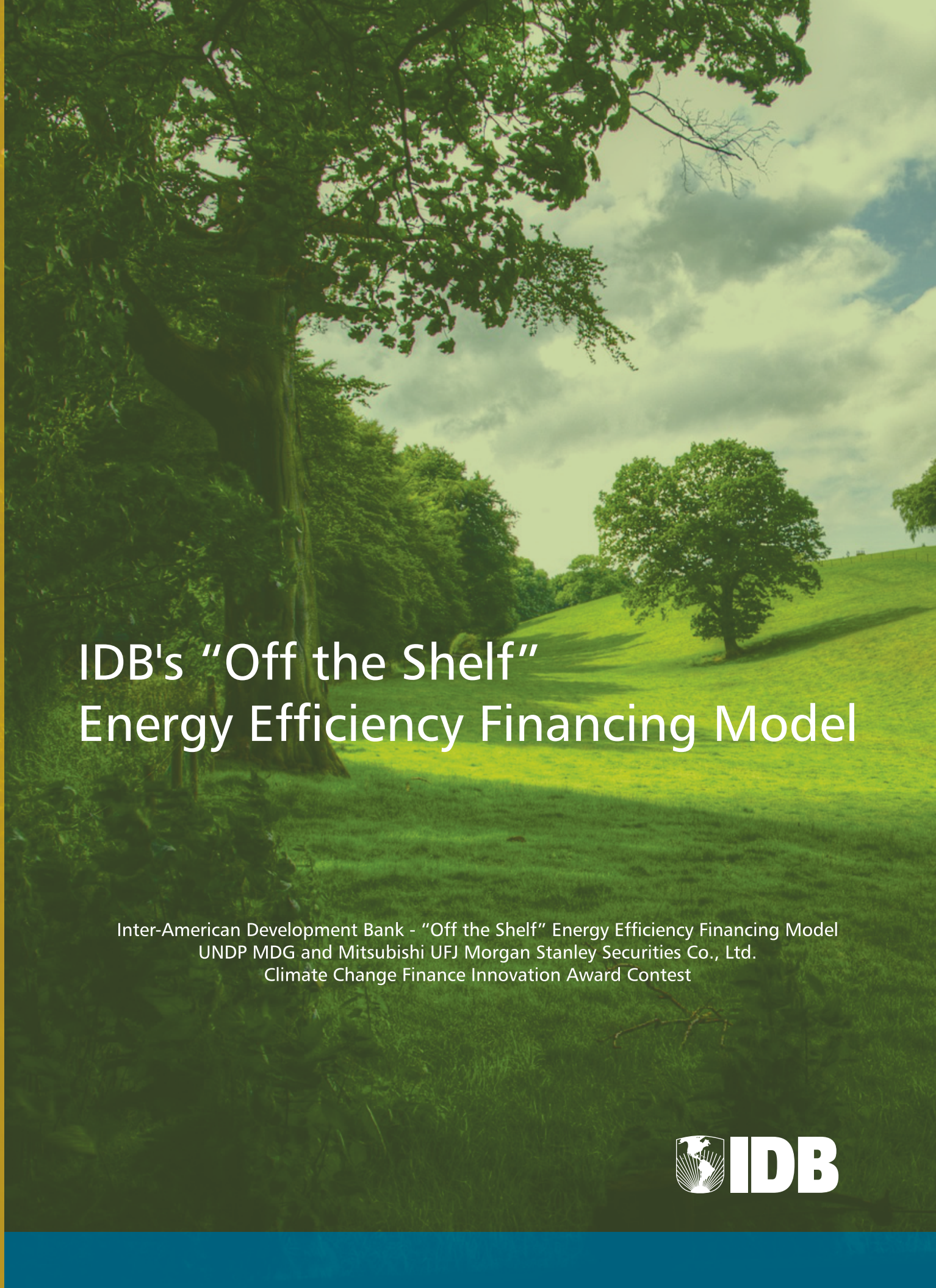


IDB's "Off the Shelf" Energy Efficiency Financing Model

Inter-American Development Bank - "Off the Shelf" Energy Efficiency Financing Model
UNDP MDG and Mitsubishi UFJ Morgan Stanley Securities Co., Ltd.
Climate Change Finance Innovation Award Contest

IDB

Tailoring an investment program for energy efficiency to local barriers and conditions

The IDB "Off the Shelf" model, structured and piloted by the Capital Markets Division, illustrates a tailored solution to the challenge of deploying energy efficient technologies that can be replicated and scaled-up in other regions as it aims at transforming the financial sector risk model and includes relevant actors to build trust for investments.

In the Colombian context, Energy Efficiency (EE) investments are seen as an important strategy to counteract an expansion in fossil-fuel power sources and greenhouse gas emission driven by economic growth, supporting the county's low-carbon growth strategy. However, interest and implementation of EE investments have been sparse despite its potential. The Colombian Energy Services Providers (ESP) market is underdeveloped and the model focuses on supporting the market made up of energy service providers, with a view to increase demand, enhance technical quality and build up the willingness of Local Financial Institution (LFI) to provide financing for EE investments.

The IDB "Off the Shelf" model addresses these challenges. The IDB model is the result of an in-depth market analysis of the supply and demand-side of EE investments.

It goes beyond many earlier models on EE financing that focused very narrowly on any of these alternative options:

(i) the provision of concessional credit lines;
(ii) building the capacity and awareness of LFI and end-users; and
(iii) addressing credit risks of end-users through credit guarantees.

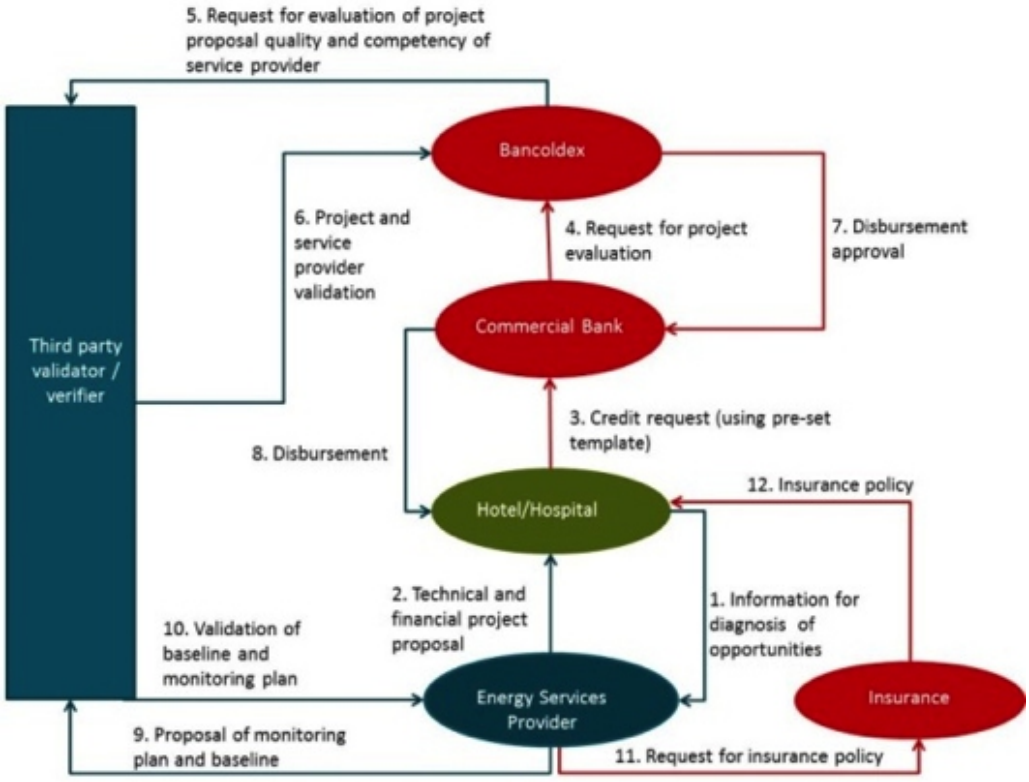
The financing scheme is conducted in two phases 1) project technical validation and credit approval, and 2) implementation, monitoring and reporting, with the following actors:

- National Development Bank (Bancoldex)
- Insurance (Suramericana de Seguros, SURA)
- Local Financial Institution (LFI – e.g. Commercial bank)
- Beneficiary/Customer (Hotel/Hospital)
- Energy Services Providers (ESP)
- Third party technical validator/ verifier (INOTEC)

• Phase 1 Project Validation and Credit Approval

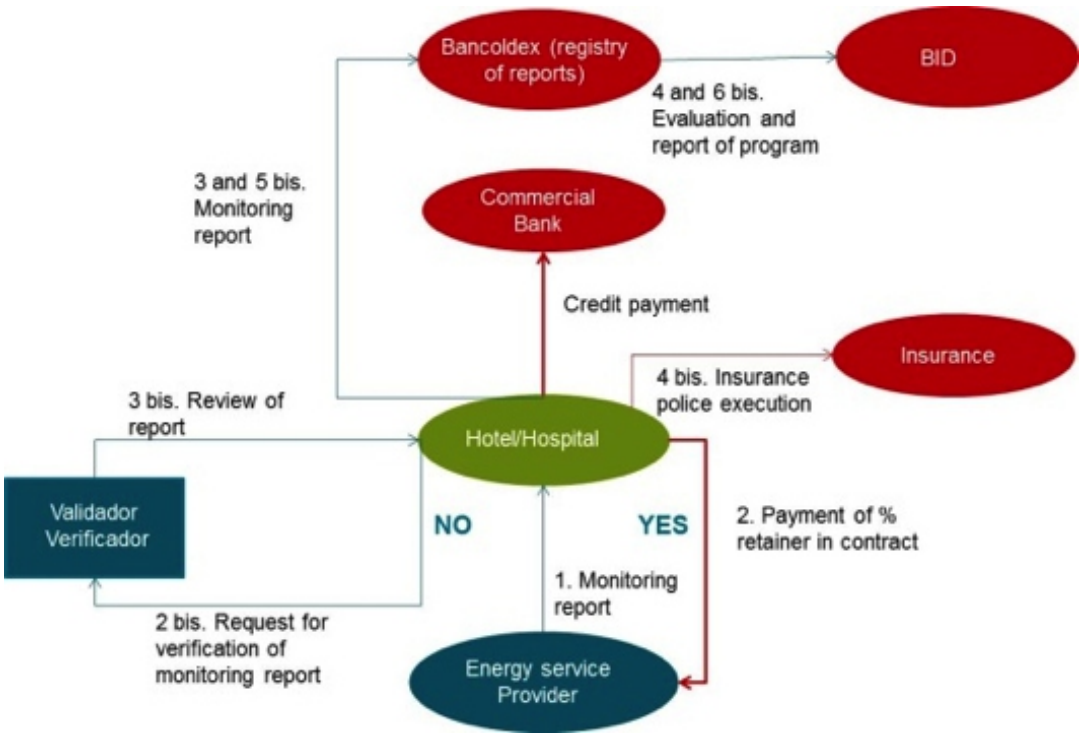
Step 1	The ESP assesses the energy savings potential of the customer. If the customer is interested:
Step 2	The ESP initiates a technical and financial project proposal
Step 3	The proposal is submitted to the LFI which undertakes risk assessment based on credit request.
Step 4	The LFI requests the project technical evaluation from Bancóldex

Step 5/6	A third party validator/verifier assesses the project feasibility and evaluates the technical proposals and expertise of energy service provider If the third party verifier's assessment is positive,
Step 7	Bancóldex approves and disburses funding to LFI
Step 8	LFI disburses credit to the customer
Step 9	The ESP submits to the third party validator a detailed design of project operations and maintenance along with a baseline and monitoring plan for results. The ESP receives a partial payment from the customer for the project design. Remaining payments are based on project performance in terms of achieving promised energy savings.
Step 10	Following a six month interval, after the implementation of the project, the third party validator spot checks on the progress of implementation including installation, monitoring plan and old equipment decommissioning. Any failures to comply would result on the acceleration of the loan.
Step 11	It is worth nothing that as part of the standard contract, the technical services provider has the option to buy a performance insurance policy from a local insurance company.
Step 12	The beneficiary of the policy being the contracting firm.



Phase 2 Implementation, Monitoring and Reporting

Step 1	The ESP prepares periodic energy savings monitoring reports for the customer.
Step 2	These monitoring reports are the basis for the customer to pay the ESP remaining payments on the contract.
Step 2/3bis	If there is disagreement on the energy savings, the customer sends the ESP report to the external verifier contracted by Bancóldex for review who then assesses the report and the energy savings actually generated.
Step 3bis	The customer or the ESP submit monitoring reports to Bancóldex at least annually or during loan repayment periods.
Step 4bis	In case of a shortfall compared to original anticipated energy savings, the customer does not disburse performance payments to the ESP. If the amount withheld is smaller than the energy savings shortfall, the customer can claim the difference from the performance insurance policy.
Step 3&5 bis	Reporting to Bancóldex occurs at least annually.
Step 4&6bis	IDB assesses overall impact of the program in terms of the benifiaciary firm's energy savings, productivity, competitiveness and technological changes (treatment group) vis-a-vis comparable, non-benifiaciary firms(control group) five years after program execution.



The model is based on the following elements and expected results:

<table>
<tr>
<td>Coordination and involvement of key actors

- National Development Bank (Bancoldex)
- Insurance (SURA)
- Local Financial Institution (Commercial bank)
- Beneficiary/Customer (Hotel/Hospital)
- Energy Services Providers
- Third party validator/ verifier (INOTEC)</td>
<td>Sources of Finance

- Bancoldex & IDB US$10 million loan
- Clean Technology Fund US$10 million concessional loan US$750,000 technical cooperation.

Technologies

- air-conditioners and heating systems,
- efficient boilers,
- heating of pools through solar power, and
- co-generation</td>
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<tr>
<td colspan="2">Financial and non-financial instruments

- a financing line with adequate terms for the type of investments being promoted;
- a performance insurance policy to insure any short-fall in projected energy savings;
- a standard contract that, apart from establishing the right and responsibilities of investors and ESP under the contract, consecrates the insurance instrument and a results-based payment mechanism for ESP;
- a third-party, independent, technical review of all project proposals, ESP, as well as of the projects' monitoring, reporting and verification systems. The third-party validator and verifier also rules on any conflict that may arise between a beneficiary and its ESP on any alleged shortfall on energy savings.</td>
</tr>
<tr>
<td colspan="2">Expected results

o SME productivity and efficiency increase through energy costs reduction by up to 20% (reductions in energy intensity per unit of output)
o Facilitate increase SME's management teams' awareness of their operating costs and EE reduction potential
o Environmental benefits for two fast growing service subsectors in Colombia;
o Improve equality as over-proportionally women are employed in both sub-sectors
o Model replication potential in Colombia and in the LAC region, with other sector and technologies. (Currently, the model is replicated in Mexico through a partnership between FIRA, Mexico's second-tier rural development bank, and IDB).</td>
</tr>
</table>

The model addresses relevant barriers to EE investment in general and Colombia in particular, and takes important lessons learned from EE financing programs deployed worldwide into account:

Barriers
(i) lack of knowledge of LFI on the risks and returns of these projects and on how to market, analyze, structure and finance them; (ii) lack of knowledge by potential beneficiaries (companies with high energy intensity) about the economic benefits of more energy-efficient equipment and processes, resulting in low demand for EE investments in the market; and (iii) lack of financial capacity of local ESP. Although ESP are knowledgeable on alternative technologies and on how to structure technically-robust EE projects, they tend to have a very small capital base to invest directly on these technologies and take on the perceived risks up-front on behalf of beneficiaries in exchange for a share of the energy savings generated. In other more advanced economies, Energy Services Companies (under an ESCO model) are able to do this without problem.
Lessons incorporated from other programs
(i) support the structuring of both the demand- and the supply-side of investment financing; (ii) address the barriers and perceived risks of all of the actors involved; (iii) adapt to the local circumstances, with no silver bullet or textbook solution available; (iv) blend loans, technical assistance and risk mitigation instruments to support the financial intermediation, as any of these instruments on their own are not able to ensure that the supply of financing for EE projects will meet its demand; (v) tailor investment products and incorporate EE to private sector needs (vi) built on local knowledge and on the existing financial distribution network; and (vii) invest in reputation and trust building, particularly when the deployment of new technologies is sought.

The financial model builds on the participation of several key actors in EE investment and the coordination is based on incentives for each of these actors to deliver their part:

Actor	Incentive
Beneficiaries/Customers e.g. hotels, clinics and hospitals	Boosting productivity and profitability through the replacement of obsolete equipment with modern EE equipment.
Energy Service Provider	Increasing demand for their services
National Development Bank e.g. Bancóldex	- Fulfil public policy mandate supporting firms' access to finance where private credit markets fail - Furthering government's goals of competitiveness and environmental sustainability - Launching new business and gaining experience with the financing of new technologies and investment models
Local financial institution e.g. Bancolombia, Banco de Bogota, and Davivienda	Potential to expand business through realistic assessment of EE project risks Perceived and real risks mitigated by financial and non-financial instruments to build experience and track record
Insurance company e.g. SURA Asset Management	New insurance business (gap between contracted and actual energy savings) Business risk mitigation through standard contract, credible third party technical verifier and reinsurance policy with Swiss Re to back up SURAmerica.
Third party verifier e.g. Colombian Institute of Technical Standards and Certification – ICONTEC	New area of business
International donors e.g. Clean Technology Fund	Fulfils its mandate to support innovative, scalable programs that promote private sector investments geared to reduce GHG emissions
Inter-American Development Bank	Fulfils development mandate and institutional strategy Building local capacity of financial institutions and development to facilitate private sector development Clear IDB exit strategy once supported projects work on their own Replicate model in other economies of the region and sectors with high energy intensity

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