

**INTEGRATED SAFEGUARDS DATASHEET
APPRAISAL STAGE**

I. Basic Information

Date prepared/updated: 01/25/2011

Report No.: AC5979

1. Basic Project Data

Country: China	Project ID: P123239	
Project Name: China Energy Efficiency Financing III		
Task Team Leader: Xiaodong Wang		
Estimated Appraisal Date: January 10, 2011	Estimated Board Date: May 24, 2011	
Managing Unit: EASCS	Lending Instrument: Financial Intermediary Loan	
Sector: District heating and energy efficiency services (90%); Banking (10%)		
Theme: Climate change (100%)		
IBRD Amount (US\$m.):	100.00	
IDA Amount (US\$m.):	0.00	
GEF Amount (US\$m.):	0.00	
PCF Amount (US\$m.):	0.00	
Other financing amounts by source:		
Borrower		0.00
Borrowing Country's Fin. Intermediary/ies		200.00
<u>Sub-borrower(s)</u>		<u>128.00</u>
		328.00
Environmental Category: F - Financial Intermediary Assessment		
Simplified Processing	Simple <input type="checkbox"/>	Repeater <input type="checkbox"/>
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

2. Project Objectives

The project development objective (PDO) is to improve energy efficiency of selected end users in key energy-consuming sectors, thereby reducing their adverse environmental impacts on climate, through scale-up of participating bank's lending for energy efficiency investments.

This proposed PDO represents slight changes to the PDO under CHEEF 1/, because the AF intends to expand the targeted market segments from the industrial-sector-only market under CHEEF to the building sector and beyond, and broaden the sub-borrowers from large and medium-sized industrial enterprises only under CHEEF to all sizes of enterprises and energy service companies (ESCOs). As a result, these expanded activities through this AF operation aim to (a) scale up the project's impacts and development effectiveness; and (b) make minor restructuring to a successful operation.

1/ The PDO for CHEEF is to improve energy efficiency of medium and large-sized industrial enterprises in China, and thereby reduce their adverse environmental impacts on climate.

3. Project Description

This project consists of an energy efficiency lending program of US\$100 million over four years. The US\$100 million IBRD loan will be on-lent by the GOC to EXIM Bank. EXIM Bank, in turn, will lend the funds to enterprises and/or ESCOs for eligible energy efficiency investment sub-projects. The size of each sub-loan will be below US\$20 million equivalent to diversify potential project risks and increase the development impacts of the IBRD loan. The lending rates will be determined based on market conditions and will adequately cover the financial and operating costs and provide for a reasonable profit margin for EXIM Bank.

Following the recent government priorities and policies, and building on achievements and lessons learned from CHEEF, the AF has three improved or expanded features, compared to CHEEF. These include: (1) piloting innovative ESCO lending that requires energy savings as partial loan security, and broadening the sub-borrowers from large and medium-sized industrial enterprises to both all sizes of end users and ESCOs, following the recent government's policies for ESCOs; (2) expanding the targeted market segments from the industrial to the building sector to support the government's ten priority energy conservation programs, given the rapid growth in energy demand for buildings and new government's plan to expand the range of priority energy conservation programs; and (3) increasing the leverage ratio of the IBRD loan to EXIM Bank contribution from 1:1 in CHEEF to 1:2 in AF, which demonstrates EXIM Bank's increased interests and confidence in EE investments during CHEEF.

EXIM Bank will lend, from their own resources, at least an additional US\$200 million equivalent, for EE investments, to leverage the \$100 million IBRD loan. In addition, the subproject beneficiary enterprises are expected to contribute about 30 percent of the project costs, a requirement by EXIM Bank, amounting to US\$128 million in equity. The total project cost then would be \$428 million.

The IBRD loan will be on-lent to all sizes of end users and ESCOs in the industrial and building sectors. It is expected that the bulk of the loan will continue to be on-lent to large and medium sized industrial enterprises for significant emission reductions. However, given the recent government's favorable policies for ESCOs, EXIM Bank has expressed interests in ESCO lending and is willing to lead by example. This proposed AF operation has tentatively set a target to dedicate at least US\$30 million of the total loan amount to ESCO lending, whereby the EE project equipment assets, contracts, and revenues serve as partial loan security, and building EE investments. The final target will be determined by a market survey to be undertaken during project preparation. The detailed eligibility criteria, appraisal guidelines, and risk management strategies for these new activities (ESCO lending and building EE investments) will be outlined in the project Operational Manual developed by EXIM Bank and approved by the Bank.

Sub-project investments will be limited to renovation and rehabilitation of existing facilities. The major types of energy efficiency sub-projects eligible for financing under the project include: (a) replacement of inefficient industrial technologies with energy saving technologies such as more efficient industrial boilers, kilns, and heat exchange systems; (b) recovery and utilization of by-product gas, waste heat and pressure; (c) installation of highly efficient mechanical and electrical equipment, including motors, pumps, heating and ventilation equipments; (d) industrial system optimization to reduce energy use; (e) building renovation energy efficiency (residential, commercial, and government buildings), such as lighting, HVAC (heating, ventilation, and air conditioning) systems, energy management, building envelope insulation (roof, walls, windows, and doors), and renewable energy applications in buildings (roof-top solar PV, solar water heaters, and heat pump); and (f) other projects agreed by the Bank and the GOC. The proposed project will not finance any coal-fired power plants. EXIM Bank will decide which particular energy efficiency subprojects it will finance, subject to the eligibility criteria detailed in the project Operational Manual.

A technical assistance (TA) program will be provided to EXIM Bank from the GEF grant under the ongoing Bank financed CHEEF project. It will assist EXIM Bank in (a) identifying, appraising, and conducting due diligence on EE projects for various types of sub-borrowers; (b) developing new financial products for ESCO lending and adapt loan appraisal and underwriting criteria tailored to EE investments; (c) conducting specific market segment studies to broaden the end-user sectors and EE technologies in the portfolio; (d) building partnerships for marketing development and generating deal flows; (e) developing market aggregation tools for small and medium-scale enterprises and projects; (f) focusing on several geographic areas or provinces with large energy saving potentials and active PFI branches; (g) strengthening its capacity to manage safeguard, procurement, and financial management risks of its future energy efficiency lending portfolio; and (h) exploring a low-carbon lending business. The TA program directly supports achievement of project objectives.

Unlike CHEEF, this AF operation will trigger the Involuntary Resettlement Policy (OP/BP 4.12) so that some subprojects that might involve some limited land acquisition outside existing plants such as those sub-projects utilizing waste heat for district heating supply could be financed. The revised and updated Environmental Impact Assessment Framework and Resettlement Policy Framework have been approved by the Bank and incorporated in the Operational Manual.

4. Project Location and salient physical characteristics relevant to the safeguard analysis

Nationwide.

Most of the sub-projects financed to date under the CHEEF Project are waste heat recovery investments. The Team conducted due diligence of safeguard implementation of the CHEEF Project through visiting three sub-projects and discussing the entire portfolio of the fifteen sub-projects financed to date with EXIM Bank. The due diligence confirmed that the three sub-projects visited have no major environmental issues and are

operating within existing plants' premise. However, safeguard implementation of the CHEEF Project found that while the safeguard arrangements for the CHEEF Project implementation are acceptable, actual implementation - following the procedures in the Operational Manual - was marginally adequate. In particular, the sub-borrowers demonstrated inconsistent capacity and performance to follow the safeguard procedures.

5. Environmental and Social Safeguards Specialists

Mr Bernard Baratz (EASCS)

Mr Youxuan Zhu (EASTS)

6. Safeguard Policies Triggered	Yes	No
Environmental Assessment (OP/BP 4.01)	X	
Natural Habitats (OP/BP 4.04)		X
Forests (OP/BP 4.36)		X
Pest Management (OP 4.09)		X
Physical Cultural Resources (OP/BP 4.11)		X
Indigenous Peoples (OP/BP 4.10)		X
Involuntary Resettlement (OP/BP 4.12)	X	
Safety of Dams (OP/BP 4.37)		X
Projects on International Waterways (OP/BP 7.50)		X
Projects in Disputed Areas (OP/BP 7.60)		X

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts: Sub-project investments will be limited to renovation and rehabilitation. The major types of energy efficiency sub-projects eligible for financing under the project include: (a) replacement of inefficient industrial technologies with energy saving technologies such as more efficient industrial boilers, kilns, and heat exchange systems; (b) recovery and utilization of by-product gas, waste heat and pressure; (c) installation of highly efficient mechanical and electrical equipment, including motors, pumps, heating and ventilation equipments; (d) industrial system optimization to reduce energy use; (e) building energy efficiency (residential, commercial, and government buildings), such as lighting, HVAC (heating, ventilation, and air conditioning) systems, energy management, building envelope insulation (roof, walls, windows, and doors), and renewable energy applications in buildings (roof-top solar PV, solar water heaters, and heat pump); and (f) other projects agreed by the Bank and the GOC. The proposed project will not finance any coal-fired power plants. EXIM Bank will decide which particular energy efficiency subprojects it will finance, subject to the eligibility criteria detailed in the project Operational Manual.

In general, EE sub-projects have either minor or no adverse environmental impacts and provide environmental benefits (reductions in local pollution such as dust and sulfur dioxide emissions and/or reductions in emissions of greenhouse gases such as carbon dioxide). EXIM Bank currently has provided loans to fifteen industrial subprojects

predominantly in the cement and iron and steel sectors, with the remaining balance from the chemicals, rubber, and metallurgy industries. Most of the sub-projects are waste heat recovery investments that use waste heat or gas to generate power, and the rest are various types of renovation of industrial processes.

The due diligence of project implementation of the CHEEF Project confirmed that sub-projects financed to date have no major environmental issues and are operating within existing plant's fence. The three subprojects visited as part of the due diligence effort have all necessary Chinese environmental approvals and operate within Chinese environmental standards. However, the safeguard requirements related to public consultation and disclosure were not consistently followed.

Foreseen sub-project impacts for the AF are mainly construction aspects associated with the movement of men, machinery and materials (dust, noise, disposal of packaging wastes). There is the possibility of hazardous materials management in certain projects such as replacement of asbestos insulation, removal and disposal of fluorescent light bulbs /2 etc. The Screening Criteria in the Framework Document (Annex A of the AF Framework) includes hazardous materials as an issue of special concern and specific requirements for both Category assignment and inclusion in the EMP.

In order to improve the efficiency of environmental safeguard process for both EXIM Bank and sub-borrowers/ESCOs, a set of generic EMPs will be prepared by EXIM Bank under the guidance of the Team safeguard specialist for the most typical sub-projects likely to be encountered. This set of generic EMPs will be prepared prior to project implementation, follow the EMP format presented in Annex B of the Framework, and added to the AF Framework as an addendum. Construction issues such as dust, noise, disposal on non-hazardous materials, worker health and safety etc. and operation issues such as emissions of dust, nitrogen oxides (NO_x), and sulfur dioxide (SO₂) will be addressed.

Most subprojects to be financed by EXIM Bank or ESCOs are within existing premises, which will involve replacing old equipments within the existing plants with no land acquisition required. But a few subprojects might involve land requisition and resettlement under proposed AF, even though no such subprojects were included under CHEEF. The due diligence of CHEEF Project implementation also confirmed that these subprojects do not have any social impacts on the existing work force. On the contrary, these subprojects have resulted in positive social benefits by employing more workers to operate the energy conservation facilities, and can generate significant revenues from power generation in the case of waste heat recovery subprojects.

/2 Fluorescent light bulbs contain mercury and may contain polychlorinated biphenyls (PCBs).

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The project will involve energy efficiency subprojects throughout the country. The overall program will contribute to the long term reduction of greenhouse gas emissions in China.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

No alternatives to the project were considered because it is not relevant to this project.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described. EXIM Bank has revised the Framework Document used under the CHEEF Project to reflect the changes in scope of the AF project. All the sub-projects under the AF will be Category B or C investments. The AF Framework Document will be an integral part of the overall subproject appraisal system. The AF Framework Document describes procedures that are consistent with environmental assessment requirements of China and the World Bank EA policy.

A technical assistance (TA) program will be provided to EXIM Bank from the GEF grant under the ongoing Bank financed CHEEF project. It will assist EXIM Bank to, inter alia, strengthen its' capacity to manage safeguard risks of its future energy efficiency lending portfolio. The TA will focus on (1) training of EXIM Bank (HQ and branches) and sub-borrowers on environmental and social safeguard policies, standards, and procedures; and (2) hiring additional qualified environmental and social safeguard consultants.

The due diligence review of safeguard implementation of the CHEEF Project found that while the safeguard arrangements for the CHEEF Project implementation are acceptable, the actual implementation--following the procedures in the Operational Manual--was marginally adequate. In particular, the sub-borrowers demonstrated inconsistent capacity and performance to follow the safeguard procedures--one sub-borrower (with two sub-projects) completely followed the procedures required in the Environmental Assessment Framework, while the other did not. EXIM Bank lacks in-house technical or environmental capacity. All staff backgrounds are in either finance or economics. The experienced external consultant was under contract with EXIM Bank to review environmental documentation prepared by subproject sponsors and on occasion EXIM Bank hired a consultant to prepare the EMP for the subproject sponsor based upon information presented in the approved Chinese EIA Table /3.

For the AF operation, the Team has asked EXIM Bank to substantially strengthen their capacity -- hiring more qualified consultants and build in-house capacity - to screen subprojects and closely guide and supervise the sub-borrowers to follow the environmental and social safeguard framework procedures. Unlike the CHEEF Project, where sub-projects environmental screening is done by Chinese environmental authorities according to Chinese environmental assessment categories, in the updated

Environment Framework under the AF operation, EXIM Bank will be responsible for environmental screening to allow for greater flexibility in the system. Furthermore, the inclusion of ESCO lending will increase the number of sub-projects, which will substantially increase the work load for environmental review. EXIM Bank has agreed to hire more consultants and build in-house capacity to handle the new responsibilities and work volume, which have been included in EXIM Bank's GEF Grant procurement plan. Prior to Appraisal, EXIM Bank agreed to submit its plans to strengthen institutional arrangements and capacity.

Regarding potential social impacts, most of subprojects to be financed by EXIM Bank or ESCOs are replacing old equipments within the existing plants with no land acquisition required. The only possible scenarios are those subprojects that build efficient equipment to replace the inefficient ones or the heating pipelines for waste heat recovery projects at the edge or right outside the existing plants. Because of such potential limited land acquisition impacts, a resettlement policy framework has been developed, which will apply to those subprojects that might involve with any limited land acquisition.

In accordance with relevant Chinese laws and regulations, and the World Bank Operational Policy OP4.12, the resettlement policy framework introduces the policy objectives, legal framework and compensation entitlements for different categories of impacts; specifies the screening procedures for those subprojects that might involve with land acquisition and resettlement; and provides basic guidelines on preparation of individual resettlement plans. In addition, the requirements on consultation and disclosure as well as monitoring and grievance procedures have also been highlighted in the policy framework.

To facilitate the resettlement screening, a resettlement screening table has been developed and included in RPF, based on which a resettlement screening will be carried out for all potential subprojects. Once it is determined that land acquisition is essential to complete any project activities, resettlement planning should begin. The overall responsibility for preparation and implementation of any necessary RPs rests with sponsors of individual subprojects. Based on accurate baseline census survey and social economic survey, the RAP will be prepared in accordance with the policy principles and planning and implementation arrangements set forth in this RPF, and established appropriate mitigation measures as appropriate for all categories of adverse impacts.

The EXIM Bank or ESCOs will be actively involved in RAP preparation in order to ensure satisfactory RAPs are prepared for subprojects involved with any potential land acquisition and resettlement. RAPs prepared will be submitted to the World Bank for review. All RAPs must be cleared by the World Bank prior to awarding of contracts for those civil works responsible for the resettlement.

/3 The Chinese environmental assessment screening system for investment projects requires either a full EIA for projects of high environmental risk, or an abbreviated EA document termed "EIA Table", for projects of moderate risk. The system is similar, in principle, to the World Bank Category A or Category B screening system.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people. Public consultation and disclosure requirements for individual sub-projects to be supported are fully described in the AF Framework Document. The EAF and RPF will be disclosed in the InfoShop and EXIM Bank web site in January 2011.

B. Disclosure Requirements Date

Environmental Assessment/Audit/Management Plan/Other:

Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	11/30/2010
Date of "in-country" disclosure	01/21/2011
Date of submission to InfoShop	01/05/2011
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	

Resettlement Action Plan/Framework/Policy Process:

Was the document disclosed prior to appraisal?	Yes
Date of receipt by the Bank	01/14/2011
Date of "in-country" disclosure	01/21/2011
Date of submission to InfoShop	01/19/2011

Indigenous Peoples Plan/Planning Framework:

Was the document disclosed prior to appraisal?	
Date of receipt by the Bank	
Date of "in-country" disclosure	
Date of submission to InfoShop	

Pest Management Plan:

Was the document disclosed prior to appraisal?	
Date of receipt by the Bank	
Date of "in-country" disclosure	
Date of submission to InfoShop	

*** If the project triggers the Pest Management and/or Physical Cultural Resources, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.**

If in-country disclosure of any of the above documents is not expected, please explain why:

N/A

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?	Yes
If yes, then did the Regional Environment Unit or Sector Manager (SM)	Yes

review and approve the EA report?
 Are the cost and the accountabilities for the EMP incorporated in the credit/loan? Yes

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared? Yes
 If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan? No

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank's Infoshop? Yes
 Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs? Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies? Yes
 Have costs related to safeguard policy measures been included in the project cost? Yes
 Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies? Yes
 Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents? Yes

D. Approvals

<i>Signed and submitted by:</i>	<i>Name</i>	<i>Date</i>
Task Team Leader:	Ms Xiaodong Wang	01/04/2011
Environmental Specialist:	Mr Bernard Baratz	01/06/2011
Social Development Specialist Additional Environmental and/or Social Development Specialist(s):	Mr Youxuan Zhu	01/05/2011
<i>Approved by:</i>		
Regional Safeguards Coordinator: Comments:	Mr Panneer Selvam Lakshminarayanan	01/13/2011
Sector Manager: Comments:	Mr Ede Jorge Ijjasz-Vasquez	01/05/2011