CASE STUDY 1: THAILAND - ENERGY EFFICIENCY REVOLVING FUND

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<th>Barriers</th>
<th>Limited access to capital</th>
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<td>Instrument</td>
<td>Revolving fund</td>
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<td>Application</td>
<td>Provided up to 50% of capital in first phase, reduced to 30% in next phase</td>
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<td>Amount</td>
<td>US$50 million per year, with an accumulated balance of US$350 million in 2005</td>
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PROJECT BACKGROUND AND OBJECTIVES

The Thailand Energy Efficiency Revolving Fund (TEERF) was established by the Government of Thailand and managed by the Ministry of Energy, Department of Alternative Energy Development and Efficiency (DEDE). The objective of the TEERF is to provide access to capital for energy efficiency projects, increase awareness of energy efficiency opportunities and improve procedures and implementation of the projects.

INSTRUMENTS USED

The TEERF receives revenues from a petroleum tax, yielding approximately US$50 million per year and in 2005 having an accumulated balance of approximately US$350 million. The TEERF provides credit lines to participating Thai banks on a full-recourse basis and at zero interest rate, with the requirement that the funds be on-lent to project developers/borrowers at an interest rate of no more than 4%. Six major Thai commercial banks are participating in the programme.

The Fund initially (2003-2007) provided up to 50% of on-lent capital, with the remaining coming from the bank’s own resources; in its second phase, the Fund is reducing its share to 30%.

INSTITUTIONAL ARRANGEMENTS

DEDE is responsible for administering the fund from the TEERF. The participating Thai banks are responsible for most aspects of the lending process, including marketing, appraisal and credit approval, and, loan collections and enforcing all remedies in default events. DEDE assists banks with technical appraisals of projects.

The fund is also used to pay for technical assistance programmes, such as energy audits and project feasibility studies.

The project developers are responsible for identifying the energy efficiency projects or opportunities, and conducting the initial feasibility studies required to apply for a loan from the fund. The application is made to the participating bank, who will then review the technical and financial viability of the project. If the results of the analysis and review are acceptable, the participating banks apply for the loan from the fund to DEDE. Once a loan is approved by DEDE, the participating banks submit disbursement and repayment plan to DEDE.
Project developers make repayments of principal and interests to the participating banks, who will pay the principal amount to DEDE within seven days. DEDE then returns the funds to the TEERF.

- the repaid loan principal may be available for recycling into new loans (though this has not yet been approved); and

- the provision of loan funds to an energy efficiency project can leverage significant additional investment in the project from non-government sources.

The financing model is simple and straightforward and does not rely on any factors unique to the situation in Thailand. Therefore, it could easily be applied in other countries.

OUTCOMES

The TEERF has successfully funded a number of energy saving projects since its commencement. The graph shows the total investments in energy efficiency projects leveraged by loans from the fund and the projected total financial savings that will be achieved over the life of the equipment installed in the projects.

The advantages of this mechanism include:

- the major risk arises from the possibility of project proponents defaulting on loans fall mainly on the project proponent themselves and partly on the lending bank, while the government carries no risk;

- the major costs are incurred in assessing loan applications, administering loans and promoting the TEERF are carried mainly by the banks and partly by the project proponents (e.g., the costs of feasibility studies), while the government carries only a small proportion of these costs;

- all loan principal is repaid, so the only additional cost to the Government is the time cost of money in providing the loan principal at zero interest rate for up to 10 years;

Further reading