern (e.g. relevant legislation, enforcement capacities, government initiatives, etc.)

I. Project coordination and management (Report project management conditions and achievements, and partner countries commitment)
J. Gender mainstreaming
K. Procurement issues

At the end of this chapter, an overall project achievement rating should be developed as required in Annex 2. The overall rating table required by the GEF should be presented here.

IV. Conclusions, Recommendations and Lessons Learned

This chapter can be divided into three sections:

A. Conclusions

This section should include a storyline of the main evaluation conclusions related to the project's achievements and shortfalls. It is important to avoid providing a summary based on each and every evaluation criterion. The main conclusions should be cross-referenced to relevant sections of the evaluation report.

B. Recommendations

This section should be succinct and contain few key recommendations. They should:

- be based on evaluation findings
- realistic and feasible within a project context
- indicate institution(s) responsible for implementation (addressed to a specific officer, group or entity who can act on it) and have a proposed timeline for implementation if possible
- be commensurate with the available capacities of project team and partners
- take resource requirements into account.

Recommendations should be structured by addressees:

- UNIDO
- Government and/or Counterpart Organizations
- Donor

C. Lessons Learned

- Lessons learned must be of wider applicability beyond the evaluated project but must be based on findings and conclusions of the evaluation
- For each lessons the context from which they are derived should be briefly stated

Annexes should include the evaluation TOR, list of interviewees, documents reviewed, a summary of project identification and financial data, and other detailed quantitative information. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Annex 2. Overall Ratings Table

Criterion	Evaluator's Summary Comments	Evaluator 's Rating
Attainment of project objectives and results (overall rating) Sub criteria (below)		
Design		
Effectiveness		
Relevance		
Efficiency		
Sustainability of Project outcomes (overall rating) Sub criteria (below)		
Financial risks		
Sociopolitical risks		
Institutional framework and governance risks		
Environmental risks		
Monitoring and Evaluation (overall rating) Sub criteria (below)		
M&E Design		
M&E Plan Implementation (use for adaptive management)		
Budgeting and Funding for M&E activities		
Project management		
UNIDO specific ratings		
Quality at entry / Preparation and readiness		
Implementation approach		
UNIDO Supervision and backstopping		
Overall Rating		

RATING OF PROJECT OBJECTIVES AND RESULTS

- Highly Satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately Satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately Unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Highly Unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Please note: Relevance and effectiveness will be considered as critical criteria. The overall rating of the project for achievement of objectives and results **may not be higher** than the lowest rating on either of these two criteria. Thus, to have an overall satisfactory rating for outcomes a project must have at least satisfactory ratings on both relevance and effectiveness.

RATINGS ON SUSTAINABILITY

Sustainability will be understood as the probability of continued long-term outcomes and impacts after the GEF project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits beyond project completion. Some of these factors might be outcomes of the project, i.e. stronger institutional capacities, legal frameworks, socio-economic incentives /or public awareness. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes.

Rating system for sustainability sub-criteria
On each of the dimensions of sustainability of the project outcomes will be rated as follows.

- Likely (L): There are no risks affecting this dimension of sustainability.
- Moderately Likely (ML). There are moderate risks that affect this dimension of sustainability.
- Moderately Unlikely (MU): There are significant risks that affect this dimension of sustainability.
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an Unlikely rating in either of the dimensions then its overall rating cannot be higher than Unlikely, regardless of whether higher ratings in other dimensions of sustainability produce a higher average.

RATINGS OF PROJECT M&E

Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing project with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. Evaluation is the systematic and objective assessment of an on-going or completed project, its design, implementation and results. Project evaluation may involve the definition of appropriate standards, the examination of performance against those standards, and an assessment of actual and expected results.

The Project monitoring and evaluation system will be rated on ‘M&E Design’, ‘M&E Plan Implementation’ and ‘Budgeting and Funding for M&E activities’ as follows:

- Highly Satisfactory (HS): There were no shortcomings in the project M&E system.
- Satisfactory(S): There were minor shortcomings in the project M&E system.
- Moderately Satisfactory (MS): There were moderate shortcomings in the project M&E system.
- Moderately Unsatisfactory (MU): There were significant shortcomings in the project M&E system.
- Unsatisfactory (U): There were major shortcomings in the project M&E system.
- Highly Unsatisfactory (HU): The Project had no M&E system.

“M&E plan implementation” will be considered a critical parameter for the overall assessment of the M&E system. The overall rating for the M&E systems will not be higher than the rating on “M&E plan implementation.”

All other ratings will be on the GEF six point scale:

HS	= Highly Satisfactory	Excellent
S	= Satisfactory	Well above average
MS	= Moderately Satisfactory	Average
MU	= Moderately Unsatisfactory	Below Average
U	= Unsatisfactory	Poor
HU	= Highly Unsatisfactory	Very poor (Appalling)

Annex 3. GEF Minimum requirements for M&E[19]

Minimum Requirement 1: Project Design of M&E

All projects will include a concrete and fully budgeted monitoring and evaluation plan by the time of work program entry for full-sized projects and CEO approval for medium-sized projects. This monitoring and evaluation plan will contain as a minimum:

- SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management;
- SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, indicators identified at the corporate level;
- baseline for the project, with a description of the problem to be addressed, with indicator data, or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation;
- identification of reviews and evaluations that will be undertaken, such as mid-term reviews or evaluations of activities; and
- organizational set-up and budgets for monitoring and evaluation.

Minimum Requirement 2: Application of Project M&E

Project monitoring and supervision will include implementation of the M&E plan, comprising:

- SMART indicators for implementation are actively used, or if not, a reasonable explanation is provided;
- SMART indicators for results are actively used, or if not, a reasonable explanation is provided;
- the baseline for the project is fully established and data compiled to review progress reviews, and evaluations are undertaken as planned; and
- the organizational set-up for M&E is operational and budgets are spent as planned.

[19] http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy_2010.pdf

Annex 4. Checklist on evaluation report quality

Independent Terminal Evaluation of the UNIDO-GEF Project:

Project Title :

Project Number :

Checklist on evaluation report quality

Report Quality Criteria	UNIDO Office for Independent Evaluation Assessment notes	Rating
A. The terminal evaluation report presented an assessment of all relevant outcomes and achievement of project objectives in the context of the focal area program indicators if applicable.		
B. The terminal evaluation report was consistent, the evidence presented was complete and convincing, and the ratings were well substantiated.		
C. The terminal evaluation report presented a sound assessment of sustainability of outcomes.		
D. The lessons and recommendations listed in the terminal evaluation report are supported by the evidence presented and are relevant to the GEF portfolio and future projects.		
E. The terminal evaluation report included the actual project costs (totals, per activity, and per source) and actual cofinancing used.1		
F. The terminal evaluation report included an assessment of the quality of the M&E plan at entry, the operation of the M&E system used during implementation, and the extent M&E was sufficiently budgeted for during preparation and properly funded during implementation.		

Rating system for quality of evaluation reports
A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1, and unable to assess = 0.

Annex 5. Required Project Identification and Financial Data

The evaluation report should provide information on project identification, time frame, actual expenditures, and cofinancing in the following format, which is modeled after the project identification form (PIF).

I. Project Identification

GEF Project ID: *[Assigned by the GEF Secretariat at pipeline entry.]*
GEF Agency Project ID:
Countries:
Project Title: *[As per the project appraisal document submitted to the GEF.]*
GEF Agency (or Agencies):

II. Dates

Milestone	**Expected Date**	**Actual Date**
CEO Endorsement/Approval		
Agency Approval date		
Implementation start		
Midterm evaluation		
Project completion		
Terminal evaluation completion		
Project closing		

Expected dates are as per the expectations at the point of CEO endorsement/approval.

III. Project Framework

Project Component	Activity Type	GEF Financing (in $)		Cofinancing (in $)	
		Approved	Actual	Promised	Actual
1.					
2.					
3.					
4.					
5.					
6. Project Management					
Total					

Activity types are investment, technical assistance, or scientific and technical analysis.
Promised cofinancing refers to the amount indicated at the point of CEO endorsement/approval.

IV. Cofinancing

		Project preparation		Project implementation		Total	
Source of cofinancing	Type	Expected	Actual	Expected	Actual	Expected	Actual
Host gov't contribution							
GEF Agency (ies)							
Bilateral aid agency (ies)							
Multilateral agency (ies)							
Private sector							
NGO							
Other							
Total cofinancing							

Expected amounts are those submitted by the GEF Agencies in the original project appraisal document. Cofinancing types are grant, soft loan, hard loan, guarantee, in kind, or cash.

Annex 6. Job Descriptions

Independent Terminal Evaluation of UNIDO projects:

GF/CPR/07/009
"*Strengthening Institutions, Regulations and Enforcement (SIRE) capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) in China*"

Job Description

Post title	International Evaluation Consultant
Duration	30 work days spread over 2 months
Started date	March 2015
Duty station	Home based and travel to Vienna and China

Duties

The consultant will evaluate the projects according to the Terms of Reference. S/he will act as leader of the evaluation team and will be responsible for preparing the final draft evaluation report, according to the standards of the UNIDO Office for Independent Evaluation. S/he will perform the following tasks:

Main duties	Duration/ location	Deliverables
Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data…); determine key data to collect in the field and prepare key instruments (questionnaires, logic models…) to collect these data through interviews and/or surveys during and prior to the field missions Assess the adequacy of China's legislative and regulatory framework to phase out POPs	3 days Home base	List of detailed evaluation questions to be clarified; questionnaires/ interview guide; logic models; list of key data to collect, draft list of stakeholders to interview during the field missions Brief assessment of the adequacy of the country's legislative and regulatory framework to phase out POPs: to be verified further during the field visit
Briefing with the UNIDO Office for Independent Evaluation, project managers and other key stakeholders at HQ	2 days Vienna (including travel days)	Interview notes, detailed evaluation schedule and list of stakeholders to interview during the field missions Division of evaluation tasks with the National Consultant
Prepare inception report and discuss with UNIDO EVA	2 days	Inception report
Conduct field mission to China in March 2015	7 days (including travel days)	Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in China at the end of the missions. Agreement with the National Consultant on the structure and content of the evaluation report and the

Main duties	Duration/ location	Deliverables
		distribution of writing tasks
Present overall findings and recommendations to the stakeholders at UNIDO HQ (incl. travel)	3 days Vienna	Presentation slides
Prepare two separate evaluation reports according to TOR and template provided by UNIDO EVA Coordinate the inputs from the National Consultant and combine with her/his own inputs into the final draft evaluation report Provide inputs to the CHINA Country Evaluation as agreed with team leader and UNIDO EVA	10 days Home base	2 Draft evaluation report Brief input report to country evaluation
Revise the draft project evaluation reports based on comments from UNIDO Office for Independent Evaluation and stakeholders and edit the language and form of the final version according to UNIDO standards	3 days Home base	Final evaluation report
TOTAL	**30 days**	

Qualifications and skills:

- ✓ Advanced degree in environmental science, chemistry, development studies or related areas
- ✓ ***Extensive knowledge and experience in POPs, the Stockholm Convention and environmental projects***
- ✓ ***Knowledge and experience in the field of evaluation (of development projects)***
- ✓ Experience in GEF projects and knowledge of UNIDO activities an asset
- ✓ Working experience in China an asset.

Language: English

Absence of Conflict of Interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the Office for Independent Evaluation.

Independent Terminal Evaluation of UNIDO project:

GF/CPR/07/009
"*Strengthening Institutions, Regulations and Enforcement (SIRE) capacities for Effective and Efficient Implementation of the National Implementation Plan (NIP) in China*"

Job Description

Post title	National Consultant
Duration	30 work days
Started date	March 2015
Duty station	Home based, Beijing and travel in China

Duties

The consultant will participate and contribute to the project evaluation according to the evaluation Terms of Reference. S/he will be a member of the evaluation team, work under the supervision of the International Evaluation Consultant and carry out the task assigned to him/her by the International Evaluation Consultant, including the following tasks:

Main duties	Duration/ location	Deliverables
Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data…) Support the project management and the China Regional Office in planning the evaluation field mission and contacting concerned organizations to prepare the evaluation programme	4 days Home base	List of detailed evaluation questions to be clarified Evaluation mission programme
Carry out meetings, visits and interviews of stakeholders according to the evaluation programme and facilitate the work of the evaluation team in China (including acting as interpreter) Participate in drafting the main conclusions and recommendations, and present them to stakeholders in accordance with the instructions of the International Evaluation Consultant	18 days China days	Notes, tables; information gathered on issues specified in TOR Draft conclusions and recommendations to stakeholders
Contribute to the draft report as assigned by the International Evaluation Consultant	7 days Home base	First draft of chapters on the country background and other inputs into the draft evaluation report as agreed with the International Evaluation Consultant
Revise the draft chapters based on comments from UNIDO Office for Independent Evaluation and stakeholders	1 days Home base	Final evaluation report
TOTAL	**30 days**	

Qualifications:

- ✓ Advanced degree in environmental science, chemistry, development studies or related areas
- ✓ ***Knowledge of and experience in Persistent Organic Pollutants***
- ✓ Experience in evaluation of environmental projects
- ✓ Knowledge of GEF and UNIDO technical cooperation activities an asset.

Language: English and Chinese

Absence of Conflict of Interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the Office for Independent Evaluation.

Annex 7. Reference Documents

1. Project document: “UNIDO-China-SIRE-ProDoc-17Oct07rev”

2. GEF annual Project Implementation Review (PIR) reports and Quarterly Project progress reports from FECO including, but not limited to their Annexes

3. Mid-Term Evaluation Report

Annex 8. Logical Framework

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
Overall objective			
Effective and efficient implementation of SC&NIP Improved awareness and education on POPs	Steady and smooth progresses in SC compliance and NIP implementation reflected by the following indicators: ➢ Number of new laws/regulations (baseline: 0; target: 21) ➢ Number of new administrative rules (baseline: 0; target: 31) ➢ Number of new policies /guidelines/standards (baseline: 0; target: 33) ➢ Number of new advanced provincial regulations for POPs reduction and elimination (baseline: 0; target: to be determined in year 1) ➢ No. of existing environmental and health monitoring centres trained (baseline:0, target: 311) ➢ No. of specialized organizations established, (provincial CIOs, information centre, service-oriented Technology Transfer Promotion Centre) (baseline: 0; target: 5) ➢ No. of enterprises trained (baseline: 0; target: 100) ➢ No. of individuals trained (baseline: 0; target: 800) ➢ Percentage of the population in high-risk POPs exposure areas aware of the need for protective action (baseline: nearly 0; target: 60)	Performance appraisal reports for SC compliance and NIP implementation Project progress reports by evaluations	The leading role of NCG among ministries continues to play its function Enduring and effective Government support in base line funding can be secured Local governments are willing to support the anti-POPs related initiatives through their own resources

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
Outcome 1: Strengthened systematic capacity for more effective implementation of the Stockholm Convention and NIP			
Output 1. A sound policy and regulatory framework *Output 2.* Mechanisms and tools for financing	➢ A basic enabling environment for SC compliance and NIP implementation built up via establishing a more sound regulatory framework ➢ Numbers of monitoring stations or laboratories capable of undertaking qualified and standardized POPs monitoring ➢ Developing a clear roadmap for co-financing the NIP implementation	➢ Legislative pieces and technical policies, guidelines, standards ➢ Reports of successful cases in demonstration provinces for legislation against POPs ➢ Workshops held for co-financing forum, and final report on co-financing NIP implementation	➢ The overall willingness of participating provinces are high and the three demonstration provinces can be selected in terms of legislation development and testing. ➢ Local leaders, especially those in demonstration provinces support the enabling environment initiatives
Output 1. Sound policy and regulatory framework			
1.1 Proposed legislation	➢ Proposed new or revised legislation submitted to relevant government agencies for consideration	➢ Workshop reports, reports for policy recommendations, consultation reports with relevant stakeholders, formal suggestive bills to relevant government agencies or legislative bodies	➢ Government endorses NIP
1.2 Draft National Administrative Rules on POPs Reduction and Control.	➢ Draft completed and intensive consultations conducted with stakeholders	➢ Completed draft and the relevant reports for consultations with stakeholders	➢ Government supports the preparation of the administrative roles
1.3 Industrial policy adjustment	➢ Suggestions submitted to relevant government agencies for consideration ➢ Consultation among stakeholders completed	➢ National industry development polices including the initiatives ➢ Relevant official reports supporting the initiatives ➢ Workshops and consultation reports	➢ Communication and cooperation among relevant national agencies
1.4 Develop or revise the 33 technical policies, guidelines, standards	➢ Drafts for technical polices, guidelines and standards	➢ Workshops reports, consultation reports, formal draft texts, and relevant national endorsements	➢ Management and coordination capacity in place and a strong technical expert advisory group in place

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
1.5 Strengthen POPs legislation in demo province	➢ POPs-related regulations in demo-provinces developed or promulgated	➢ Workshops reports, consultation reports, formal draft texts, and relevant provincial endorsements	➢ Sustained Provincial government commitment
Output 2: Mechanisms and financing tools			
2.1 Identify principal stakeholders	➢ Financial roles and responsibilities of stakeholders determined	➢ Reports on principles and guidelines for co-financing ➢ Reports on results of consultation among stakeholder ➢ Workshops held and reported upon	➢ Stakeholders willing to participate
2.2 Determine the principles and mechanism for responsibility sharing among stakeholders for different types of activities, e.g. non-profitable and profitable activities	➢ Market oriented mechanisms identified and relevant legislation and institutional strengthening requirements recommended ➢ Principles and mechanisms determined for non-profitable activities	➢ Principles and rules for mobilizing co-finance established and shown in relevant reports ➢ Clear definitions for the activities to be co-financed by government ➢ Reports on the other relevant workshops and consultations	➢ Consensus can be reached regarding profitable and non-profitable classification
2.3 Explore public-private partnerships to involve private sectors	➢ Suggestions and recommendations to remove barriers to market oriented operations, with special emphasis on BAT and BEP	➢ Incentives, risks, and reasonable rate of return discussed and shown in relevant reports ➢ Workshop minutes ➢ Consultation reports ➢ Suggestions and recommendations to relevant government agencies	➢ Investment opportunities exist or could exist ➢ Opinions from different interest group could be harmonized
2.4 Develop a strategy for co-financing the implementation of Convention and NIP	➢ Strategy report	➢ Strategy report ➢ Other reports from workshops and consultations	➢ Government willing to consider suggestions on the strategy

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
2.5 Fund raising workshop by inviting key stakeholders in the country and abroad	➢ Workshop(s) held	➢ Workshop reports	➢ Stakeholders willing to participate
2.6 Implement strategy in demonstration province(s) and launch replication of results	➢ Agreement with demo province(s) ➢ Implementation of demonstration ➢ Reported case study and results	➢ The agreement with the local government(s) ➢ Reports on the progress of the demonstration in terms of policy development, incentives, and the public-private partnerships ➢ Reports on the successful cases	➢ Support and commitment from demonstration provinces ➢ Local support on resources
Outcome 2: Strengthened capacity of institutions for efficient implementation of the Stockholm and NIP			
Output 3. Environmental monitoring *Output 4.* Research and Development *Output 5.* Technology transfer promotion centre *Output 6.* Institutional strengthening of data collection, processing and reporting	➢ Building up a basic and preliminary infrastructure for NIP implementation in Monitoring, R&D and Technology transfer promotion ➢ Requirements of SC and COP for data collection, processing and reporting are met	➢ Training materials and training workshops for monitoring ➢ A technology transfer promotion centre in place supporting public and private participation for technology cooperation and assistance	➢ Government commitment is crucial ➢ Relevant fund is available
Output 7. Institutional strengthening of decision-making and the coordination and enforcement of policy and/or legislation. *Output 8.* Institutional strengthening of evaluation and follow-up	➢ A fully computer based functional POPs MIS that meets evaluation and reporting requirements and support decision making ➢ The capacity of NCG&CIO improved; ➢ NAC established and plays its function; ➢ Responsibilities for the implementation of NIP to provincial level;	➢ The qualified reports to meet the requirements of SSC and COP, ➢ A well functioning MIS ➢ Documentation series of the POPs MIS expanded and upgraded ➢ The progress report of NCG, CIO and NAC, ➢ The Concrete plans for NIP Implementation in three demonstration provinces	➢ Smooth coordination and cooperation among government agencies for information sharing and evaluation; ➢ Data can be available, and the hardware and software configuration of the prototype management information system can be extended to accommodate all necessary data

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
	➢ The application of existing environment protection instruments to meet the obligations of the Convention at central and local level; ➢ Enterprise self-policing practices for voluntary elimination and reduction of POPs encouraged and provided with incentive measures. ➢ An evaluation oriented institutional capacity to meet the requirements of the Convention for performance appraisal and the requirements for continuous improvement in NIP implementation is built up	➢ The adaptation of EIA, Cleaner production practices and other environmental protection instruments to meet anti-POPs requirements; with relevant reports ➢ Disciplines for enterprise's self-policing developed and experiences dissimilated, results shown in relevant reports. ➢ All relevant evaluation reports to meet the requirements of the relevant stakeholders including SSC, COP, GEF, government agencies and etc.	
Outcome3: Strengthening for environmental monitoring			
3.1 Develop a unified monitoring program for monitoring of POPs in environmental and human samples	➢ Effectiveness evaluation for monitoring program	➢ Evaluation report(s)	➢ Stakeholders willing to participate
3.2 Organize national training on monitoring of pesticide POPs and PCBs for local professionals	➢ Improved monitoring capacity of trainees	➢ The developed training materials ➢ Report/reports for training workshops ➢ Number of trainees from the municipal and county environmental monitoring stations ➢ Capacity improvement shown in the results of new sampling and analyses	➢ The trainees could be motivated to attend workshop.

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
3.2 Organize training for existing dioxins monitoring laboratories on pre-treatment and monitoring of dioxins in sources and environmental and human samples;	➢ Improved monitoring capacity of trainees	➢ Developed training materials ➢ Training workshop report(s) ➢ Number of participants in existing dioxin monitoring labs receiving training on dioxin analyses relevant to environmental and human samples ➢ Capacity improvement shown in the results of new sampling and analyses	➢ Laboratories willing to participate ➢ Capable trainers are identified
3.3 Organize national training in monitoring of pesticide POPs and PCBs in human samples, targeting the centre for disease control and prevention (CDC) laboratories at provincial levels.	➢ Improved monitoring capacity of trainees	➢ Developed training materials ➢ Training workshop report(s) ➢ Number of participants ➢ Other reports ➢ Capacity improvement shown in the results of new sampling and analyses	➢ Centres willing to participate ➢ Capable trainers are identified
3.4 Organize inter-laboratory comparisons and calibrations with the participation from all the trained laboratories	➢ Data and results for inter-comparison and inter calibration ➢ Workshop for improvement oriented training	➢ Report on the results of cross-laboratory inter comparisons and calibration ➢ Analysis reports ➢ Workshop for improvement oriented training	➢ Stakeholders willing to participate
Output 4. Research and Development			
4.1 To establish the coordination mechanism between CIO/SEPA and the main R&D financial sources	➢ The regular communication and coordination mechanism among government and funding sources developed ➢ POPs inclusion in national R&D Resources Application Guidelines	➢ Minutes for the regular meetings and consultations ➢ Reports on coordination workshops	➢ Stakeholders willing to cooperate

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
4.2 Regularly evaluate progress of national R&D activities related to POPs	➢ National R&D activities with relevance to POPs evaluated and supervised by the expert advisory committee in the project	➢ Evaluation reports ➢ Progress reports of R&D activities ➢ Workshop reports	➢ Fund available for tracking and intervention
4.3 Establish incentive program for promoting R&D results that can effectively and efficiently support Convention implementation	➢ Incentive program established Number of dissertations published in periodicals of world reputation, ➢ Number of patents for anti-POPs initiatives	➢ Incentive program report ➢ Number of stakeholders participating in he program ➢ Progress reports ➢ Dissertations, patents	➢ Stakeholders willing to participate the program; R&D activity attractiveness
4.4 Promote exchange and communication of R&D progress between the international and national academics.	➢ Presentations and technical communications	➢ Reports on workshops or seminars abroad ➢ Reports on domestic technical communication workshops ➢ National expert mission reports ➢ National expert training materials ➢ Mission reports of international experts ➢ Presentations	➢ Competent national and international experts can be selected and recruited.
Output 5. Technology Transfer Promotion Centre established			
5.1 Establish assistance-oriented Technology Transfer Promotion Centre (TTPC) for the Convention Implementation	➢ Technology transfer promotion centre established and in operation	➢ Operating rules in place ➢ Number of personnel and experts recruited ➢ Equipment procurement	➢ Subcontractor/ partner to house TTPC can be identified ➢ Government co-financing is available
5.2 Enable centre to work as a technology information clearinghouse	➢ Opportunities identified for technology upgrading through analyses on current and forthcoming national technology development programs and plans.	➢ Collected Information shown in various medias ➢ Reports on the consultation with relevant industrial organizations	➢ Government agencies willing to cooperate ➢ Competent international and national experts are available for in-depth POPs related economic, environmental, and social surveys

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
	➢ Liaison established with relevant government agencies, industrial associations, research institutes, and universities ➢ Surveys and evaluations conducted on supply and demand of applicable technology ➢ Platform established for sharing technological cooperation and information dissemination	➢ Increased members in the Liaison list for information sharing ➢ The relevant social surveys and evaluation reports ➢ The distributed information ➢ The progress report of TTPC ➢ Other relevant workshop reports ➢ Joint venture promoted ➢ The amount of introduced investments and technical staffs	➢ Opportunities exist for foreign investments
5.3 Provide enterprises with assistance in optimizing technical and engineering design to meet the Convention requirements	➢ Improved cooperation between anti-POPs technical initiatives with national program and plans for economic restructuring, circular economy (3R & zero emission practices) and the development of environment protection industry ➢ Hotspots and opportunities identified ➢ Concord efforts shown in technical assistance to enterprises that are willing to take actions against POPs	➢ Workshops reports ➢ Technical assistance reports	➢ Enterprises willing to participate in technical assistance program and share information
5.4 Establish a technological coordination and cooperation platform to promote introduction and transfer of technologies from technology suppliers to users	➢ Questionnaires about technology suppliers and users prepared ➢ Technical exhibitions and workshops held	➢ Questionnaires about technology suppliers and users ➢ Minutes of the exhibitions and workshops	➢ The suppliers and users are willing to participate in activities

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
5.5 Evaluate barriers to technology transfer and propose the instruments to remove identified barriers for continuous improvement of the TTPC performance	➢ Performance appraisal of TTPC	➢ Performance appraisal report ➢ Proposals for further improvements or activities	➢ Government willing to consider the further improvements and donors willing to support further initiatives
Output 6: Data collection, processing and reporting			
6.1 Identify information needs and develop analysis and dissemination guidelines	➢ Data requirements of SC and COP including all forms to be filled in and the relevant reports to be submitted and reviewed. ➢ Other information needs relevant to anti-POPs initiatives assessed	➢ Information needs assessment report	➢ The needed data can be made available
6.2 Strengthen integration of information from various ongoing projects	➢ Data collected from on-going projects	➢ Data collection protocols ➢ Implementation reports	➢ The other on-going projects accept the protocols
6.3 Establish information collection channel for unintentionally produced POPs in demo provinces	➢ Data collection protocols for Unintentionally produced POPs established in a pilot city	➢ An on-line operational project management information system ➢ Information collection reports for unintentionally produced POPs in a pilot city	➢ The staff of the relevant environmental protection agencies and enterprises are sufficiently trained
6.4 Analyze and disseminate information	➢ Number of collaborative and external visitors to the website ➢ Data and information filled in to meet with requirements of Secretariat of Stockholm Convention (SSC) and COP	➢ An on-line operational POPs website ➢ Documentation series for expansion of management information system ➢ Data filled in all files and forms to meet the requirements of SSC and COP	➢ The system can later be upgraded to interact with other Chinese environmental management information systems
Output 7: Institutional strengthening for decision-making and coordination and enforcement of policy and/or legislation			

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
7.1 Strengthen NCG and CIO	➢ More rational decisions made ➢ National Advisory Committee (NAC) established and functional ➢ More effective and efficient responses of CIO to the COPs	➢ Agendas and minutes of NCG meetings ➢ Activity plans and reports from the CIO	➢ The CIO will make a fast move to hire key requisite staff.
7.2 Establish 3 Local Convention Implementation Units	➢ 3 LCIUs established and responsive to CIO requirement	➢ Activity plans and reports from the 3 LCIUs	➢ The local governments committed to POPs reduction and elimination
7.3 Develop training materials and conduct training for environmental protection departments at central, regional and local levels	➢ Training conducted for relevant inspection and enforcement departments, targeting the application of cleaner production and EIA	➢ EIA and cleaner production guidelines modified to take POPs concerns into consideration	➢ POPs issues can be incorporated into the routine work schedule of the environmental protection authorities
7.4 Launch joint inspections	➢ Inspections for POPs release conducted in key areas and sectors	➢ Reports on inspections	➢ Strong inter-ministerial coordination can be achieved
7.5 Establish and strengthen self-policing and supervision	➢ Extent of enterprise self-policing and interaction with CIO	➢ Reports on enterprise self-policing	➢ Active participation from enterprises
Output 8. Evaluation and follow-up			
8.1 Establish a joint working team for evaluation	➢ A joint evaluation team operates	➢ Evaluation team work plan	➢ There is open, transparent, and effective communication between the evaluation team and the project implementation staff
8.2 Train the evaluation staff	➢ Evaluation capacity developed by trainings	➢ Training materials	➢ Guidance from the Secretariat is available
8.3 Evaluate the progress, results and impacts of the NIP implementation	➢ Evaluations have been performed for NIP ➢ Evaluation support provided to the Convention Secretariat	➢ NIP implementation evaluation reports	➢ Documentations can be made available to the external evaluation staff

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
8.4 Further assess the capacity needs for the Convention implementation	➢ Ensuing capacity needs assessed	➢ Report on further capacity needs	➢ Stakeholders are encouraged to disclose capacity gaps
8.5 Hold a workshop to present and disseminate the evaluation findings	➢ Comments and responses received	➢ Minutes of meeting	➢ A qualified audience can be obtained for the meeting
Outcome 3: Changed attitudes and behaviors that promote protection			
Output 9. Public awareness *Output 10*. Education	➢ Materials in different forms tailored to various kinds of media distributed for public awareness ➢ The education system is motivated to conduct relevant POPs related education	➢ Brochures, posters, TV programs, radio programs, newspapers, magazines, websites, CDs ➢ Demonstrative POPs education programs and implementation reports	➢ Willingness of media to cooperate and interest of the other stakeholders to participate in the awareness raising activities ➢ Willingness of the education system to cooperate and participate
Output 9. Materials for public awareness			
9.1 Establish a comprehensive platform for effective POPs information distribution	➢ Good contacts with various news media, including TV, radio, newspaper, and Internet	➢ Plan for media mobilization to publicize POPs issues and report on implementation	➢ Willingness of media to cooperate
9.2 Establish partnerships for raising public awareness of POPs issues	➢ Partnerships established with other environmental protection promotion programs of governments, NGOs, community based organizations (CBOs), and schools	➢ Plan for partnerships establishment and report on implementation	➢ Willingness of governments, NGOs, community based organizations (CBOs), and schools
9.3 Produce materials for raising public awareness of POPs issues	➢ Materials available for distribution	➢ Plans for public exposure to POPs information and report on implementation	➢ Awareness and information lead to changed attitudes and behavior of those who feel they have cause for concern
9.4 Distribute POPs information and publicity materials	➢ Percentage of target audience in key areas exposed to information regarding POPs risks	➢ Survey report on the percentage that is aware	

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
9.5 Implement a special program for farmers' awareness	➢ Program to reach farmers established	➢ Plan for program to reach farmers and reports on implementation	➢ Materials tailor-made for easy understanding by farmers
Output 10. Education			
10.1 Propose modified educational curricula	➢ Proposal is transmitted to Ministry of Education to modify the POPs related curriculum	➢ Proposal text	➢ Interest and willingness of Ministry of Education to accept the proposal
10.2 Prepare textbooks and training materials and train university teachers	➢ Textbook and training materials, and number of teachers trained	➢ Inventory of POPs education materials and lists of trainees	➢ Educators will be interested in participating as trainees
10.3 Ditto middle schools and primary schools	➢ Number of demonstrations of POPs education	➢ List of demonstrations	➢ Ditto
10.4 Carry out demonstrations of POPs education in selected universities, middle schools, and primary schools	➢ Number of registrations to on-line POPs education program	➢ On-line POPs education curriculum	➢ Educators will be supported by their schools to carry out the demonstrations
10.5 Design and implement an on-line POPs education program for university students	➢ Number of participants in workshop to exchange teaching experiences	➢ On-line POPs education program website	➢ Material producers will be able to find adequate information
10.6 Organize a training workshop involving mayors of cities in 3 demonstration provinces and evaluate the experience	➢ Number of mayors participating the trainings ➢ Experience derived from demonstration education programs for improvement	➢ Training materials ➢ Minutes of meeting ➢ Evaluation report	➢ Mayors will be interested in participating as trainees
Outcome 4: Project management and oversights			
Output 11: Project management and M&E			

Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions and Risks
11.1 Establish the national project management office (PMO)	➢ PMO established and operational ➢ Full-time National Project Manager (NPM) recruited and functional ➢ Support staff recruited and functional	➢ PMO workplan ➢ TORs of NPD ➢ TORs of the support staff	➢ A highly qualified NPM can be recruited to manage the very comprehensive project
11.2 Establish 3 local project implementation units (PIU)	➢ Three LCIUs established and operational	➢ LCIUs workplan	➢ The local provinces are committed to POPs reduction and elimination
11.3 Establish a Project Coordination Group (PCG)	➢ PCG established and functional	➢ Working rules of PCG	➢ Strong commitment and coordination of the PCG members
11.4 Recruit and sustain employment of national experts and subcontractors	➢ Experts, consultants and subcontractors recruited to deliver technical assistances	➢ TORs for consultants and subcontractors	➢ Qualified consultants and subcontractors can be recruited through open biddings
11.5 Extend the operation of the international TCG that was previously established for NIP development and implementation	➢ Reports of the meetings of the Technical Coordination Group (TCG) are available	➢ Minutes of the meetings of TCG, together with the list of the participants	➢ Willingness of relevant stakeholders
11.6 Designate a project focal point within UNIDO	➢ Focal point of UNIDO designated	➢ TORs of UNIDO focal point ➢ Project implementation reports from experts and subcontractors	➢ Quality assistance and guidance can be delivered by UNIDO in time
11.7 Conduct Project Implementation Reviews	➢ Annual project implementation reviews (PIRs) meetings conducted ➢ Mid-term and terminal reviews carried out	➢ PIR reports ➢ Minutes of meeting ➢ Reports of mid-term review and terminal review	➢ Wrongful deeds identified by evaluations and can be expeditiously corrected
11.8 Provide independent evaluation and financial reviews	➢ Independent audits and evaluation conducted	➢ Financial audit reports ➢ Independent M & E reports	➢ Qualified independent evaluators can be recruited

Annex 9 – UNIDO procurement process

UNIDO Procurement Process
-- Generic Approach and Assessment Framework –

1. Introduction

This document outlines an approach and encompasses a framework for the assessment of UNIDO procurement processes, to be included as part of country evaluations as well as in technical cooperation (TC) projects/programmes evaluations.

The procurement process assessment will review in a systematic manner the various aspects and stages of the procurement process being a key aspect of the technical cooperation (TC) delivery. These reviews aim to diagnose and identify areas of strength as well as where there is a need for improvement and lessons.

The framework will also serve as the basis for the "thematic evaluation of the procurement process efficiency" to be conducted in 2015 as part of the ODG/EVA work programme for 2014-15.

2. Background

Procurement is defined as the overall process of acquiring goods, works, and services, and includes all related functions such as planning, forecasting, supply chain management, identification of needs, sourcing and solicitation of offers, preparation and award of contract, as well as contract administration until the final discharge of all obligations as defined in the relevant contract(s). The procurement process covers activities necessary for the purchase, rental, lease or sale of goods, services, and other requirements such as works and property.

Past project and country evaluations commissioned by ODG/EVA raised several issues related to procurement and often efficiency related issues. It also became obvious that there is a shared responsibility in the different stages of the procurement process which includes UNIDO staff, such as project managers, and staff of the procurement unit, government counterparts, suppliers, local partner agencies (i.e. UNDP), customs' and transport agencies.

In July 2013, a new "UNIDO Procurement Manual" was introduced. This Procurement Manual provides principles, guidance and procedures for the Organization to attain specified standards in the procurement process. The Procurement Manual also establishes that "The principles of fairness, transparency, integrity, economy, efficiency and effectiveness must be applied for all procurement transactions, to be delivered with a high level of professionalism thus justifying UNIDO's involvement in and adding value to the implementation process".

To reduce the risk of error, waste or wrongful acts and the risk of not detecting such problems, no single individual or team controls shall control all key stages of a transaction. Duties and responsibilities shall be assigned systemically to a number of individuals to ensure that effective checks and balances are in place.

In UNIDO, authorities, responsibilities and duties are segregated where incompatible. Related duties shall be subject to regular review and monitoring. Discrepancies, deviations and exceptions are properly regulated in the Financial Regulations and Rules and the Staff Regulations and Rules. Clear segregation of duties is maintained between programme/project management, procurement and supply chain management, risk management, financial management and accounting as well as auditing and internal oversight. Therefore, segregation of duties is an important basic principle of internal control and must be observed throughout the procurement process.

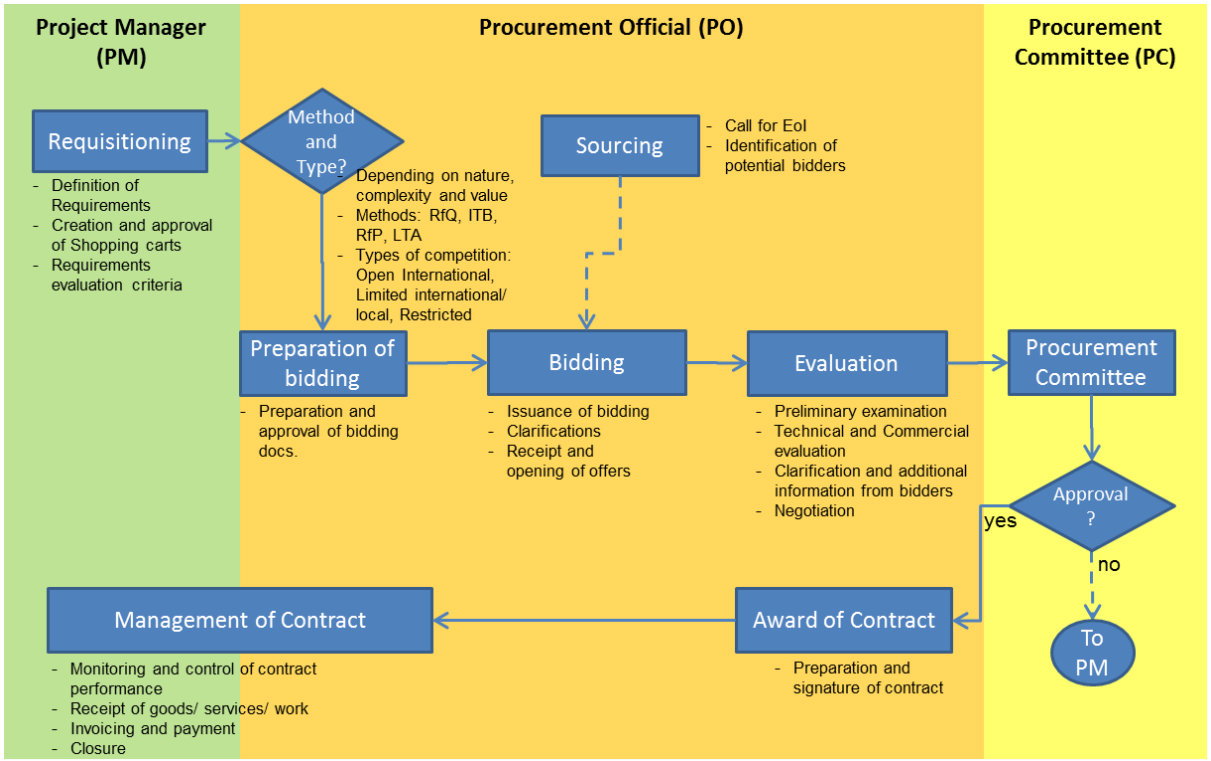
The different stages of the procurement process should be carried out, to the extent possible, by separate officials with the relevant competencies. As a minimum, two officials shall be involved in

carrying out the procurement process. The functions are segregated among the officials belonging to the following functions:

- Procurement Services: For carrying out centralized procurement, including review of technical specifications, terms of reference, and scope of works, market research/surveys, sourcing/solicitation, commercial evaluation of offers, contract award, contract management;
- Substantive Office: For initiating procurement requests on the basis of well formulated technical specifications, terms of reference, scope of works, ensuring availability of funds, technical evaluation of offers; award recommendation; receipt of goods/services; supplier performance evaluation. In respect of decentralized procurement, the segregation of roles occurs between the Project Manager/Allotment Holder and his/her respective Line Manager. For Fast Track procurement, the segregate on occurs between the Project Manager/Allotment Holder and Financial Services;
- Financial Services: For processing payments.

Figure 1 presents a preliminary “Procurement Process Map”, showing the main stages, stakeholders and their respective roles and responsibilities. During 2014/2015, in preparation for the thematic evaluation of the procurement process in 2015, this process map/ workflow will be further refined and reviewed.

Figure 1: UNIDO procurement process map



3. Purpose

The purpose of the procurement process assessments is to diagnose and identify areas for possible improvement and to increase UNIDO's learning about strengths and weaknesses in the procurement process. It will also include an assessment of the adequacy of the 'Procurement Manual" as a guiding document.
The review is intended to be useful to managers and staff at UNIDO headquarters and in the field offices (project managers, procurement officers), who are the direct involved in procurement and to UNIDO management.

4. Scope and focus

Procurement process assessments will focus on the efficiency aspects of the procurement process, and hence it will mainly fall under the efficiency evaluation criterion. However, other criteria such as effectiveness will also be considered as needed.
These assessments are expected to be mainstreamed in all UNIDO country and project evaluations to the extent of its applicability in terms of inclusion of relevant procurement related budgets and activities.
A generic evaluation matrix has been developed and is found in Annex B. However questions should be customized for individual projects when needed.

5. Key issues and evaluation questions

Past evaluations and preliminary consultations have highlighted the following aspects or identified the following issues:

- Timeliness. Delays in the delivery of items to end-users
- Bottlenecks. Points in the process where the process stops or considerably slows down
- Procurement manual introduced, but still missing subsidiary templates and tools for its proper implementation and full use
- Heavy workload of the procurement unit and limited resources and increasing "procurement demand"

- Lack of resources for initiating improvement and innovative approaches to procurement (such as Value for Money instead of lowest price only, Sustainable product lifecycle, environmental friendly procurement)
- The absence of efficiency parameters (procurement KPIs)

On this basis, the following evaluation questions have been developed and would be included as applicable in all project and country evaluations in 2014-2015

- To what extent does the process provide adequate treatment to different types of procurement (e.g., by value, by category, by exception)
- Was the procurement timely? How long the procurement process takes (e.g., by value, by category, by exception)
- Did the good/item(s) arrive as planned or scheduled? If no, how long were the times gained or delays. If delay, what was the reason(s)?
- Were the procured good(s) acquired at a reasonable price?
- To what extent were the procured goods of the expected/needed quality and quantity?
- Were the transportation costs reasonable and within budget. If no, pleased elaborate.
- Was the freight forwarding timely and within budget?. If no, pleased elaborate.
- Who was responsible for the customs clearance? UNIDO FO? UNDP? Government? Other?
- Was the customs clearance handled professionally and in a timely manner? How many days did it take?
- How long time did it take to get approval from the government on import duty exemption?
- Which were the main bottlenecks/issues in the procurement process?
- Which good practices have been identified?
- To what extent roles and responsibilities of the different stakeholders in the different procurement stages are established, adequate and clear?
- To what extent there is an adequate segregation of duties across the procurement process and between the different roles and stakeholders?

i. Evaluation method and tools

These assessments will be based on a participatory approach, involving all relevant stakeholders (e.g., process owners, process users and clients).

The evaluation tools to be considered for use during the reviews are:

- **Desk review**: Policy, Manuals and procedures related to the procurement process. Identification of new approaches being implemented in other UN or international organizations. Findings, recommendations and lessons from UNIDO Evaluation reports.
- **Interviews**: to analyze and discuss specific issues/topics with key process stakeholders
- **Survey to stakeholders**: To measure the satisfaction level and collect expectations, issues from process owners, user and clients
- **Process and stakeholders mapping**: To understand and identify the main phases the procurement process and sub-processes; and to identify the perspectives and expectations from the different stakeholders, as well as their respective roles and responsibilities
- **Historical data analysis from IT procurement systems**: To collect empirical data and identify and measure to the extent possible different performance dimensions of the process, such as timeliness, re-works, complaints.

An evaluation matrix is presented in Annex A, presenting the main questions and data sources to be used in the project and country evaluations, as well as the preliminary questions and data sources for the forthcoming thematic evaluation on Procurement process in 2015.

ANNEX A: Evaluation matrix for the procurement process

No.	Area	Evaluation question	Indicators[20]	Data source(s) for country / project evaluations	Additional data source(s) for thematic evaluation of procurement process in 2015.
	Timeliness	- Was the procurement timely? How long the procurement process takes (e.g. by value, by category, by exception)	(Overall) Time to Procure (TTP)	•	• Procurement related documents review • SAP/Infobase (queries related to procurement volumes, categories, timing, issues) • Evaluation reports • Survey to PMs, procurement officers, beneficiaries, field local partners. • Interviews with Procurement officers
		- Did the good/item(s) arrive as planned or scheduled? If no, how long were the times gained or delays. If delay, what was the reason(s)?	Time to Delivery (TTD)	• Interviews with PM, procurement officers and Beneficiaries	
		- Was the freight forwarding timely and within budget? If no, pleased elaborate.			
		- Was the customs clearance timely? How many days did it take?		• Interviews with PMs, Government counterparts and beneficiaries	
		- How long time did it take to get approval	Time to Government Clearance (TTGC)	• Interviews with beneficiaries	

[20] These indicators are preliminary proposed here. They will be further defined and piloted during the Thematic Evaluation of UNIDO procurement process planned for 2015.

No.	Area	Evaluation question	Indicators[20]	Data source(s) for country / project evaluations	Additional data source(s) for thematic evaluation of procurement process in 2015.
		from the government on import duty exemption			
	Roles and Responsibilities	- To what extent roles and responsibilities of the different stakeholders in the different procurement stages are established, adequate and clear?	Level of clarity of roles and responsibilities	• Procurement Manual • Interview with PMs	• Procurement related documents review • Evaluation reports • Survey to PMs, procurement officers, beneficiaries, field local partners. • Interviews with Procurement officers
		- To what extent there is an adequate segregation of duties across the procurement process and between the different roles and stakeholders?		• Procurement Manual • Interview with PMs	
		- How was responsibility for the customs clearance arranged? UNIDO FO? UNDP? Government		• Procurement Manual • Interview to PMs • Interviews with local partners	

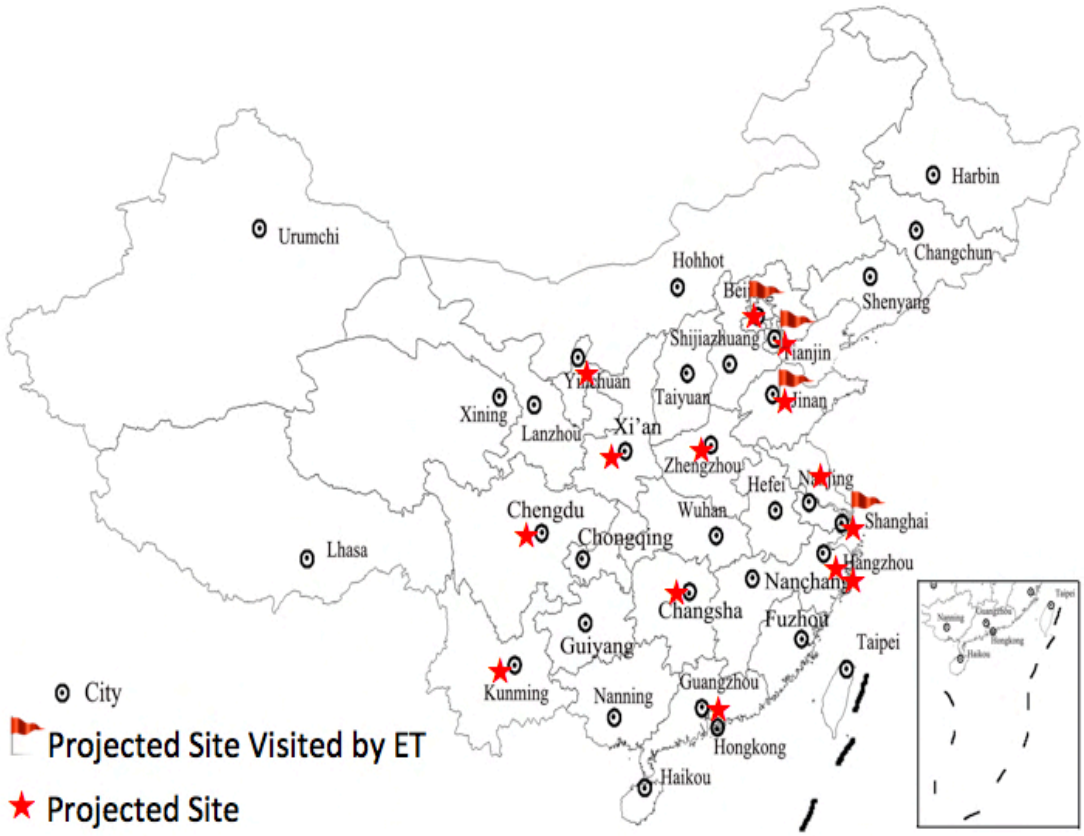
No.	Area	Evaluation question	Indicators[20]	Data source(s) for country / project evaluations	Additional data source(s) for thematic evaluation of procurement process in 2015.
		? Other?			
		- To what extent were suppliers delivering products/ services as required?	Level of satisfaction with suppliers	• Interviews with PMs	
	Costs	- Were the transportation costs reasonable and within budget. If no, pleased elaborate.		• Interviews with PMs	• Evaluation reports • Survey to PMs, procurement officers, beneficiaries, field local partners. • Interviews with Procurement officers
		- Were the procured goods/services within the expected/planned costs? If no, please elaborate	Costs *vs*. budget	• Interview with PMs	
	Quality of Products	- To what extent the process provides adequate treatment to different types of procurement (e.g., by value, by category, by exception)		• Interview with PMs	• Evaluation reports • Survey to PMs, procurement officers, beneficiaries, field local partners. • Interviews with Procurement officers
		- To what extent were the procured goods of the expected/nee	Level of satisfaction with products/services	• Survey to PMs and beneficiaries • Observation in project site	

No.	Area	Evaluation question	Indicators[20]	Data source(s) for country / project evaluations	Additional data source(s) for thematic evaluation of procurement process in 2015.
		ded quality and quantity?			
	Process / workflow	- To what extent the procurement process if fit for purpose?	Level of satisfaction with the procurement process	• Interviews with PMs, Government counterparts and beneficiaries	• Procurement related documents review • Evaluation reports • Survey to PMs, procurement officers, beneficiaries, field local partners. • Procurement related documents review • Evaluation reports • Survey to PMs, procurement officers, beneficiaries, field local partners. • Interviews with Procurement officers
		- Which are the main bottlenecks / issues in the procurement process?		• Interviews with PMs, Government counterparts and beneficiaries	
		- Which part(s) of the procurement process can be streamlined or simplified?		• Interview with PMs	

Annex B - Reference Documents

- Project documents of individual TC projects
- Project progress reports and self-assessments
- Back-to-office reports of project managers
- UNIDO Medium Term Planning Framework
- Thematic evaluation: UNIDO Field Office performance (March 2013)
- UNIDO's contribution to the Millennium Development Goals (October 2012)
- UNIDO contribution to One UN mechanisms (May 2012)
- Economist Intelligence Unit documents: country profile and country reports
- Human Development Report 2013 (UNDP. 2013)
- Evaluability assessments of the programme country pilots delivering as One UN. Synthesis report (UNEG. December 2008)
- Industrial reports on sectors from different sources
- World Bank data and statistics

Annex B: Map of China with visited project sites



Annex C: Organizations visited and persons met

NO.	Name	Position	Organization
1.	Yu Lifeng	Deputy Director-General	Foreign Economic Cooperation Office, China Ministry of Environmental Protection (FECO/MEP)
2.	Ren Yong	Deputy Director of Division V	FECO/MEP
3.	Wu Entao	Director of Division Finance	FECO/MEP
4.	Su Chang	Project Officer	FECO/MEP
5.	Hu Jan	Project Officer	FECO/MEP
6.	Peng Ying	Project Officer of Contracts Division	FECO/MEP
7.	Liu Jianguo	Associate Professor	Beijing University
8.	Chen Yang	Associate Professor	Institute of High Energy Physics (IHEP), CAS
9.	Chen Peng	Doctor	Chinese Academy for Environmental Planning
10.	Jiang Feng	National experts	
11.	Yu Gang	Professor	Tsinghua University
12.	Wu Changmin	Assistant Engineer/ General manager	TTPC / CSD Emerging Environmental Technology Center（CETC）
13.	Lin Yanxia	Engineer	TTPC/CETC
14.	Sheng Shouxiang	Engineer	TTPC/CETC
15.	Ge Yuxi	Engineer	TTPC/CETC
16.	Li Wei	Engineer	TTPC/CETC
17.	Luan Caixia	Project Officer	China Ministry of environmental protection publicity and education center(CEEC)
18.	Hui Jie	Project Officer	CEEC
19.	Yan Yingying	Project Officer	CEEC
20.	Xu Dongqun	Deputy Director	Environment Hygiene and Health Related Product Safety of the Chinese Centre for

NO.	Name	Position	Organization
			Disease Control and Prevention (CDC).
21.	Lin Shaobin	Deputy Director	CDC
22.	Dong Shaoxia	Associate Professor	CDC
23.	Zhao Xin	Associate Professor	CDC
24.	Zhou Xiaojian	Assistant Professor	CDC
25.	Du Peng	Assistant Engineer	CDC
26.	Zhang Haiyuan	Technical Manager	Everbright environmental energy (Ji'nan) Co., Ltd.
27.	Zhou Kefeng	Technical Deputy Manager	Everbright environmental energy (Ji'nan) Co., Ltd.
28.	Qu Lei	Administrative Personnel Manager	Everbright environmental energy (Ji'nan) Co., Ltd.
29.	Liang Weihua	Director	TianJin Solid Waste and Chemical Management Center
30.	Wei Tongyu	Director	TianJin Solid Waste and Chemical Management Center
31.	Wang Dongmei	Senior Engineer	TianJin Solid Waste and Chemical Management Center
32.	Cai Ling	General manager	Tianjin Hejia Veolia Environmental Services Limited(Veolia)
33.	Yang Zhichun	Senior Engineer	Veolia
34.	Kang Peisong	Senior Engineer	Veolia
35.	Wu Jian	Director	Shanghai EPB
36.	Hu Guoliang	Director	Shanghai Solid Waste Management Center
37.	Xu Yang		Shanghai Solid Waste Management Center
38.	Wei Wei	Vice Director	Baosteel
39.	Li Honghong	Deputy Director	Baosteel
40.	Shen Xinfeng	Senior Engineer	Baosteel
41.	Yu Yongmei	Senior Engineer	Baosteel
42.	Zhang Yongzhong		Baosteel
43.	Yang Xiaodong		Baosteel

NO.	Name	Position	Organization
44.	Shen Qixu		Baosteel

Annex D: Evaluation Matrix and Interview Guidelines

Evaluation Criteria	Guiding evaluation questions	Source of Information						Evaluation Tools			
		Counter part	Donor	Project Manager	Beneficiaries	Experts		Doc Review	Interview	Field Obs.	
Relevance	• How is the project aligned to a national development priority?	x		x				x	x		
	• Why/how were government agency and/or company selected to partner with UNIDO?	x	x	x					x		
	• To what extent are the problems that originated the project still relevant today? • Have there been changes in the context that affected the project significantly?	x		x	x	x			x	x	
	• To what extent the project is relevant to intended target groups/beneficiaries?	x		x	x				x	x	
	• IMPACT: To what extent is the project contributing to international development priorities (Medium term development framework, MDGs, UNDAF, DaO…)?. • IMPACT: How these contributions (if any) can be measured?	x	x	x				x	x	x	
Effectiveness	• What are the main results of the project so far? (for on-going projects)	x		x	x	x		x	x	x	

Evaluation Criteria	Guiding evaluation questions	Source of Information						Evaluation Tools			
		Counter part	Donor	Project Manager	Beneficiaries	Experts		Doc Review	Interview	Field Obs.	
	• To what extent outputs established in the project document are delivered?			x	x	x			x	x	
	• To what extent outcomes established in the project document are being achieved (or likely to be)?			x	x	x			x	x	
	• To what extent outputs are/were sufficient to achieve the outcome?			x		x		x	x	x	
	• To what extent were SMART performance indicators established and measured?			x		x		x	x	x	
	• To what extent has the project reached the intended beneficiaries?			x	x	x			x	x	
Efficiency	• To what extend UNIDO services were adequate (expertise, training, equipment, methodologies..)?	x			x	x			x	x	
	• To what extend were resources/inputs converted into outputs in a timely and cost-effective way?			x	x	x			x	x	
	• What were the main factors influencing the delivery of outputs? (Issues / context that facilitated implementation?)			x	x	x			x	x	
	• What were the main barriers, if any, encountered during project implementation?	x		x	x	x			x	x	
	• How has the project management addressed barriers / challenges?			x	x	x			x	x	

Evaluation Criteria	Guiding evaluation questions	Source of Information						Evaluation Tools			
		Counter part	Donor	Project Manager	Beneficiaries	Experts		Doc Review	Interview	Field Obs.	
	• How was the project monitoring conducted?			x		x		x	x	x	
	• To what extent were project progress reports updated/recorded systematically?	x	x	x				x	x	x	
	• Has the in-country presence improved project monitoring and supervision?	x	x	x		x			x	x	
	• To what extent is the UR involved in supervising and monitoring projects?	x		x					x	x	
Sustainability/ Ownership	• To what extent were government counterparts and key stakeholders involved in the project design?	x	x	x	x	x			x	x	
	• What is the level of local/national funding/financing?	x	x	x				x	x		
	• What has been the involvement of government counterparts / private sector in implementation?	x		x					x	x	
	• Are the main stakeholders taking effective leadership in the project implementation? Why or why not?	x	x	x	x	x			x	x	
	• What plans have been made to ensure sustainability of project results / benefits?	x		x	x			x	x	x	
Project Design Process (Situation, gap,	• What do you see as strengths / weaknesses of the project design?		x	x	x			x	x	x	
	• How was the consultation process during the project design?	x	x	x	x				x	x	

Evaluation Criteria	Guiding evaluation questions	Source of Information						Evaluation Tools			
		Counter part	Donor	Project Manager	Beneficiaries	Experts		Doc Review	Interview	Field Obs.	
problem analysis, objectives analysis, formulation process, LFA and RBM approach)	• What would you change of the project design if you had the chance of starting all over again?	x	x	x	x				x	x	
	• To what extent project has been designed using the LFA?	x	x	x	x			x	x		
	• To what extent have evaluations been used and drawn on in the design of projects and / or to learn lessons?	x	x	x	x			x	x	x	
	• Overall quality of project design (clarity, consistency and logic. Results chain, SMART indicators, Realistic and meaningful outputs and outcome)							x			
Overall / Cross-cutting	• What have been in your view the strengths and weaknesses of UNIDO with respect to this project?	x	x	x	x	x			x	X	
	• To what extent the project has contributed to empowerment of women and gender equality?	x	x	x	x	x		x	x	X	
	• To what extent the project has contributed (positively or negatively) to environmental sustainability?;	x	x	x	x	x		x	x	x	
	• How this project contributed to the One UN Programme objectives. (forDaO projects)	x	x	x	x	x		x	x	x	
	• How was coordination/synergies among UNIDO activities at the national level, including TC projects, and GF activities?	x		x	x				x	x	

Evaluation Criteria	Guiding evaluation questions	Source of Information						Evaluation Tools			
		Counter part	Donor	Project Manager	Beneficiaries	Experts		Doc Review	Interview	Field Obs.	
	• How projects/programmes were integrated/coordinated with other UN project/programmes?. Have synergies with other initiatives been developed and exploited by UNIDO?	x	x	x	x			x	x	x	
	• What could be learned from the experiences of other UN agencies in the country?	x	x	x	x				x	x	
	• To what extent UNIDO financing or co-funding was part of the budget and what the UNIDO financing was used for?	x	x	x	x			x	x	x	
	• To what extent has the management structure and procedures adequate (structure, information flows, decision making, procurement) and contributed to generate the planned outputs and achievement of outcome?	x		x	x	x		x	x	x	
	• What could be improved (if any) on UNIDO's model of intervention?	x	x	x	x	x			x	x	
	• To what extent UNIDO GF activities nurtured national knowledge and dialogue globally and with regard to industrial development in the country?	x	x	x	x	x		x	x	x	
IP XX	• To what extent to which UNIDO's Field Office supported coordination, implementation and monitoring of the programme?	x	x	x	x			x	x	x	
	• To what extent UNIDO HQ management; coordination and monitoring have been efficient and effective?	x	x	x	x			x	x	x	
	• How effective were coordination arrangements with other development	x	x	x	x				x	x	

Evaluation Criteria	Guiding evaluation questions	Source of Information						Evaluation Tools			
		Counter part	Donor	Project Manager	Beneficiaries	Experts		Doc Review	Interview	Field Obs.	
	partners?										
	• To what extent UNIDO contributed to the One UN and other UN coordination mechanisms?	x	x	x	x			x	x	x	
	• To what extent the IP design and implementation had government ownership, alignment with government strategies, results orientation, use of country systems, tracking results, and accountability?.	x	x	x	x			x	x	x	
UNIDO Field Office	(As per Field Office Assessment Framework)	x	x	x	x			x	x	x	
Additional Comments / Observations	e.g project sites, contacts, issues…..										