

**PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE**

Report No.: AB2249

Project Name	China Energy Efficiency Financing
Region	EAST ASIA AND PACIFIC
Sector	District heating and energy efficiency services (90%);Banking (10%)
Project ID	P084874
Global Supplemental ID	P098916
GEF Focal Area	C-Climate change
Borrower(s)	GOVERNMENT OF CHINA
Implementing Agency	
Environment Category	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	March 14, 2006
Estimated Date of Appraisal Authorization	January 8, 2007
Estimated Date of Board Approval	June 18, 2007

1. Key development issues and rationale for Bank involvement

China's energy consumption and greenhouse gas (GHG) emissions are the second largest in the world with no sign of slowing down. Since 1980, energy consumption has grown around five percent annually (nearly three times the world average)¹ and is expected to rise rapidly in the future. The most energy-intensive sectors (about fifty percent of energy use) operate at significantly higher levels of energy intensity than international best practice: steel at 21% more, coal-fired power plants 19 %, nitrogen fertilizer 31%, coal fired boiler 15%, and cement 45%². The significant potential for energy efficiency (EE) and emissions reduction in these industries is largely untapped even though their current capital stock is expected to remain active beyond 2020.

In China, given the large size (comparing with other industries) and complexity of production facilities in these industries, systematic process evaluation and renovation of the whole production process are often necessary to achieve major energy efficiency gains. This can require significant financing commitments, making external financing a requirement in most cases. Before the late 1990s, the primary funding sources for such projects were government budgetary funds. Since the late 1990s, the Government of China (GOC) has gradually eliminated budgetary funds for energy conservation project financing, expecting that domestic banks would step into the void and provide credits based on market conditions and their own commercial judgment. Recent studies indicate, however, that domestic banks, including policy banks, are not filling the financing gap as expected.

¹ IEA World Energy Outlook 2004.

² State Development and Reform Commission, Mid and Long-term Energy Conservation Plan, 2004.

The Bank is implementing the First and Second China Energy Conservation Projects, to support small and medium sized commercial energy conservation projects by removing financing, technical or policy barriers through the introduction of a performance-based contracting mechanism. These two projects have been implemented successfully and resulted in significant increases of commercial financing to the targeted energy efficiency (EE) projects. The large EE investment financing market, however, is not covered by the projects.

Difficulties in accessing to financing resources for large EE investments, however, remain a major barrier for industrial energy consumers to improve their energy efficiency. To provide sustainable and sizeable flows of finance for China's EE investments, it is clear that the key focus should be placed on local banks. At present, for Chinese banks, Energy efficiency financing represent a relatively small, non-conventional niche business, to some extent, significantly different from the traditional working capital finance or lending for capacity expansion. The absence of suitable mechanisms to address the various risks of large industrial EE projects, as well as the lack of suitable experience in financing such projects, continues to constrain local banks from providing credit in a systematic and large-scale way for large industrial EE projects.

China's banking sector has started to emerge from a decade-long process of reform to a market-based banking system. There is no doubt that many domestic commercial banks are still facing significant challenges. As part of project preparation, the Bank will carry out an assessment of the financial viability of participating banks to determine their compliance with the eligibility criteria under OP8.30. A recent preliminary assessment of some Chinese policy and commercial banks by the Bank team indicates that certain major policy bank as well as certain commercial banks which are listed on stock exchanges may potentially be in compliance with the eligibility criteria under OP8.30. In addition, the Bank started to provide technical assistance to domestic banks for EE financing in 2003 under the Bank implemented "Three Country (Brazil, China and India) EE financing TA"³. After three years of extensive consultation with various domestic banks, it is believed that domestic banks can increase lending to large energy efficiency projects rapidly and substantially with proper support in terms of technical assistance and lines of credit to launch the new lending programs.

Recently, GOC is responding forcefully to China's energy efficiency challenge. In November 2004, it approved its first Medium and Long Term Energy Conservation Plan (up to 2020). In the 11th five year plan for economic and social development recently endorsed by the People's Congress, GOC has pledged to reduce energy intensity to GDP by 20% from 2005 to 2010. As requested by GOC, the proposed project targets a number of the strategic lines highlighted in the Energy Conservation Plan and it will be an important vehicle for GOC to achieve the EE target set of the 11th five year plan. GOC has been engaged in the preliminary project concept development process since late 2004 and will continue to be an integral part the project design and implementation.

³ The multi-year technical assistance project "development of financial intermediation mechanisms for energy efficiency investment in Brazil, China and India", financed by the United Nation Foundation and implemented by the World Bank through ESMAP and the United Nations Environment Program.

The proposed project directly supports a major strategy of the Bank's new Country Partnership Strategy (CPS) for China (2006 – 2010): *managing resource scarcity and environmental challenges (pillar 3)*. It will also echo the Bank's recent efforts of developing a new investment framework to promote clean energy and energy efficiency by exploring effective ways of incorporating carbon finance and GEF technical assistance into the Bank's lending operation in China. In addition, the proposed project would support the World Bank Group corporate commitments to increase renewable energy and energy efficiency lending support to clients at least 20% per year during 2005 – 2010.

The mainstreaming of large-scale EE financing requires a two-pronged approach of demonstration projects at the domestic bank- and enterprise-level complemented by the development of a policy regime at the macro level. The Bank is uniquely positioned to provide GOC with this support given its over two decades' close working relationship with GOC and successful experience in integrating EE financing with GOC's policy agenda, as well as its global energy efficiency financing experience.

2. Proposed objective(s)

The development objective of the proposed project is to improve energy efficiency in medium and large-scale Chinese industries by developing sustainable energy efficiency project lending programs in selected banks to support energy efficiency investments in these industries. The key performance indicators of the project will be energy savings achieved in medium and large scale industries; and associated emission reductions of greenhouse gas and other pollutants. EE project lending increases in participating banks will also be a key output indicator.

3. Preliminary description

The preliminary design of the proposed project was initiated jointly by the GoC and the Bank in 2004. Since then, the concept of the proposed project has been developed gradually based on extensive consultations with major stakeholders and market assessments under the Three Country EE Financing Technical Assistance Project. Five commercial banks and two policy banks have shown strong interests in participating in the project as financial intermediaries and four of them (two commercial and two policy banks) have formally submitted project applications to the GoC.

It is proposed for the project to finance a line of credit to the selected domestic bank(s) with an IBRD loan of US\$ 200 million. Under the project, the selected banks will establish EE lending business with the support of the proposed technical assistance (up to US\$ 15 million including proposed GEF financing), and will utilize their own financial resources in addition to the Bank loan proceeds to increase the impact of the project. The proposed technical assistance may also support additional domestic commercial banks committing to EE financing but not participating in the IBRD on-lending support to further amplify the impact of the proposed project.

Component I – Line of Credit for EE financing

The proposed IBRD loan would be on-lent by the GOC to selected domestic bank(s), which would in turn re-lend these funds, at market rates, to enterprises (regardless of public or private ownership) for medium- and large-sized EE investment sub-projects, according to the lending policies of the bank(s) concerned as well as the operational manual that includes procedures and eligibility criteria to be agreed with the Bank. The domestic banks will be responsible for loan repayment to the GOC and assume all the financial risks.

As some of the EE subprojects may be potentially eligible for carbon credit trading under the Clean Development Mechanism (CDM) scheme of the Kyoto Protocol, opportunities of carbon financing will be explored to enhance EE subprojects' creditworthiness and improve their risk profiles. Approaches for such credit enhancement will be developed during the project preparation stage. These may include: (a) carbon credit payment escrowed as a debt service reserve by the subborrowers; or (b) assignment of carbon credits to the bank(s) concerned as part of the collateral for the bank loans.

Component II – Technical Assistance

Tailored technical assistance (TA) will be provided to the domestic banks for (1) EE lending business start-up; (2) capacity building and training; (3) development of necessary internal mechanisms, procedures, and a knowledge base adequate to evaluate and extend loans to industrial enterprises for energy efficiency projects; (4) lending subproject pipeline development; and (5) loan evaluation and due diligence. TA will also be provided to Chinese energy intensive industries through participating banks to mitigate technical risks of large scaled energy efficiency projects, especially those involving new technologies and/or comprehensive system re-integration.

Finally, technical assistance is proposed for GOC to (a) develop a set of government policy and regulatory vehicles to promote investment into the industrial sector for large energy efficiency projects and (b) strengthen the government capabilities, in the areas of enforcement of related laws, government regulations and standards, and supervision and monitoring of energy efficiency related activities by energy intensive industries.

4. Safeguard policies that might apply

[Guideline: Refer to section 5 of the PCN. Which safeguard policies might apply to the project and in what ways? What actions might be needed during project preparation to assess safeguard issues and prepare to mitigate them?]

The only Safeguard Policy likely to apply is Environmental Assessment (OP 4.01). Since actual sub-projects are not known *a priori* other safeguard policies might be triggered during project implementation. During project preparation, the Task Team would work with the participating banks to develop specific environmental safeguard framework documents (to be incorporated into the Operation Manuals) which would include screening procedures to establish if other safeguards are triggered and the actions necessary to comply with both Chinese environmental requirements and World Bank safeguard policies.

5. Tentative financing

Source:	(\$m.)
BORROWER/RECIPIENT	0
INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT	200
GLOBAL ENVIRONMENT FACILITY	13.5
LOCAL SOURCES OF BORROWING COUNTRY	0
Total	213.5

6. Contact point

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