

Annual Project Report (UNDP conclusion)

[Name of project] Sector Plan for HCFC Phase-out in the Solvents Sector in China (Stage-I compliance with 2013 and 2015 targets)]

[Date of report] January 10, 2015

Project annual report rating

<i>Item rated</i>	<i>Rating provided</i>
Overall quality of the report	4
Does the project still fit with the Country office Strategic direction	5
Is the project still Relevant within the country setting	5
Sustainability	4
Efficiency: Financial performance (overall)	4
Efficiency: Financial performance (reporting period)	4
Effectiveness: Activity implementation (overall)	5
Effectiveness: Activity implementation (reporting period)	4
Partnership Effectiveness (if applicable)	4
Total	39

Partnership Effectiveness (only for joint inter-UN agency initiatives)

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Overall assessment

The project, generally, implemented well, the activities are expected under the agreement, indicators are met.

Sustainability (either separate or as part of the overall assessment)

This issue has not been well addressed in the annual report.

More than 610 metric tonnes HCFC-141b will be phased out permanently through above 9 contracts.

Safety issue should be carefully solved in the implementation of the sector; otherwise it will have negative effects on the work.

The technology could be used in the sector in China.

Management steps to be taken

*The technical components of project should be speed up.
In 2015, the project need to be report to the ExCom and the tranche request should be made for
75th ExCom. Coordination should be made this year by UNDP.
Safety issues should be highlighted in the implementation of the sector plan.*

Signed by

Houma

Date

30 Jan. 2015

[Sector Plan for HCFC Phase-out in the Solvents Sector in China
(Stage-I compliance with 2013 and 2015 targets)]

[January,2015]

Basic Project Information

Project Title: Sector Plan for HCFC Phase-out in the Solvents Sector in China (Stage-I compliance with 2013 and 2015 targets)	
UNDP Award ID	00066894
UNDP Project ID	00082918
Project Duration	2012-2016
Reporting Period	2014
Total Approved Project Budget	USD 5,000,000
Participating UN agencies	UNDP
Implementing Partners/ National collaborating agencies	FECO/MEP
International collaborating agencies	
Cost-sharing third parties	
UNDP Contact officer	Dr. Hong Yun
Project website	

Executive Summary

The Project Document between FECO and UNDP was signed in 2012. Five payments had been made from UNDP to FECO during 2012-2014, the fourth and fifth payments were made in 2014. Nine contracts between FECO/MEP and enterprises were signed in 2013, more than 610 metric tonnes of HCFC-141b will be phased out through above 9 contracts and the fund was amount to 4,347,929 USD.

In 2014, the equipment conversion under sector plan had been made great progress, 3 enterprises finished all the conversion and stopped HCFC-141b consumption, another 3 enterprises finished all the conversion work and will stop HCFC-141b consumption in 2015, the other 3 enterprises signed conversion equipment procurement contracts with suppliers and looked forward to receive conversion equipment in the first quarter of 2015.

9 on-site baseline verifications were organized by FECO, together with technical and financial

experts, 15 disbursements were made to above enterprises, which will be described later.

FECO has received 1,600,000 USD from UNDP in 2014. It disbursed 1,293,194 USD to beneficiary enterprises and about 5,000 USD for technical assistance activities.

1. Background

Development Context

China signed Vienna Convention for the Protection of the Ozone Layer in June 1989 and Montreal Protocol on Substances that Deplete the Ozone Layer (hereinafter Montreal Protocol) in June 1991. By May 2010, China has ratified all amendments to the Montreal Protocol. Chinese government compiled and approved "Country Program for Phase-out of Ozone Depleting Substances" (hereafter Country Program) in January 1993 and established phase-out strategies for major sectors of ODS production and consumption in 1995.

In November 1999, Chinese Government updated the Country Program. According to the Country Program, China has conducted more than 400 projects and 18 sector plans including chemical production sector, Automobile Air-conditioner Sector, Tobacco Sector, Industrial and Commercial Refrigeration and Air Conditioning, Extinguishing Sector, Solvent Sector, Household Appliance, Foam Sector etc. With the support of Multilateral Fund and international institutions, these projects and plans were conducted to phase out production and consumption of CFCs, Halons, CTC, TCA and Methyl Bromide subsequently. After two decades of hard work, China has completed the phase-out of the production and consumption of CFCs and Halons on July 1st 2007, two and a half year earlier than the phase-out schedule under Montreal Protocol.

By January 1st 2010, except for essential use, Chinese Government had completely eliminated the production and consumption of CFC, Halons, CTC and TCA (5 year ahead the schedule) to meet the requirement of Montreal Protocol, which is an outstanding contribution to Ozone Layer protection.

Project Objectives and Strategy

Approved in the 65th Meeting of the Executive Committee, the total funding was \$ 5,000,000 for Sector Plan for HCFC Phase-out in the Solvent Sector in China (Stage-I), with UNDP as the implementing agency. The Sector Plan was designed to address 2013 freezing target and 2015 7.9% reduction target. Upon successful completion, the Sector Plan will result in sustainable reductions of 69 ODP tonnes of HCFC consumption in the Solvents Sector by 2015, contributing to China's compliance with the 2013 and 2015 control targets for Annex-C, Group-I substances (HCFCs) under the Montreal Protocol. In addition, the project will result in direct CO₂-equivalent emission reductions of about 435,204 tonnes annually.

The Sector Plan comprises of a combination of interventions such as technology transfer investments, policies and regulations, technical assistance, training and public awareness to be implemented over 5 years from 2012 to 2016.

2. Key Results

Project Outcomes

The Project Document was signed between FECO/MEP and UNDP in May, 2012. The Biennial Implementation plan (TYW-plan) for 2014-2015 was signed in 2014. The fourth payment of 1,000,000 USD and the fifth payment of 600,000 USD were made from UNDP to FECO/MEP.

Workshops had been organized for phasing out strategy formulation and enterprises training. The implementation plans of 9 enterprises were reviewed and approved when they revised the plans according to expert's suggestion and opinions.

According to verified consumption data, FECO signed 9 contracts with 9 solvent enterprises in 2013 which will phase out 610 metric tonnes of HCFC-141b by production equipment conversion; according to CP data submitted to Ex.Com, China has realized 2013 freeze target and will realize 2015 7.9% reduction target.

Activities and Outputs

Output 1: Implementation made following progress:

Biennial Implementation plan (TYW-plan) has been agreed in March 2014.

In 2014, each of 9 enterprises made some progress, please see the table:

No.	Enterprises	Contract Fund (USD)	ICC budget	IOC disbursement steps					fund disbursed(USD)
				1	2	3	4	5	
1	Zhejiang KDL	938,790	600,000	1	2	3	4	5	540,000
2	Shandong WEGO	206,800	158,000	1	2	3	4	5	142,200
3	Jiangxi Hongda	975,042	625,128	1	2	3	4	5	562,615
4	Jiangxi Yikang	267,000	183,000	1	2	3	4	5	164,700
5	Shenzhen Tianma	469,265	462,000	1	2	3	4	5	415,800
6	Zhuhai Lingda	503,250	309,900	1	2	3	4	5	123,960
7	Geli Longshan	573,250	350,750	1	2	3	4	5	140,300
8	Jiangxi Fuerkang	210,002	130,000	1	2	3	4	5	52,000
9	Wenzhou Beipu	204,530	143,000	1	2	3	4	5	57,200
Total		4,347,929	2,961,778						2,198,775

Note: 1 means the 1st payment, when enterprises signed HCFC phase out contract with FECO, FECO disbursed;

2 means the 2nd payment, when the enterprises signed conversion equipment with suppliers;

3 means the 3rd payment, when enterprises received conversion equipment and got approval of technical and financial verification;

4 means the 4th payment, when the trial run of the equipment was good-- the products produced with non-ODS solvent could met quality standard;

5 means the 5th payment, when enterprises get National Acceptance.

As to Dec.31,2014, 1)Shandong Wego, Jiangxi Yikang and Shenzhen Tianma had finished all the conversion work, the converted equipment were operated well, these 3 enterprises had totally stopped HCFC -141b consumption; in addition, they submitted all the related documents to FECO

and ready for National Acceptance; 2) Jiangxi Hongda, Zhejiang KDL and Zhejiang Beipu, had finished all the conversion work, the converted equipment were operated well, these 3 enterprises planned to phase out HCFC -141b at the beginning of 2015 when all the testing results are OK; in addition, they were preparing the related project documents. 3) Zhuhai Lingda, Geli Longshan and Jiangxi Fuerkang made less progress than other 6 enterprise, Jiangxi Fuerkang signed the procurement contracts in the first quarter of 2014, but the equipment supplier provided could not meet technical standard, they adjusted technical parameter and asked supplier to re-produce qualified equipment; Lingda and Longshan were slowly because their internal procurement procedure was complicated.

Output 2: Technical Assistance

In 2014, FECO has organized 9 on-site verifications to 6 enterprises separately, and finished 9 financial reports and 15 technical assessment reports. Helped enterprises prepared 12 equipment arrival, fixture and trial run reports and 3 project completion reports.

Financial verification reports gave conclusion on financial status of enterprises, how the grant fund was disbursed to beneficiary enterprises and if the procurement was based on implementation plan and procurement procedure. The reports should also have appendixes of the copy of essential documents including invoices and procurement and review documents etc. Based on the verification results, the grant fund will be disbursed accordingly.

In September, 2014, the First Coordination Meeting on Preparation of Stage II HPMP was successfully held in Beijing, the meeting presented the progress of stage I HPMP and preparation of stage II HPMP for HCFC production, PU foam, XPS foam, RAC, ICR, solvent, servicing sectors and overarching project, analysed the challenges of HCFC phase-out at stage II faced by China and discussed preparation for stage II HPMP for the next step. **Solvent sector** is the only sector which signed all the HCFC-141b phase out contracts to meet 7.9% reduction target in 2015, and committed more than 99% of investment budget.

Output 3 public awareness:

FECO participated the annual meeting held by Industry Association of Medical Devices in March, 2014 to introduce the "HCFC-141b quota management and the phasing out trend in the future", and issue questionnaires to Medical enterprises to learn HCFC-141b consumption data and their willingness to phase out 141b.

Output 4 HCFC-141b alternative development

Jan.20, 2014, FECO organized a review meeting on possible alternative research and development proposals; finally, 4 proposals (Shanghai Xilikang, Beijing, Dongyang Zhileng and Quzhou Sancheng) were approved;

March, 2014, FECO signed the contracts with above enterprises on different alternatives;

April 11, 2014, FECO organized a training workshop for four alternatives develop enterprises, to introduce the financial and procurement management procedure.

The progress report on 2013 to 2014 had been submitted to UNDP in the September, 2014.

Sustainability

Meeting the project targets would help China ensure environmental suitability, address climate change and promote a green, low carbon economy

Partnership Effectiveness

Medical equipment manufacturers are invited to join some trainings, so that they could master the Chinese plan for phasing out HCFC-141b in solvent sector, and the participation could improve the technical selection, make it more realistic and reasonable, and acceptable by the markets.

Cross-cutting Issues

The successful implementation of this project will result in reduction of at minimum 67.1 ODP tonnes and emission reductions of 430050 tonnes of CO₂-eq. This project will demonstrate an environmentally safe and cost-effective alternative for enabling replication of this technology in Medical Devices Production enterprises in the solvent Sector in China, and contribute to China's compliance with the 2013 and 2015 control targets.

3. Project Management and Oversight

Implementation status

The preparation activities for phase-out have been carried out according to Project Document and Implementation Plan. The conversion contracts have been signed in 2013 and the conversion activities at enterprise level have been started.

Human Resource Management

Ms. Gao Lingyun and Ms. Li Juan, the project officers of division III at FECO, have been assigned as the focal point of the Sector Plan.

Monitoring and Evaluation

Before the contracts, FECO visited all enterprises with the support of experts and accountants to identify their ODS baseline consumption, review their implementation plan carefully according to UNDP's project management request.

After the contracts, FECO disbursed every payment to beneficiary enterprises immediately

when they met the necessary standard, and organized training workshop for enterprises on project management requirement of procurement and finance. To ensure the smooth implementation, FECO requested enterprises to submit the procurement document of conversion equipment and construction for review before they issued to suppliers and submit procurement contract before they signed.

Risk management

1. As the alternative technology is more inflammable than HCFC-141b, enterprises should formulate a concrete implementation plan with comprehensive and professional safety measures, prevention and ventilation. The thorough review and assessment of experts are also needed
2. FECO and UNDP will supervise and monitor the implementation schedule and financial management as well as procurement of the project under the Performance-based Mechanism to make sure that the project can be smoothly completed in time as planned.
3. FECO procured an Accounting Firm to verify if the project enterprises could manage financial issues according to FECO's financial regulations and assist enterprises to implement the project better and smoothly.

Communication and advocacy

A special training workshop for potential enterprises was held in Beijing with the aim to encourage them to phase out HCFC-141b before 2015, i.e. The deadline for the HPMP stage 1. FECO issued HCFC-141b phasing out project proclamation in MEP/FECO official website in March.2013 to invite related solvent enterprises to apply for phasing out project.

4. Financial Management

Expenditure Vs. Approved project budget by source of funding	Source of Fund	Budget	Expenditure
UNDP		2,094,302	1,379,108
Government Cost Sharing			
Third Party Cost-sharing			
Other (please specify)			
Total		2,094,302	1,379,108

Note: * refers to the cumulative expenditure from UNDP to FECO/MEP; ** refers to the cumulative expenditure by FECO/MEP until the reporting year.

Output	Activities	Source of Funding	Budget Description	Annual Budget (USD)	Annual Expenditure (USD)	Note
Output 1: Investment Projects	Activity 1.1 signing conversion contracts of 247 tonnes with 2-5 enterprises Activity 1.2 Contracts implementation for contribution to the 272.7 tonnes phasing out target of 2013	MLF	Subcontracts with beneficiary enterprises for Incremental Capital Cost (procurement of equipments, redesign and reinstall the production lines etc) and Incremental Operational Cost (alternative materials procurement, procurement etc.) Training workshops, consulting service for the enterprises, etc.	1,917,302	1,293,195	
Output 2: Technical Assistance	Activity 2.1 2-3 Training workshops of project management, alternative technologies to enterprises with assistance of consultants Activity 2.2 Study tour organized to exchange technical and policy experience in HCFC phasing out Activity 2.3 Public awareness with publishing and distributing communication materials and/or conducting workshops, campaigns, etc. Activity 2.4 Consultancy services: 5-6 technical experts for implementation of phasing out at enterprises level and national level Activity 2.5 Baseline/financial verification: Accounting company commissioned to conduct baseline/financial verification and complete reports	MLF	Travel to other countries for sharing experiences of policy and technology, miscellaneous costs, etc. subcontract; miscellaneous costs, etc. local consultant; travel; miscellaneous costs, etc. Subcontract to third party of accounting company for verification and reports accomplishment, miscellaneous	10,000 0 12,000 15,000 20,000	0 0 0 1360 3259	

	<p>Activity 2.6 Other activities may be needed to support the conversion and other technical assistance</p> <p>3.1 Monitoring: including field monitoring, review meetings, etc.</p> <p>3.2 Reporting: PMO submits implementation Reports to UNDP</p> <p>3.3 Financial, technical and managerial supervision: Financial management, technical support and managerial supervision</p>	<p>cost, etc.</p> <p>Sub-contracts, travel, local consultants, workshop, miscellaneous cost, etc.</p> <p>Travel, workshop, miscellaneous cost, etc.</p> <p>local consultants, service contracts, miscellaneous cost, etc.</p> <p>Implementing and operational cost, miscellaneous cost etc.</p>	<p>20,000</p> <p>100,000</p>	<p>44</p> <p>81250</p>	<p>Remittance charge</p>
Output 3			Total	2,094,302	1,379,108

5. Management recommendations

5.1 Cooperation with related industrial association, academic institutes and enterprises is significant to the implementation of the Solvent Sector Plan.

5.2 Given that most Solvent enterprises in China lack information on alternative technologies and their management capacity is poor, technical support from experts and association is needed.

5.3 For smoother and better transferring of technology in Medical Devices Sub-sector, and also for laying solid foundation for future comprehensive phase-out in the whole sub-sector, big enterprises as flagship role in the industry will be given special attention and should be encouraged to participate in the phase-out project as early as possible.

5.4 Experiences and lessons learnt in the KDL Demonstration Project provided the Solvent Sector Plan valuable knowledge in phase-out strategy formulation and KDL served as pioneer and leading model in alternative technology and project implementation for other enterprises.

6. Annex

Not applicable.

