

ENABLING ASIAN SMEs THE ACCESS 2 FINANCE

FOR ENERGY & RESOURCE EFFICIENCY

A guide for Financial Institutions and Investors

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Introduction

The **ENABLING ASIAN SMEs THE ACCESS 2 FINANCE** (A2F) booklet attempts to present the business case for increased investment and lending in/to small and medium-sized enterprises (SMEs) for the implementation of energy and resource efficient (E&RE) initiatives. Through the presentation of practical indications and the use of best cases, financial institutions¹ will have the possibility to understand the economic and financial advantages of redirecting their activities towards E&RE with the foremost goal of widening the A2F to SMEs.

The following pages attempt to present the other side of the traditional discussion about the common reasons why SMEs do not A2F. The booklet presents some indications to cope with traditional barriers for investing/lending to SMEs. Thus the reader will:

- See SMEs as **low-risk** borrowers/target groups that are less vulnerable to market fluctuations when operational E&RE are implemented in their core business
- Be able to identify sustainability-oriented strategies for diminishing administrative/operational costs making SME financing a profitable business
- Acknowledge best practices developed by Asian financial institutions on A2F for E&RE

The booklet is divided in three sections. Part one depicts the importance of designing and developing strategies that enable the A2F for E&RE. It also outlines the elements that make a business case for financial institutions when enabling the A2F to SMEs. Part two presents overall indications that help financial institutions reformulating their business models towards the foremost goal of fostering E&RE. Basically, it presents and explains customer- and operational-oriented aspects that enable financial institutions to develop the business case in a more tangible way. The third section presents a selection of best practices of financial institutions or institutional programmes developing financial products and services, in order to enable the A2F for E&RE for

¹ In this booklet the following actors form the category of financial institutions: banks, leasing companies, private investors, microcredit institutes, other financial services providers.

Asian SMEs.

The SWITCH-Asia Network Facility hopes that this guide helps Asian and international financial institutions from the private and public sectors realize the importance of redirecting institutional and operational strategies towards A2F for E&RE.

Part One Why A2F to SMEs for E&RE?

SMEs require the support of external agents to mainstream the implementation of E&RE improvements in their businesses. Financial institutions have a relevant role to play here. They can innovate their own operations and develop market-oriented financial products & services that not only meet SMEs' needs, but also make the access to those products & services more available to SMEs.

In general, A2F is a basic requirement for economic efficiency, productivity, and competitiveness in Asian countries. It allows SMEs to carry out their daily operations, acquire or develop upgraded technologies (equipment finance) and undertake productive investments to expand their business (long term finance). In other words, A2F stands for an absence of price and non-price barriers in the use of financial services and products. Price barriers refer to the high costs of accessing to financial instruments, while non-price barriers include rigid criteria for conceding loans, exclusion of certain groups, etc². However, promoting A2F is a goal that can only be achieved, when both, financial institutions and SMEs, establish loyalty-based relationships and optimise their own operational performance.

The market potentials for E&RE are increasingly growing. According to UNEP, investments in energy and resource efficient technologies worldwide have been increased steadily in the last 5 years. For instance they climbed from \$80 billion in 2005 to a record \$100 billion in 2006.

Source: UNEP

² Adapted from World Bank, 2008.

Financial institutions can derive great business opportunities when allocating financial resources to SMEs for E&RE. The most important are:

- **Extending their market niches:** Traditionally, large business and individual customers have represented the market niches for Asian financial institutions. Financial institutions have the opportunity to enrich their portfolio by developing and offering financial products and services that meet SMEs' needs. In order to achieve this goal, the International Finance Corporation (IFC) recommends developing strategies that attempt to gain a better understanding of the SME market. In essence it means the integration of those factors that influence the operation of SMEs (and consequently their availability to meet loan/investment duties) into the business strategies of financial institutions.

For instance, the ability of SMEs to repay a loan is highly dependent on the level of technological upgrade of the SME. Therefore, aspects such as technological trends and operational innovation might be seen by financial institutions as factors to be analyzed when trying to understand the SME market. However, not all SMEs share the same needs or are affected by the same issues. For that reason financial institutions need to segment the market and get major insights of SMEs' needs and strategies in order to reduce the costs linked to their relationship to them. Acquiring knowledge of the specific characteristics of SMEs enables financial institutions develop better product strategies where price and contract terms for loans are more tailored to the reality of the SMEs.

- **Improving image towards community and stakeholders:** Financial institutions that support E&RE innovations in SMEs can increase their reputation among the society. They are considered as drivers for environmental protection, indirect employment generation and consequently social stability.
- **Becoming a benchmark for E&RE solutions:** The sooner the better! Unquestionably, market trends are directed to evolve within the framework of environmental protection. Consequently, designing and developing financial instruments and strategies to target E&RE solutions will now enable financial institutions to gain experience and expertise and reliability and trust among clients in the future.

- **Receiving major national and international institutional support:** Financial institutions involved in E&RE financing have the opportunities to partner and strengthen their corporate relations and networks in- and outside the countries. Nowadays, almost all development finance institutions (DFI) and cooperation agencies from industrialized countries consider industrial sustainable development support as a key priority of their operations. It involves direct support to the real sector, but also intermediary support through local financing systems. Nonetheless, when looking for partnerships, DFIs require mostly that the corporate vision and mission of local financial institutions keep concordance with their own ones.

The business case is clear and attractive. However, there is a long way to go to achieve it. It demands a re-conceptualization of the business and operational strategies of financial institutions. In essence, their business model with regard to the kind of offer (products & services) and the target costumers needs to be more coherent towards E&RE intentions.

The following section presents overall indications to redesign the business models of financial institutions towards E&RE.

Loan Guarantee Fund

The setting up of a “Loan Guarantee Fund (LGF)” for E&RE projects is imperative to spur lending to SMEs for the implementation of E&RE initiatives which are viewed as greenfield investments. The LGF will address the perceived credit and collateral risks hindering access to financing, thus, removing barriers to the widespread use of E&RE in Asian countries.

The support of the Government is essential, specifically in the setting up of an LGF that can be accessed by lenders. Financial Institutions can partner with the Department or Ministry of Energy (DOE) and work with borrowers and project sponsors in satisfying the qualifications of an eligible lender that would apply directly to DOE to access loan guarantee. The DOE, on the other hand, would rely heavily on the project credit analysis and financial structuring work performed by the lender-bank in its decision on whether or not to grant the requested guarantee.

The “Credit Surety Fund” approach is another option where cooperatives/NGOs/Industry Associations set up a surety fund in partnership with the Local Government Unit and development finance institutions in their area to guarantee E&RE loans of individual members.

Part two: Re-orienting the business model towards E&RE

Asian financial institutions face the challenge of developing a compelling value proposition for SME customers while at the same time designing a model that would deliver effectively and profitably. Orienting the business model for the SME market towards E&RE comprised a reformulation of plans, strategies and activities for all key areas, such as human resources & training, performance management, technology requirements, organizational structure, distribution channels, marketing and product & services development. Innovative business models that foster E&RE among SMEs but that make in fact –in the praxis- the A2F practicable, are needed.

Thus, financial institutions that want to commit themselves in orienting their business models towards E&RE need to consider the following aspects:

1. **Acknowledgment possibilities of reducing risks when working with sustainable SMEs:** The critical factor that enables or restrings the offer of financial products & services is the potential risk implied in doing business with SMEs. The principal risk associated with working with SMEs is mainly their incapacity of meeting the financial institution's expectations (e.g. loan pay-back, creating shareholder value).

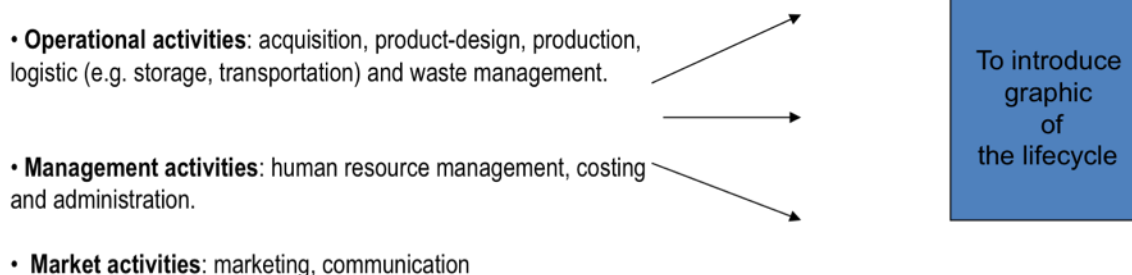
Risks related to unsustainable industrial behaviours can be due to different reasons such as: Inappropriate management systems (e.g. unmotivated employees), inappropriate operational systems (e.g. high-polluting technologies and procedures), inappropriate market strategies (e.g. selection of inefficient commercialization channels), lack of internal and external financial leverage to run the business.

Due to lack of information and proper communication channels, financial institutions are not able to understand and recognize the business potentials of sustainable-oriented SMEs and risk becomes a sensible factor. By solving this hurdle, financial institution can embrace the opportunity to improve their risk management systems and consequently enable the A2F for E&RE purposes. Before coming to the business strategies, it is

important to understand the scope of sustainable-oriented SMEs, but more important their contribution to reduce financial risk. Two issues confirm this argument:

- They are enterprises that carry out sustainable innovations at the operational, management, and market level, by considering every stage of the life cycle of the products & services. They are constantly innovating, increasing their productivity and efficiency³.

Sustainable SMEs are enterprises that integrate long-term strategies in their core business to cause internal and external ecologic, economic, and social positive impacts.



- Since SMEs are essential components of national and cross-border supply chains, they can affect positively or negatively the operational and financial performance of other companies through their operations. Lending or investing in large companies does not guarantee financial success itself, if they have to assume the risk of partnering with non-efficient suppliers or commercial partners.

³ See Accessing 2 Finance (other side of this booklet)

Think about.....

Two SMEs approach separately your institution expecting to close up a business deal with you (e.g. apply for a loan, present an investment proposal, etc.).

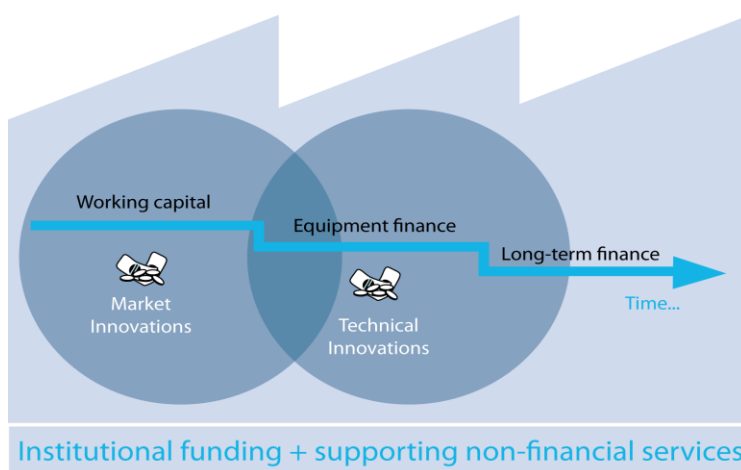
Case A: The financial performance of a SME is not outstanding enough because of several reasons. For instance its products are not innovative enough to be successful in the market meaning a decrease of its turnover, and/or its operational costs are very high, etc. In order to counteract this trend, the SME has redesigned its business strategies (at the operational, market and management level) towards sustainability parameters. According the projections, the business reorientation may assure the enhancement of their financial performance. Nonetheless, they lack the financial resources for the implementation of the new strategies.

Case B: Another SME, operating unsustainably presents stable and “good-looking” financial statements expecting to close up a business with you.

Question: How do you assess the fact of doing business with the SME of case A and case B for the short (1 year)-, middle (1 to 3th year)-, and long term (from the 3th year on)?; How would you assess the situation in the case that the SME of case A is one supplier of the SME of case B? How would you assess the business if both SMEs come to your office with a joint-strategic proposal?

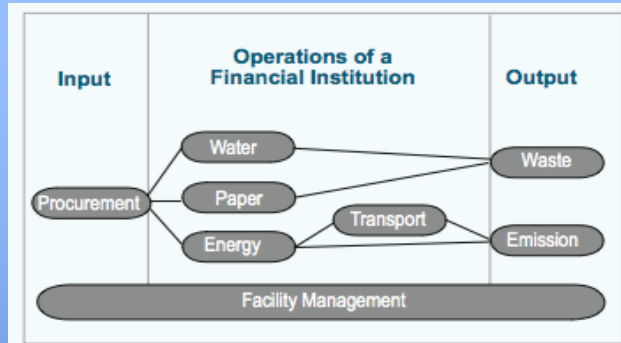
SMEs often face constrains when accessing financial resources in order to meet their needs for further implementing E&RE. The following graphic summarizes those needs. In section X of the booklet ACCESSING 2 FINANCE you will understand them deeply.

Financial needs of SMEs



2. **Search for sustainability-oriented strategies to mitigate business risks:** In order to improve risk management systems related to un-sustainability issues, financial institutions can conceptualize and develop benchmarking, operational performance and feasibility checking strategies and actions:
- a. **Benchmark:** Compare and analyse the methods, processes, strategies, and approaches of “best in class” local, regional, and international financial institutions. Basically, pay attention to the following steps:
 - Start *identifying own gaps for E&RE involvement*: before analysing what other financial institutions do in/for the field of A2F for E&RE, carry out an internal exploratory research to question why your financial institution is not involved in it: is it because it is not contemplated in the business philosophy of the organization? Is it reflected in its mission and vision? Or maybe there is a matter of lack of knowledge, resources, or methods for the implementation? To rise up these information internal consultative activities with the different departments members are necessary.
 - *Identify leading financial institutions* that share similar characteristics as yours but which focus on E&RE support.
 - *Analyse the way in which the leading organisations in the branch* are innovating their methods, processes, strategies and approaches and consequently performing. It could be possible to get such information through exploratory research methods, such as surveys, interviews, and market observation.

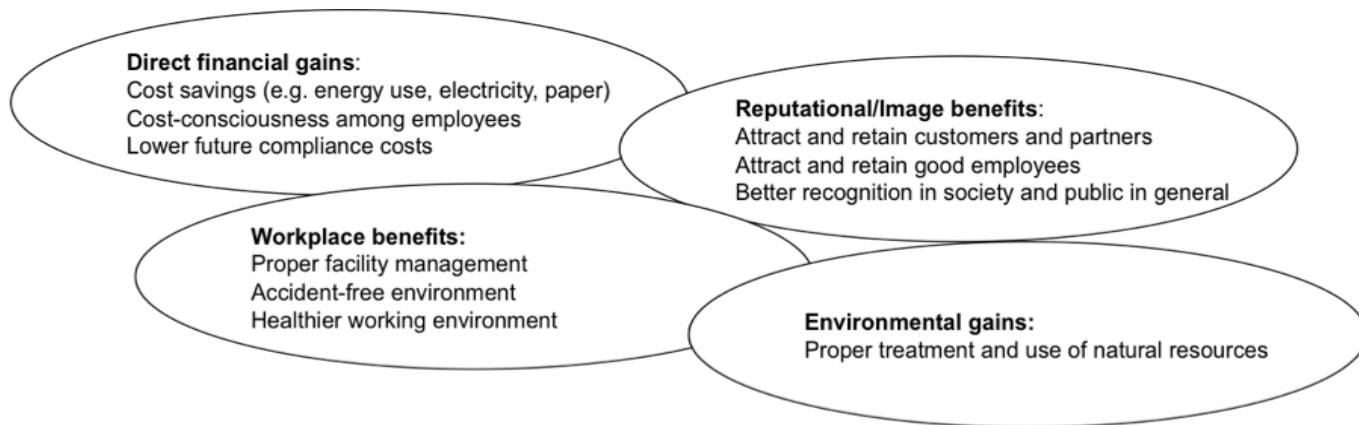
How to implement an environmental management strategy in the financial institution?



1. Set up a team
2. Define a global policy for facilitating management for water, energy, transport needs, material acquisition and responsible waste management
3. Identify needs and requirements to implement the strategy
4. Implement the strategies starting by defining tasks and responsibilities
5. Establish an internal communication strategy for application and dissemination
6. Monitor and evaluate the implemented of the activities

Source: adapted from ADFIAP & CSCP (2006)

- *Develop a E&RE-oriented strategy:* here you can establish parameters for internal operational action, development of risk management mechanisms, development of E&RE-oriented financial products & services and customer relationship measures (see following topics).
- b. **Improvement of internal operational performance (E&RE)** to reduce operational and transactional costs. Developing a systematic approach to the environmental management of your internal business activities can bring vast business benefits. These tangible and intangible gains can be summarized as follows:



c. **Development of instruments to prove the feasibility of the project proposals**

- Cash flow-based lending or risk-based lending seeks to equip financial institutions in effectively determining the feasibility of project proposals. The capacity of the proposed business to generate income is the primary deciding factor for loan approval rather than the availability of collaterals which do not give the assurance of loan repayment.
- Subject the project to the four tests for feasibility: (1) Operational feasibility which measures the implementability of the project, how well it will work, and its acceptability in the market; (2) Technical feasibility which measures the practicality of the technical aspect and the availability of technical resources and expertise; (3) Schedule feasibility which measures how reasonable the project timetable is; and (4) Economic feasibility which measures the cost-effectiveness and cost-benefit of the project using analysis instruments such as Net Present Value, Return on Investment, Break-Even Analysis, and Payback Analysis.
- Business cluster development where like-minded groups of businesses and organizations with common business objectives work collaboratively to promote the growth of their sector. Clusters can include businesses with complementary capability or businesses involved in the same supply/value chain with common suppliers and distributors and can

include related organizations that support these businesses such as industry associations and knowledge providers. The presence of support infrastructure ensures project feasibility and viability.

- Business incubation which focuses on the creation of E&RE businesses through the provision of training, seed capital, technical support, equipment and material procurement, and aid in business planning to ensure project sustainability.

Thus, it can be claimed that financial institutions, which have recognized the feasibility and the economic advantages of E&RE business case, will be able to develop successful loan, investment, coverage, and other financial strategies aim at developing:

- a) Financial products & services for SMEs that contribute to meet their needs for E&RE: The following table offers a quick overview of the contribution of financial products & services to undertake E&RE initiatives. It will help financial institutions have a better picture of SMEs need, in order to identify better financial strategies to address them.

		Financial instruments										
		Debt financing			Equity financing			Tailored financial instruments for E&RE			Other financial instruments	
		Commercial loans	Concessional loans	Micro credit	Private equity	Venture capital	Mezzanine finance	ESCOs	Carbon Finance (CDM)	Banking windows	Leasing	Factoring
Specific contributions to increase E&RE	Working capital (short-term)											
	Purchase of sustainable raw materials needed for the production process	X	X	X								X
	Acquisition of low- energy and resource consuming office appliances	x	x	x							x	x
	Allocation of resources for capacity building (e.g. workshops, training, conferences and seminars about design and implementing of E&RE)		x									
	Equipment finance (middle-term)											
	Development or acquisition of more efficient machinery	x	x		x	x	x	x	x	x	x	
	Rent of more efficient machinery										x	
	Maintenance of existing machinery	x	x				x	x	x	x		
	Investment finance (long-term)											
	Construction and expansion of facilities	x	x		x	x	x	x	?	x		
Maintenance of facilities	x	x		x	x	x	x	x	x			

- b) **Customer-oriented strategies** that enable FIs to outreach more SMEs: FIs have to engage deeper in order to develop better customer relationship management strategies to support SMEs business activities where the loan is applied. Likewise, monitoring strategies to accompany and react effectively to unexpected business or market flaws can help SMEs to make the best out of the loan and of course, this implies a better credit risk management for the FIs.
- c) Energy efficiency **banking windows** are bank programs that are specialized in offering energy efficiency loans and reaching out to potential customers for those loans. These programs are meant to reduce transaction costs for both the customer and bank, so that offering the loan becomes less risky. Typically, staffs working for financial institutions are trained to evaluate and understand E&RE project risks. Then, specific E&RE loan products

may be developed and outreach programs for particular industry segments may be implemented.

- d) **Information and knowledge management:** Of course improving the information and communication technologies and systems in financial institution can be traduced in opportunities: financial institutions can reduce operational costs and increase the grade of understanding of SME clients. It contributes to increasing the effectiveness of risk management systems and therefore make easier lending processes.

Good Practices Overview

Good Practices Overview											
COUNTRIES		Asia Region	Afghanistan	China	India	Indonesia	Malaysia	Mongolia	Pakistan	Philippines	Thailand
Debt Financing	Commercial Loans									Development Bank of the Philippines	
	Concessional/Soft Loans										Energy Efficiency Revolving Fund Thailand
	Micro-credit							XacBank: Eco Products Program			
Equity Financing	Private Equity				Global/ Asia Clean Energy Services Fund	Global/ Asia Clean Energy Services Fund				Global/ Asia Clean Energy Services Fund	Global/ Asia Clean Energy Services Fund
	Venture Capital					(Indonesia) Standard Chartered Bank					

	Mezzanine Capital	E+Co									
Financial Services	ESCOs			(China) Beijing PowerU Technology Co. Ltd.							
	Leasing		Afghan Growth Finance LLC								
	Carbon-Finance				Industrial Development Bank of India						
	Factoring								(Pakistan) Small and Medium Enterprises Development Authority		
	Banking Window						SME Bank Malaysia				

Institutional Funding	Grant							SME Corporation Malaysia: Matching Grant for Product and Process Improvement				
	Tax Incentives							Pioneer Status, Investment Tax Allowance and Tax Exemption Malaysia				
	Loan Guarantee							Mongolian National Chamber of Commerce and Industry: Green Credit Guarantee Fund				

Non Financial Services	Networking Facilities				(India) CoSMiLE: Competence Network for Small and Micro Learning Enterprises						
	Consultation and Advisory Services			(China) CECIC Blue-Sky Investment Consulting & Management Co., Ltd.							
	Award					Indonesian Environmental Impact Management Agency: Cleaner Production Award					

I. DEBT FINANCING

1.1 Commercial loans

PHILIPPINES

Development Bank of the Philippines



The Development Bank of the Philippines is a state bank its primary objective is to provide banking services principally to cater to the medium- and long-term needs of agricultural and industrial enterprises with emphasis on SMEs. The bank is **committed to environmental protection and sustainable development**. The loan instrument targets basically financial needs of SMEs to acquire E&RE-oriented equipment.

The Industrial Pollution Control Loan Project II is a policy-based **lending program, which focuses on** supporting SMEs regarding investment in efficient production and environmentally sound technologies and occupational health and safety issues. Eligible projects for loan funding are **investments in pollution reduction and the reduction of raw material inputs** for production to cover waste minimization and clean technology in industrial processes. Additionally, investments in equipment to monitor emissions or effluents, and the installation of cost-effective end-of-pretreatment facilities and other waste disposal options are also considered qualify projects for funding under the Industrial Pollution Control Loan Project.

Key literature

- The Bank Negara Malaysia and the Association of Banks in Malaysia. Small and Medium Enterprises- Your loan application and financing needs. Online available in: www.bankinginfo.com.my/_system/media/.../sme_loans.pdf

- International Finance Corporation-World Bank. (2009). The SME Banking Knowledge Guide. Pages 25 to 54. Online available: www.ifc.org/.../SMEBankingGuidebook/.../SMEBankingGuide2009.pdf
- European Commission. (2000). Third roundtable of bankers and SMEs (Final report/European case). Online available in: ec.europa.eu/enterprise/policies/finance/files/rt3_en.pdf

Internet sources:

- *Development Bank of the Philippines: Industrial Pollution Control Loan Project II*
http://www.devbankphil.com.ph/sme/sme_lending.php

Further Good Practices:

- **Bank Negara Malaysia:** The SME Modernisation Facility. Online available: <http://www.bnm.gov.my/index.php?ch=8&pg=14&ac=1659>
- **The Export-Import Bank of Korea (South Korea):** Green Finance . Online available: http://www.koreaexim.go.kr/en2/02_export/06_greenFN/01.jsp
- **The State Bank of Pakistan:** Long Term Financing Facility (LTFF) for Imported and Locally Manufactured Plant & Machinery. Online available: www.sbp.org.pk/incentives/ltf-eop/list-PFIs-LTFF.pdf
- **Industrial Development Bank of India** under the Project Finance scheme provides finance for Greenfield projects. Online available at: http://www.idbi.com/idbi/corporate_banking.asp
- **Industrial Bank Co. LTD of China** is a nationwide joint-stock commercial bank, which has formulated an Environmental and Social Risk Management Policy in order to fully integrate the concepts of environment and sustainability into the bank's systems and measures to further enhance and contribute to the effectiveness of sustainable finance in China. Online available at: http://www.cib.com.cn/netbank/en/About_IB/
- **Clean Energy Development Bank Ltd. (Nepal):** has been promoted as an only specialized bank with a primary focus in the development of clean energy and hydropower

sector in Nepal. Besides debt financing, the Bank also offers assistance to the clean energy and hydropower projects by way of private equity and advisory and consulting services. Online at: <http://www.cedbl.com/>

- **YES BANK (India):** operates in a so-called 'Sustainability Zone' where wider economic, environmental, and social objectives are met by supporting new emerging businesses that not only promote financial growth but also enhance social and environmental causes. To this end, the Bank has established a dedicated **Sustainable investment banking** business that addresses the need for specialist investment advisory in sustainable ventures such as Social, Alternative Energy and Environment.
- **Small Industries Development Bank of India (SIDBI)** and Bureau of Energy Efficiency (BEE) as the co-implementing agencies are currently preparing a World Bank funded project titled **Financing Energy Efficiency for micro, small and medium size enterprises (MSMEs)**. The project will be supported by a grant from the Global Environment Facility (GEF). The proposed project will facilitate energy efficiency improvement through capacity building in MSME clusters and provision of grant support for preparing investment grade proposals for energy efficiency improvements. Further information available online at: <http://www.sidbi.com/energysaving.asp>
- **Bank of Baroda** established a Scheme for Financing Energy Efficiency Projects⁴ for SMEs focusing on acquisition of equipments, services, and adopting measures for enhancement of energy efficiency/conservation of energy. Generally, the bank will take up to 75% of the total project cost, subject to maximum of Rs. 1/- crore (minimum amount of loan Rs. 5/- Lakhs), which might include: cost of alterations to existing machinery; cost of structural / layout changes; cost of energy audit/consultancy; cost of acquisition/modification/renovation of equipment/software. Online at: <http://www.bankofbaroda.co.in/bbs/financeenergy.asp>

⁴ Further information on how to finance energy efficiency projects and on which projects have been already undertaken was not provided online.

1.2 Concessional/ Soft Loans

THAILAND

Energy Efficiency Revolving Fund Thailand



The Energy Efficiency Revolving Fund was launched in 2003 by the Government of Thailand, represented by the Department of Alternative Energy Development and Efficiency (Ministry of Energy). The fund aims at **stimulating financial sector involvement in energy efficiency projects with minimal government intervention**. Since its inception, the Fund has successfully completed three phases funding 242 projects, which have predominantly been **private factories and, to a lesser extent, buildings, such as hospitals and hotels**. At present, the Ministry of Energy is implementing the 4th Project Phase in 2009-2012.

The Energy Efficiency Revolving Fund is funded by the Energy Conservation Promotion Fund (ENCON Fund), which receives revenue from a tax on all petroleum products sold in Thailand. From these funds, the participating banks are provided with credit lines at 0.5% interest to cover administrative costs. Banks then provide **low-cost loans for energy efficiency projects of up to a maximum of USD 1.25 million, at an interest rate below market rates of no more than 4% per year**. The interest rate covers bank administrative expenses, some of the risk associated with the loans, and a small profit for the banks. Banks are free to provide loans at a lower interest rate, and in practice, some of the banks provided loans at interest rates as low as 2.7 percent for existing customers with strong credit. Loans are to be repaid within 7 years.

Any project is eligible for funding as long as it meets the definition of an “energy conservation project” under the ENCON Act. These include **projects improving the combustion of fossil fuels, preventing energy loss, recycling waste, substituting a more efficient energy type for a less efficient one, improving electricity efficiency, and installing energy efficient machinery or equipment, including operations control systems**. The process for getting a

loan from the Revolving Fund involves six stages. First, a project opportunity has to be identified within the company. Second, a detailed feasibility study of the project has to be conducted by the company and the loan application is prepared. The bank then performs a financial analysis of the loan application and the Department of Alternative Energy Development and Efficiency technically evaluates and eventually approves the project. Fourth, the loan is approved by the bank and disbursed. Finally, the company may then implement its project. After seven years loan repayment has to be completed.

Internet sources:

- *Department of Alternative Energy Development and Efficiency (Thailand)*
[<http://www.dede.go.th/dede/index>]

Further Good Practices:

- **Malaysian Industrial Development Finance Bhd. (Malaysia)** online available at:
<http://www.midf.com.my/main>. Energy Efficiency Loan Financing Scheme available at:
<http://www.ptm.org.my/mieeip/finance.html>
- **Bank of India (India):** Scheme of Financing for Energy Efficiency Project
<http://www.bankofindia.com/energy.aspx>

1.3 Micro-credit

MONGOLIA

(XacBank): Eco Products Program



XacBank, founded in 1998, is the fourth largest bank in Mongolia providing inclusive and innovative financial products and services throughout the country with a nation-wide network of 77 branches.

In September 2009, XacBank launched its Eco Products Program offering low-interest loans for energy products to very small enterprises in Mongolia. As an additional note, XacBank provided **start-up loans to local producers** to increase production of both the stove and the get cover.

XacBank funds its loans in a highly innovative manner. Being a field partner of www.kiva.org, an international platform that combines microfinance with the Internet, XacBank approves and disburses a microloan to an entrepreneur in its community. Then, the loan applicant's profile and picture are uploaded to www.kiva.org. **International Internet users may then lend money to the entrepreneur of their choice** via PayPal or credit card and Kiva provides those aggregate funds of all contributing lenders to the microfinance institution. As the lender repays his loan, international lenders are repaid. To the entrepreneur, the average fees and interest rates ("portfolio yield"⁵) paid to XacBank amount to 25% of the loan value.

The bank's ability to supply energy products to the poorest market segment is based on two financial innovations and partnerships. The first partnership is with FMO, a Dutch Development Bank, which signed a loan facility agreement allows the bank to pass the lower interest rate that it pays to FMO on to its clients (approx. 17% compared to market rates of 26-30%).

The bank's second partnership is with Micro Energy Credits (MEC), an international carbon aggregator. MEC allows microfinance institutions to access carbon revenues by providing certification and aggregating credits from different MFIs around the world to bundle and sell to carbon brokerage firms. Xacbank **uses the carbon revenues to pay for product marketing on behalf of its eco micro-businesses**, cover program costs, sustain below market interest rates for eco products, and expand into new eco sectors.

Internet sources:

- XacBank: Kiva.org Field Partner. Online available: <http://www.kiva.org/partners/116> - <http://www.xacbank.mn/en/19/small-business/loans>

⁵ all interest rates and fees paid by entrepreneurs to the field partner divided by the average portfolio outstanding during any given year

Further Good Practices:

- **Grameen Shakti (Bangladesh):** Biogas Plant Program. Online available: <http://www.gshakti.org/>
- **Amret Bank (Cambodia):** Energy Loan. Online available: <http://www.amret.com.kh/businessloan.aspx>
- **YES BANK: microfinance** → is committed to creating equal financial opportunities and enabling financial inclusion. The Bank provides term lending and direct lending, a two-pronged solution to provide easy access to suitable financial products and services to un-Banked/under-Banked, low-income communities across urban and rural India. http://www.yesbank.in/responsible_banking.htm
- **Mandiri Bank: Small and Micro Business** provides a vast financing array of services, which suit micro, small, and medium business needs. Credit facilities that Bank Mandiri offers include Investment Loans, Working Capital Loans, Business Loans, and Multipurpose Loans. **Loan for Food Sustainability Program and Energy (KKP-E):** is an investment loan and/or working capital loan provided to farmers, breeders, fishermen and fish cultivators groups in order finance the intensification of rice, corn, soy, cassava and sweet potato, peanut and/or sorghum, development of cultivation of sugar plants, cattle breeders, local chicken and duck, fishery business and fish cultivation, and to cooperatives in procuring foodstuffs such as rice husks, corn and soy. Online at: <http://www.bankmandiri.co.id/english/article/265805761509.asp>

II. Equity finance

2.1 Private equity

Global/ Asia Clean Energy Services Fund (FE Clean Energy Group, Inc.)



FE Clean Energy Group, Inc

The FE Clean Energy Group, Inc. is a private equity investment firm founded in 2002 with headquarters in the United States of America. The firm **specializes in investing in privately held companies in select countries in Asia** (China, India, Thailand, Philippines) that deliver energy efficiency, emissions reduction, renewable energy and reliable power services to the industrial, commercial and public sectors. Furthermore, the firm **invests in opportunities to replace outdated machinery with newer, more efficient technologies**. FE Clean Energy Group, Inc. generates carbon credits from the GHG emission reductions generated by its investments.

Mainly, the FE Clean Energy Group, Inc. manages the Global/ Asia Clean Energy Services Fund that **invests in energy efficiency and renewable energy initiatives in predominantly small and medium-sized enterprises**. Its forms of investments comprise **direct equity infusions in ESCOs, joint ventures with ESCOs and direct financing of energy efficiency and renewable energy projects** where the involvement of ESCOs is not required.

FE Clean Energy Group, Inc. has made various investments in Asian markets. One of its portfolio companies is ELPRO, an energy service company based in Bangalore (India). **ELPRO specializes in energy efficient municipal lighting and performs all ESCO services** from energy audits through energy financing to consultancy and research and development. FE Clean Energy Group's investment in ELPRO helped finance its ETRACS lighting technology in Bangalore. Until now, the ELPRO system has saved energy of up to 45 per cent over the last years in its Bangalore installations.

Internet sources:

- FE Clean Energy Group, Inc. (USA) <http://www.fecleanenergy.com/>
- ELPRO Energy (India) <http://www.elproenergy.com>

Further Good Practices:

- **BTS Investment Advisory (Switzerland):** BTS India Private Equity Fund. Online available: <http://www.btsadvisors.com/btsindia.htm>
- **Azure International Technology & Development Limited (China).** Online available: <http://www.azure-international.com/>
- **National Venture Capital LLC (Mongolia).** Online available: <http://www.nvcmongolia.com>
- **YES BANK:** Private Equity →As India fast becomes the most favored emerging market for foreign investments, the economic, political and regulatory climate for private equity investors has become encouraging. YES BANK actively engages in making conscious efforts of promoting sunrise sectors with high growth potential. Online at : http://www.yesbank.in/responsible_banking.htm

2.2 Venture capital

INDONESIA

Standard Chartered Bank



Standard Chartered is helping to finance a shift to the low-carbon economy. They have committed to take a lead role in the financing of new renewable energy and clean technology projects and companies globally, focusing on Asia, Africa and the Middle East with a total project value of \$8–10 billion over the five-year period from 2007–2012. The Wholesale Banking environmental finance business specifically focuses on clean and renewable energy, water and energy efficiency, as well as carbon trading. And they are working with their peers and other stakeholders in the financial services sector to encourage their greater engagement in responding to climate change.

The Standard Chartered Bank integrates sustainability in risk management and provides the financing to make vital investments. The Bank offers a diversified type of loans and mortgages - for helping SMEs in implementing energy and resource efficiency projects:

- **Long-term loans** to help finance owner-occupied and investment property purchases for residential or commercial use.
- **BusinessPower:** by combining a loan with an overdraft facility, BusinessPower provides working capital and helps support long-term financial needs.
- **Business Installment Loans:** boost long-term working capitals and help finance business purchases, the Standard Chartered also provides an unsecured term loan repayable in equal monthly installments (EMIs) over a fixed number of months.

Internet sources:

- *Standard Chartered Bank online available at:*
<http://www.standardchartered.com/sustainability/sustainable-finance/background/en/index.html>

2.3 Mezzanine Capital

E+Co



E+Co's business development support and investment capital serve to create energy businesses that mitigate climate change and reduce poverty while generating financial returns. **E+Co does not provide grants, but rather** invests seed and growth capital to **implement and expand sustainable** renewable energy businesses in **Africa, Asia and Latin America**. The **E+Co** investment process is rigorous. Energy businesses that have submitted a business proposal

and have received development services will be considered for a debt or equity investment if they meet our investment criteria:

- The business idea must be well defined and involve capable local in-country people.
- The business idea should employ approaches to energy production, and reliable technologies that move communities up the energy ladder.
- The business idea must offer clear social and environmental benefits, while being competitive.
- The business idea must have the potential to be economically self-sufficient and offer growth potential.

Internet sources:

- *E+Co information available at: <http://eandco.net>*

Further Good Practices:

- **Japanese Bank for International Cooperation (JBIC)** JBIC is active in supporting the projects contributing to environmental conservation and improvement as well as those helping to preserve the global environment by reducing greenhouse gas emissions. JBIC provides advice for Japanese firms, foreign governments and others with respect to utilization of the Kyoto Protocol, including innovative financing for improving project revenues and reducing borrowing costs by using carbon, and on the investment climate in host countries. JBIC offers a wide range of financial products and other services to its clients: export/import loans; overseas investment loans; united loans; equity participation; guarantees etc. Further information available online at: <http://www.jbic.go.jp/en/about/environment/index.html>

III. Financial Services

3.1 Energy Service Companies

CHINA

Beijing PowerU Technology Co. Ltd.



Beijing PowerU Technology Co. Ltd. (“PowerU”) is a joint venture established with financial funding from Siemens Venture Capital GmbH and the China Environment Fund in 2002. Among others, the Asian Development Bank is a main investor in the company. PowerU holds a unique position among energy services companies in China, as it is the first ESCO funded by a private equity fund, Tsinghua Venture.

PowerU is an energy service company (referred to as “energy management corporation” in China) and supplier of technology in the field of chilled water storage for central air-conditioning systems. Its main customers are large-scale air-conditioned buildings like hospitals, airports, hotels or factories. Apart from providing high-tech solutions to its customers, the company works with performance contracts to finance energy efficiency improvements.



For LG in Changsa Province, PowerU reconstructed LG’s air-conditioning system on an area of 40.000 m² by newly constructing a 12.000 m³ chilled water tank which helped its customer save RMB 4.6 million annually (~ USD 700.000).



Wuhan Zhongshang Plaza is a large commercial building providing services such as commerce, trade, leisure and entertainment. Its air conditioning system covers an area of 30,000m² and its machinery room is equipped with 4 500RT centrifuging chilled water sets. For this building PowerU transformed the cellar and deserted parking lot space into a chilled water tank. After the construction, the chilled water storage amount reaches 11, 6million Kcal which brings a considerable economic benefit by shifting 352, 000 KWh of electricity from peak hours and thus saving an electric bill of 600,000 Yuan.

Internet sources:

- *Beijing PowerU Technology Co. Ltd. (China)* <http://www.poweru.cn/enindex.htm>

Further Good Practices:

- **Korea Energy Management Corporation (South Korea).** Available online at: http://www.kemco.or.kr/new_eng/pg01/pg01050000.asp
- **Asian Electronics Ltd. (India)** <http://www.aelgroup.com/>
- **IREDA Indian Renewable Energy Development Agency (India):** was established in 1987, as a Public Limited Company under the Companies Act of 1956, for promoting, developing and extending financial assistance for renewable energy and energy efficiency/conservation projects. It works under the administrative control of the Ministry of New and Renewable Energy (MNRE). IREDA is registered as Non-Banking Financial Company (NFBC) with Reserve Bank of India (RBI). It has also been notified as a “Public Financial Institution” under section 4 ‘A’ of the Companies Act, 1956. Online at: <http://www.ireda.gov.in>

3.2 Leasing

AFGHANISTAN

Afghan Growth Finance LLC:



Established in September 2007 by Small Enterprise Assistance Funds (SEAF), Afghan Growth Finance (AGF) is a investment fund seeking to provide long-term capital to SMEs throughout Afghanistan. AGF works closely with SMEs to structure financing options that enable them to grow and maximum profits. By working closely as a partner to the SMEs, AGF enables innovative and growth oriented companies to realize operational efficiency and increase value. Investments are made in growth-oriented companies operating in key sectors with strong emphasis on agribusiness and processed agro-industry, manufacturing, transport, storage, services and technology. The objective of SEAF-AGF is to work with local entrepreneurs and change-driven companies that are utilizing inputs available in Afghanistan and adding value through innovation and use of new technologies. AGF targets businesses that have been shut out of the commercial banking system and require more capital than what is offered by the microfinance institutions and donor programs. AGF is a full service financial partner helping SMEs realize their entrepreneurial potential.

Internet sources:

- *Afghan Growth Finance (AGF) information available at:*
<http://afghangrowthfinance.com/about-us/default.asp>

Further Good Practices:

- **Maldives Finance Leasing Company Private Limited (Maldives)** information available at: <http://www.mflc.org.mv/>

3.3 Carbon Finance

INDIA

Industrial Development Bank of India



IDBI Bank has been actively engaged in providing a major thrust to financing of SMEs. With a view to improving the credit delivery mechanism and shorten the Turn Around Time (TAT), IDBI Bank has developed a special business model to serve the SMEs in India. The Bank has set up 24 City SME Centers (CSCs) across India. These CSCs are the Bank's hubs while dedicated SME desks have been set up in several branches across these cities. These branches serve as front offices for sales delivery and customer service. IDBI has assisted many companies in India and have strong relationships with the companies in Textiles, Sugar, Power/Energy, Chemicals, Fertilizers, Pharmaceuticals, Steel, Paper, Cement, and other sectors. The following are some examples of medium and large-scale projects that IDBI has undertaken:

Besides offering various banking services, IDBI has also set up a dedicated **Carbon Credit desk**, which provides all the services in the area of **Clean Development Mechanism/Carbon Credit (CDM)**. In order to achieve this objective, IDBI has entered into formal arrangements with multi-lateral agencies and buyers of carbon credits like Germany. Their primary objective is to protect long-term interests of their clients and suggest various risk mitigation measures. By combining the experience and expertise of these agencies and in-house strength of IDBI, they are in a position to offer a complete range of CDM related services.

Internet sources:

- *Industrial Development Bank of India. Online available at:*
http://www.idbi.com/idbi/corporate_banking.asp

Further Good Practices:

- **Asian Development Bank: Future Carbon Fund.** Further information available at: <http://www.adb.org/Climate-Change/future-carbon.asp>
- **E+Co's carbon finance** program targets carbon finance investment opportunities that reduce greenhouse gas emissions while transforming lives and livelihoods at the local level. E+Carbon identifies high impact projects, works with local enterprises to adhere to necessary data collection requirements, drafts all necessary carbon documentation, and ushers projects through rigorous third party approval procedures governed by the Gold Standard, Voluntary Carbon Standard and the UNFCCC's Clean Development Mechanism. Online at: <http://eandco.net/approach/carbon-finance/>

3.4 Factoring

PAKISTAN

Small and Medium Enterprises Development Authority (SMEDA)



The main goal of SMEDA is to function as the promoter and facilitator of SME sector in Pakistan by creating a conducive and facilitating environment as well as providing and facilitating service delivery to SMEs for enhancing their capacities and competitiveness.

SMEDA main objectives are the following:

- Formulate policy to encourage the growth of SMEs in the country and to advise the government on fiscal and monetary issues related to SMEs.
- Facilitation of business development Services to SMEs.
- Facilitate the development and strengthening of SME representative bodies associations/chambers.
- Set up and manage a service provider's database including machinery and supplier for

SMEs.

- Conducting sector studies and analysis for sector development strategies.
- Facilitation of SMEs in securing financing.
- Strengthening of SMEs by conducting and facilitating seminars, workshops and training programs.
- Donor assistances for SME development of SMEs through programs and projects.
- Assist SMEs in getting international certifications (such as UL, CE, DIN, JIS, ASME, KS, etc.) for their products and processes.
- Identification of service opportunities on the basis of supply/demand gap.

Internet sources:

- SMEDA. Information available at: http://www.smeda.org/SMEDA-introduction_1.html

Further Good Practices:

- **Korea Energy Management Corporation** implements various projects aimed at rationalizing energy use. These projects ranges from creating an energy use culture, enhancing energy use efficiency to developing and supplying technologies for new renewable energies as future energy sources. KEMCO offers a vast array of services: supply support projects; ESCO; help with funds and taxations; technology development project; foundation forming project; energy saving technology cooperation (ESP); voluntary agreement; efficiency management system; consulting business ect. Online at http://www.kemco.or.kr/new_eng/pg01/pg01050000.asp

3.5 Banking Window

MALAYSIA

SME Bank Malaysia



The ability of the bank to offer “One Stop Centre Experience” to its customers where all the bank’s staff at all business levels have the ability to provide the information on:

- Bank’s products and services package and its client charter
- Products and services related to SMEs offered by government agencies and any other SME lending institutions
- Brief on economic and industry reports, corporate business plan and also related BNM guidance & circulars
- Related initiatives with Bank’s strategic partners/providers

Any customer that comes to the Bank for assistance will receive responses not only on the bank’s products and services but also information pertaining to assistance from the other SME lending institutions or government agencies. In addition, while providing ‘value added advisory services’ to the customers along the relationship tenure, the Bank’s staff will be able to further assist the clients to tap any matching grant or technical assistance available, or any developmental programs funded by the government allotted to the other agencies.

Internet sources:

- *SME Malaysia Bank information available online at:*
<http://www.smebank.com.my/web/guest/home>

Further Good Practices:

- Developed for Union Bank of India, Bank of India, Bank of Baroda, Canara Bank and State Bank of India under UNEP’s “Three Country Energy Efficiency Project”

IV. Institutional Funding

4.1 Grant

MALAYSIA

SME Corporation Malaysia: Matching Grant for Product and Process Improvement



The SME Corporation Malaysia was installed as successor of the Small and Medium Industries Development Corporation (SMIDEC) under the Ministry of International Trade and Industry in September 2009. The new agency assumed the role as a one-stop referral point for SMEs. The “matching grant for product and process improvement” had been offered by SMIDEC before and is continued by SME Corp.

The objective of the scheme is to provide **grant to SMEs for improvement and upgrading of existing products, products design, and processes**. Eligible for funding are Malaysian manufacturing companies or companies providing manufacturing related services with a maximum annual sales turnover of RM25 million (~ USD 7.8 million as of April 18th) or 150 full-time employees and service companies with an annual sales turnover of no more than RM5 million (~ USD 1.5 million as of April 18th) or 50 full-time employees.

Assistance is given in the form of a matching grant where **50% of approved project cost is borne by the Government and the remainder by the applicant**. The maximum grant allocated per application is RM 500,000 (~ USD 150,000.00 as of April 18th). The matching grant covers expenses for feasibility studies, product testing, purchase of machinery and cleaner production and waste treatment projects including energy efficiency audits.

Internet sources:

- SME Corporation Malaysia. <http://www.smecorp.gov.my>
- Malaysian Industrial Development Authority (2007): *Government Grants and Financing / Credit Facilities*.

Further Good Practices:

- **Infrastructure Development Company Ltd. (Bangladesh):** Solar Energy Program
<http://www.idcol.org/energyProject.php>
- **Ministry of Micro, Small and Medium Enterprises (India):** Scheme for Enhancing Productivity and Competitiveness of Khadi Industry and Artisans
http://www.msme.gov.in/msme_kvicscheme.htm

4.2 Tax Incentives

MALAYSIA

Pioneer Status, Investment Tax Allowance and Tax Exemption Malaysia



The Government of Malaysia offers tax incentives for energy conservation, energy efficiency, and renewable energy efficiency investments under the Promotion of Investments Act 1986. There are three incentives companies can be considered for:

1. **Pioneer Status:** provides a **25% exemption from income tax on 100% of statutory income** for 10 years. Accumulated losses and unabsorbed capital allowances incurred during the pioneer period can be carried forward and deducted against post-pioneer income of the company. The exemption commences from the date the company makes its first sales. Only energy service companies can be eligible for Pioneer Status.
2. **Investment Tax Allowance:** **100% of capital expenditure** for investments on buildings, plant and machinery used for energy efficiency activities incurred within a period of five years can be **utilized against 100% of the statutory income for each year of assessment**. Unutilized allowances can be carried forward to subsequent years until fully

utilized. Energy service companies and any company incurring capital expenditure for conserving energy for its own consumption may apply for Investment Tax Allowance

- 3. Import Duty and Sales Tax Exemption:** Companies providing energy efficiency services or adopting energy efficiency initiatives can also apply for import duty and sales tax exemption on imported machinery, equipment, materials, spare parts and consumables used directly in the generation process and that are not produced locally. For locally purchased machinery, equipment, materials, spare parts and consumables, **full exemption is given on sales tax**. The exemption is given for a period of one year, commencing from the date the application is received by MIDA.

These incentives apply for all applications received until 31 December 2010.

Internet sources:

- *Ministry of Energy, Green Technology, and Water (2009): Incentives for Renewable Energy & Energy Efficiency in Malaysia.*
- *Ministry of Energy, Green Technology and Water: National Incentives Guidelines* [<http://www.kettha.gov.my/template01.asp?contentid=244>]

Further Good Practices:

- **National Board of Revenue (Bangladesh).** Online at: <http://www.nbr-bd.org/incometax.html>
- **Government of India** http://www.ireda.in/homepage1.asp?parent_category=2&sub_category=26&category=141

4.3 Loan Guarantee

MONGOLIA

Mongolian National Chamber of Commerce and Industry: Green Credit Guarantee Fund



The Green Credit Guarantee Fund was created in 2006 as part of the “New 21 Project” which aimed at promoting energy efficiency through energy service companies in Mongolia. The Fund, which was established with financial support from the Dutch Government, is run by the Mongolian National Chamber of Commerce and Industry (MNCCI) and managed by Golomt Bank of Mongolia. The purpose of the fund is to **provide supplemental collateral guarantee for energy efficiency improvements, green investments, and cleaner production projects**. Additionally, the fund disburses concessional loans and conducts trainings on cleaner production, energy efficiency and finance and business matters.

Eligible for guarantees are energy service companies and any other company seeking financing for energy efficiency and cleaner production improvements fulfilling the fund’s requirements, which include **certain self collateral assets** to be pledged for a bank loan, **no debts at banks, financial institutions and tax and social insurance authorities**, and sufficient human and technical resources to implement the project.

The application process then encompasses several steps that have to be passed by applying companies. Firstly, project documentation and required documents have to be prepared as a basis for technical appraisal through the Cleaner Production Center at MNCCI and financial appraisal through Golomt Bank. Then, documents are checked for completeness at the Fund Office. If requested by Golomt Bank, the Fund Office passes the decision of providing a supplement collateral guarantee to the self-collateral provided by the applicant. Eventually, the loan is issued through Golomt Bank with a maturity of three years and annual interest rates of 16 per cent. The

Fund Office may **guarantee 30 to 80 per cent of the total loan amount with the collateral fee amounting to 1.5 per cent of the loan.**

Internet sources:

- *Green Credit Guarantee Fund* <http://qcgf.mongolchamber.mn/en/>

Further Good Practices:

- **Government of India and Small Industries Development Bank of India:** Credit Guarantee Fund Trust for Micro and Small Enterprises [<http://www.cgtmse.in/>]
- **Sri Lanka Sustainable Energy Authority:** Sustainable Guarantee Facility [<http://www.energy.gov.lk/projects/fundmgt.php>]

V. Supporting Non-Financial Services

Access to finance is a necessary prerequisite for a transition towards sustainable production practices in Asia, but it is not without supporting services such as capacity building, network facilities, advisory services, and award programs that demand and innovation for cleaner production are stimulated. If cleaner production is to be promoted, one has to observe both “supply and demand side of the financing equation” (MacLean 2008, UNEP Sustainable Energy Finance Initiative).

5.1 Network Facility

INDIA

CoSMiLE: Competence Network for Small and Micro Learning Enterprises



CoSMiLE is an informal grouping of actors consisting of owners and workers of small and micro enterprises, service providers, local experts, stakeholders, industry associations, government departments, NGOs, financing institutions, and research institutions. The network is the result of a partnership between The Energy and Resources Institute (TERI) and the Swiss Agency for Development and Cooperation (SDC) that was launched in 1994 with the **overarching goal to develop innovative solutions to energy, environment, and social issues of a few selected energy intensive small-scale industrial sectors** (foundry, glass, brick, thermal gasifiers, power gasifiers). With the help of a large network of informal stakeholders, TERI's demonstration projects resulted in increased awareness of energy efficient and environmentally friendly production among India's small and micro enterprises. With this in mind, CoSMiLE was founded in 2005 in order to build on the existing network of stakeholders working in the small and micro enterprise sectors.

The goal of CoSMiLE is to **improve the economic, environmental, and social conditions of entrepreneurs and workers of small and micro enterprises**. The network focuses on the increased adoption of resource-efficient technologies and **knowledge sharing to enhance competitiveness** of the targeted small and micro enterprises in selected industrial sectors. It aims at the holistic development of the enterprises through techno-social integration - in a manner that the developed technologies benefit the workforce through improved working conditions and providing better quality of life. The common factor binding the network members is learning orientation. It is an open network and accepts enterprises and experts desiring to learn and share their knowledge.



CoSMiLE's services cover a wide range from technical support for the implementation of energy efficient technologies to outreach campaigns for awareness generation.

Internet sources:

- *Competence Network for Small and Micro Learning Enterprises (India)*
<http://www.cosmile.org/>

Further Good Practices:

- **Climate Technology Initiative: Private Financing Advisory Network**
<http://www.climatetech.net/template.cfm?FrontID=5142>
- **Energy Conservation Service Industry Committee of the China Energy Conservation Association (China)** <http://www.emca.cn/bg/en/>

5.2 Consulting and Advisory Services

CHINA

CECIC Blue-Sky Investment Consulting & Management Co., Ltd.



CECIC Blue-Sky Investment Consulting & Management Co., Ltd. was established in January 2003. It is a joint set-up of the China Energy Conservation Investment Corporation (CECIC) and China National Environmental Protection Corporation (CNEPC). Blue-Sky Company dedicates itself to professional consultation, project development as well as technology dissemination and project financing in the fields of energy conservation, CHP, renewable energy, environmental resources, new materials, the integration of optics, mechanics and electronics and other hi-tech fields.

Blue-Sky Company is the member of the International Federation of Consulting Engineers (the FIDIC) and China National Association of Engineering Consulting (CNAEC). It has a Comprehensive Class-A Engineering Consulting Qualification awarded by CNAEC. Also, Blue-Sky Company is one of 35 designated evaluation organizations ratified by the National Development and Reform Commission (NDRC), one of the project evaluation organizations accredited by the Administration Center of Innovation Fund for SMEs (Small and Medium Enterprises) of the Ministry

of Science and Technology (MOST) and also one of consulting organizations authorized by Beijing Municipal Commission of Development and Reform.

Internet sources:

- *CECIC Blue-Sky Investment Consulting & Management Co., Ltd (China). Information available at: <http://www.cecic-consulting.com.cn/english>*

Further Good Practices:

- **Advanced Energy Plus (Thailand)** <http://www.aep.co.th>
- **The Shri Shakti Alternative Energy Ltd. (SSAEL), India:** is the latest enterprise of Shri Shakti Group engaged in the fields of energy, hospitality and education, with a common drive; "To facilitate better quality of life for Indian people". Information available at: <http://www.shrishakti.com/alternativeenergy/index.html>
- **Econoler International (Canada):** further information available at <http://www.econolerint.com/home.aspx>

5.3 Award

ASIA REGION

Association of Development Financing Institutions in Asia and the Pacific (ADFIAP)



ADFIAP is the focal point of all development banks and other financial institutions engaged in the financing of development in the Asia-Pacific region. Its mission is to advance sustainable

development through its members. Founded in 1976, ADFIAP has currently 117 member-institutions in 42 countries. ADFIAP is also a founding member of the World Federation of Development Financing Institutions composed of regional associations in Africa, Asia-Pacific, Latin America and the Middle East. ADFIAP is an NGO in consultative status with the United Nations' Economic and Social Council.

ADFIAP has also developed annual institutional awards, which are assigned to ADFIAP members which have undertaken and/or assisted projects that have created a development impact in their respective countries. Awards are given to members, which in the judgment of the ADFIAP Awards Board, have implemented or enhanced outstanding and innovative development projects during the immediate past year. To name a few:

- **Environmental Development Award:** is assigned to members and/or its clients, which have contributed in minimizing or eradicating environmental risks and/or in promoting environmental due diligence and management practices in their respective institution and/or client operations.
- **SME Development Award:** is bestowed on members through lending programs, and/or facilities have assisted and/or have provided financing access and technical assistance to small and medium enterprises (SMEs) in the country.

Internet sources:

- ***Association of Development Financing Institutions in Asia and the Pacific (ADFIAP).***
Further information available online at: <http://www.adfiap.org/online-nomination-form/>

Further Good Practices:

- Indonesian Environmental Impact Management Agency BAPEDAL (Indonesia): Cleaner Production Award
- Government of the Philippines: Don Emilio Abello Award

CONCLUSION

According to the United Nations Industrial Development Organization (UNIDO), SMEs make up more than 90 percent of businesses worldwide. Nevertheless, their clear economic relevance, SMEs has often been neglected from banks and FIs. Globalisation, international economic crisis together with competitive pressures from markets are forcing banks and FIs to concentrate on core business profit generations. As a consequence this decreases their engagement in financing SMEs, where higher associated costs and lower returns in the short-term can be an occurrence, especially with regard to E&RE initiatives.

Nonetheless, given the rapid pace of environmental and social change, and a growing awareness of SMEs' environmental impacts, it appears clear that both FIs and SMEs will have to establish a closer relationship in order to remain competitive. FIs will have to play a central role in financing E&RE solutiond for SMEs. However, in order to engage into this collaboration FIs need to understand the importance and the economic advantages connected to increase investments in SME 'clusters.

This booklet has, thus, attempt to practically present the business case for FIs investing in E&RE solutions. A business model has been presented and discussed into two main sections, firstly clear economic business advantages have been presented to FIs. Secondly, challenges for financial institutes of developing compelling value propositions for SMEs along with designing a model that would deliver effectively and profitably services have been faced and analyzed.

This detailed analysis clearly indicates that the business case for financing E&RE projects exists. The problem still lies in an overall lack of information and knowledge of which tools should be employed to provide access and to develop adequate and effective financial services. By keeping in mind those hindrances, an explanation of business risks and advantages and a presentation of good practices already in place, have been provided. The SWITCH-Asia Network Facility aims at actively contributing to the overall debate, by providing a practical guide for Asian and International FIs investing in E&RE solutions for SMEs.

References

Ashton, Weslyne et al. (2002): Best Practices in Cleaner Production Promotion and Implementation for Smaller Enterprises. Yale University.

Asian Development Bank: SME Access to Finance. In: Key Indicators for Asia and the Pacific 2009, p. 44–49.

Asian Development Bank (2002): Development of a Small and Medium-sized Enterprise Credit Support System.

Asian Development Bank (2008): Toward Resource-Efficient Economies in Asia and the Pacific.

Association of Development Financing Institutions in Asia and the Pacific (ADFIAP), CSCP (2006). Internal Environmental Management System [<http://www.scp-centre.org/projects/ongoing-projects/env-standards-for-financial-inst.html>].

Balinghasay, Elisa (2004): FE Global/Asia Clean Energy Services Fund. Asian Development Bank [<http://www.adb.org/Documents/Events/2004/Roundtable-on-Energy/Session-IV-Balinghasay.pdf>].

Basel Agency for Sustainable Energy (2006): Public Finance Mechanisms to increase Investment in Energy Efficiency. A Report for Policymakers and Public Finance Agencies.

Chandler ,William and Gwin, Holly (2008): Financing Energy Efficiency in China.Cargnegie Endowment for International Peace. [www.carnegieendowment.org].

Cleveland, Cutler (2008): Tax Subsidies. The Encyclopedia of Earth [http://www.eoearth.org/article/Tax_subsidies].

Competence Network for Small and Micro Learning Enterprises (2009) [<http://www.cosmile.org>].

Conroy, John (2003): The Challenges of Microfinancing in Southeast Asia. The Foundation for Development Cooperation.

Cornelius, Barbara; Van der Laan, Sandra (2005): Supporting SMEs through venture capital policy. In: Harvie, Charles; Lee, Boon-Chye (Hg.): Sustaining growth and performance in East Asia. The role of small and medium sized enterprises. Cheltenham, UK: Elgar, p. 341–358.

DEDE (2009): USAID Complimented Energy Ministry on DEDE Revolving Fund Project. [http://www.dede.go.th/dede/fileadmin/upload/pictures_eng/pdf/DG_Krairit_unveiled.pdf].

Deelen, Linda; Molenaar, Klaas (2004): Guarantee Funds for Small Enterprises. A Manual for Guarantee Funds Managers. International Labour Organization.

Fletcher, Matthew et al. (2005): Leasing in Development. Guidelines for Emerging Economies. International Finance Corporation.

Food and Agriculture Organization of the United Nations: Capacity Building Portal [<http://www.fao.org/capacitybuilding/index.jsp?lang=en>].

Fresner, Johannes et al. (2009): Ressourceneffizienz in der Produktion. Kosten senken durch Cleaner Production. Düsseldorf.

Global Development Research Center: Defining Capacity Building [<http://www.gdrc.org/uem/capacity-define.html>].

Görlach, Stephanie et al. (2009): Unternehmensnahe Instrumente. Wuppertal Institut für Klima, Umwelt, Energie GmbH.

Hamilton, Kirsty (2009): Energy Efficiency and the Finance Sector. A Survey on Lending Activities and Policy Issues. UNEP Finance Initiative.

International Finance Corporation (2008): Access to Finance. Highlights Report 2008. www.ifc.org

International Finance Corporation (2008): Manual for the Development of Municipal Energy Efficiency Projects: www.ifc.org

International Finance Corporation (2009): The SME Banking Knowledge Guide: www.ifc.org

Justice, Sophie (2009): Private Financing of Renewable Energy. A Guide for Policymakers. UNEP Sustainable Energy Finance Initiative.

Karlan, Dean; Morduch, Jonathan (n.d.): Access to Finance.

KeTTHA (2009): Incentives for Renewable Energy & Energy Efficiency in Malaysia.

MacLean, John; Siegel, Judith (n.d.): Financing Mechanisms and Public/Private Risk Sharing Instruments for Financing Small Scale Renewable Energy Equipment and Projects. United Nations Environment Program.

MacLean, John et al. (2008): Public Finance Mechanisms to Mobilise Investment in Climate Change Mitigation. UNEP Sustainable Energy Finance Initiative.

Malaysian Industrial Development Authority (2007): Government Grants and Financing / Credit Facilities. Guide for Malaysian Manufacturers [<http://www.mida.gov.my/beta/pdf/GMMBOOK5-07.pdf>].

Malhotra, Mohini et al. (2006): Expanding Access to Finance. Good Practices and Policies for Micro, Small and Medium Size Enterprises. World Bank. Washington.

MicroCapital: Energy Reduction Microfinance Loans Earn XacBank Carbon Credits from Micro Energy Credits (MEC) [<http://www.microcapital.org/press-release-energy-reduction-microfinance-loans-earn-xacbank-carbon-credits-from-micro-energy-credits-mec>].

Ministry of Energy, Green Technology and Water: National Incentives Guidelines [<http://www.kettha.gov.my/template01.asp?contentid=244>].

Ministry of Planning and Investment of Vietnam. Agency for SME Development. Online available: www.business.gov.vn

Mongolian National Chamber of Commerce and Industry: Green Credit Guarantee Fund [<http://gcfg.mongolchamber.mn/en/index.php>].

Ott, Hermann et al. (2009): Internationale Finanzmittel für den Klimaschutz. Wuppertal Institut für Klima, Umwelt und Energie GmbH. Wuppertal Paper 181.

Peachey, Stephen; Roe, Alan (2004): Access to Finance. A Study for the World Savings Banks Institute. Oxford.

Price, Lynn et al. (2005): Tax and Fiscal Policies for Promotion of Industrial Energy Efficiency. A Survey of International Experience.

Small Industries Development Bank of India (2010): A Study on Factoring. Policy Paper Series.

Sonntag-O'Brien, Virginia; Usher, Eric (2004): Mobilising Finance for Renewable Energies. Secretariat of the International Conference for Renewable Energies. Bonn.

Taylor, Robert et al. (2008): Financing Energy Efficiency. Lessons from Brazil, China, India, and Beyond. Washington.

The Bank Negara Malaysia and the Association of Banks in Malaysia. Online available: www.bankinginfo.com.my/_system/media/.../sme_loans.pdf

United Nations Economic Commission for Europe (2010): Financing Global Climate Change Mitigation. ECE Energy Series 37.

United Nations Environment Program (2006): 3 Country Energy Efficiency [<http://www.3countryee.org/window.htm>].

United Nations Environment Programme (2006): Improving Energy Efficiency in Industry in Asia. A Review of Financial Mechanisms.

USAID (2009): Innovative Approaches to Financing Energy Efficiency in Asia.

World Bank (2008): Finance for all? Policies and Pitfalls in Expanding Access: Internet: www.worldbank.org

World Energy Council: Energy Efficiency Policies around the World. Review and Evaluation [http://www.worldenergy.org/publications/energy_efficiency_policies_around_the_world_review_and_evaluation/1166.asp].

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