



BUREAU OF ENERGY EFFICIENCY



ENERGY SAVINGS INSURANCE: INTERNATIONAL FOCUS GROUP DISCUSSION

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Summary

Background and Context

Energy efficiency has frequently been highlighted by the Governments of India and Indonesia as a key policy priority. Both countries have set targets for energy intensity improvements and implementation of energy efficiency measures will be key to meeting ambitious energy transition and climate goals. While both countries have seen reductions in energy intensity, there remains significant potential for greater progress across all sectors. Access to finance for energy efficiency investments can be challenging with high perceived risks of investment, particularly in newer technologies and high transaction costs.

The Energy Savings Insurance (ESI) model was first developed by the Inter-American Development Bank (IDB) in 2014, with the support of Basel Agency for Sustainable Energy (BASE), as a mechanism to build investor confidence and improve access to low-cost finance for energy efficiency projects. Originally designed for implemented in Latin America, the ESI model has been implemented in Colombia and El Salvador and partial implementation or under way in a number of other countries in the region. It was developed with financial support from international donors such as the Danish Energy Agency (DEA), the Clean Technology Fund (CTF), and the Green Climate Fund (GCF). It is now being replicated in numerous countries around the world and countries such as India, Indonesia, the Philippines, and Viet Nam have expressed interest in the model.

Building on the [Clean Energy Finance and Investment Roadmap of India](#), the [Clean Energy Finance and Investment Policy Review of Indonesia](#) and the [Blended Finance Guidance for Clean Energy](#), the OECD CEFIM programme is working with India and Indonesia to provide technical support on the development of ESI schemes in the country. To help build knowledge and facilitate country experience sharing, the OECD organised a 1st International Focus Group Discussion to share lessons learned in the development and implementation of ESI programmes in Colombia, El Salvador, Chile and Mongolia.

Session 1 Introduction and scene setting: Perspectives from India and Indonesia

- Energy efficiency projects suffer from high upfront costs, competition for investment capital, lack of trust among stakeholders and high transaction costs of relatively small scale projects. High perceived risks associated with these investments make them unattractive and difficult to finance. The ESI model is designed to reduce perceived risk and make energy efficiency investments more attractive. An ESI model contains the following four elements: i) an energy performance contract with guaranteed savings; ii) energy savings insurance; iii) technical validation and iv) financing.
- India's BEE is working closely with financial institutions to support financing of energy efficiency projects. It has already published a technology list comprised of over 150 energy efficient technologies to help streamline project evaluation by financial institutions. In the development of an ESI mechanism, engagement with the Insurance Regulatory and Development Authority of India (IRDAI) will be critical to mobilise insurance companies. ESI is expected to help build confidence and demand for energy efficiency adoption, particularly among SMEs who are not familiar with these technologies and will also support industries under India's Perform, Achieve and Trade (PAT) scheme achieve their energy efficiency obligations by providing additional security that investments in efficient equipment will realise their promised savings and help facilitate access to finance by de-risking investments. The development of an ESI programme will need to involve key stakeholders including IRDAI,



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insurance companies, financial institutions, large industries and SMEs.

- Indonesia has implemented a number of energy efficiency policies and programmes to stimulate the energy efficiency market. This includes Minimum Energy Performance Standards (MEPS), labelling programmes and Green Building codes as well as information and knowledge building campaigns. The government has also implemented measures to support the development of an energy savings company (ESCO) market. Scaling up investments in energy efficiency will require support from domestic and international financial institutions. The use of warranties and insurance can help to de-risk projects and facilitate financing of energy efficiency projects. There is no commercially attractive financing product in Indonesia for energy efficiency projects and numerous barriers remain in developing bankable projects. A guarantee or insurance from a third party is needed to address concerns around whether promised energy savings will be realised. ESCOs with good track record and solid balance sheets are also needed to help deliver and support the financing of energy efficiency projects.
- A number of development partners including the Asian Development Bank (ADB), the ASEAN Centre for Energy (ACE) and Enertec (supported by the UK Mentari) have projects to support the development of innovative financing solutions for energy efficiency including support to develop an ESI Programme. These projects will help to build technical capacity and support the development and financing of pilot projects. ADB's project which targets India and the Philippines aims to identify financing solutions for energy efficiency, including the use of energy savings insurance. ACE, with the support of the Korean Development Agency with financing from the Green Climate Fund focuses in developing innovative mechanisms for industrial energy efficiency financing in Indonesia with lessons for replication in other ASEAN Member States. Enertec is supporting the development of a HUB PLATFORM that will connect different Indonesian stakeholders to offer training and certification, help building project pipelines and support knowledge sharing. There is a need for international collaboration to showcase best practices in ESI development and to identify ways for replication in other countries.

Session 2: International experience sharing

- Bancoldex's ESI programme (supported by the IDB) was designed to promote investment in energy efficiency among Colombia's SMEs. The focus of the programme was an innovative scheme to guarantee energy savings to mitigate project risks and build investor confidence. Validation methodologies helped to reduce distrust among SMEs, while the structuring of energy savings agreements (contracts) created minimum legal standards for commitments between technology providers and buyers. An energy insurance policy mitigated the risks of not generating expected savings and Bancoldex provided a credit line (supported by IDB) to help finance energy efficiency projects. The programme helped to build investor confidence in energy efficiency investments among SMEs in the health and hospitality sector and will be expanded to other sectors.
- Bandedal's ESI programme, supported by the IDB and GCF, was established to support energy efficiency investments in El Salvador. It was designed to overcome the lack of knowledge on the benefits of energy efficiency and poor familiarity with energy efficient equipment and technologies and to help build confidence in the estimated savings from investments in energy efficiency projects. The programme financed 4 pilot projects and included incentives to cover validation costs, contributed to cost of the insurance premium and also included an incentive for early retirement and scrapping of old equipment. It also provided credit lines to finance



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energy efficiency projects which helped financial institutions attract new clients. Events organized with unions helped to increase interest among SMEs in the uptake of energy efficiency projects and the support of Bandesal as the executing agency to the financial institutions helped to speed up the financing process.

- Banco Estado's ESI programme, supported by IDB, was designed to help improve the competitiveness of businesses in Chile, mitigate investment risk, promote the adoption of energy efficient technologies, reduce greenhouse gases, promote an energy savings culture, promote investments and overcome financial barriers for energy efficiency investments. IDB support provided incentives to cover the cost of validation, support the payment of insurance premiums, and encourage early retirement of assets. A series of dissemination events were held as part of the ESI communication strategy with strong interest among companies, however in the end competing credit lines and the requirement for a counter guarantee contract was a disincentive for developers to adopt the ESI, as a guarantee was already provided for project implementation. Key lessons include the need to re-evaluate and be transparent with companies on the commission, ensure commercial value of the validation entity when IDB funding is exhausted, increase participation of the insurance company, identify certified developers using ESI and engaging a consultant to help attract potential clients through outreach and provide technical support to companies and developers.
- BASE is supporting Xacbank and GCF in the development and implementation of the ESI programme in Mongolia. Currently at the testing phase, it is expected to be released in Q3 2023. Challenges faced so far include: the lack of regulation for surety bonds and the need to develop an insurance policy based on existing products, small market size with limited technology providers, lack of trust among stakeholders, limited insurance culture and lack of transparency. So far interest among enterprises in the ESI programme is high and XacBank is incorporating ESI as a credit requirement.
- Key lessons across the different country cases include the importance of strategic partnerships among organisations to help create demand for ESI, existing contracts and methodologies can be adapted to national context to efficiently develop tools, training of different ESI participants is needed to develop market capacity, online MIS will improve efficiency of administrative procedures and active involvement of the executing agency and insurance company is needed to create a market for ESI. Local insurance regulation can restrict market development or impact the type of insurance products provided. Data availability and accuracy is key to promote comprehensive insurance packages. The development of technology lists can help customers access financing for energy efficiency projects and reduce due diligence and transaction costs for financial institutions. The use of concessional funds and grants is especially important in emerging and developing economies where financings costs are higher.
- GCF supports the development of financing tools, promotes innovative financing and business models, helps to de-risk investments, and works closely with national institutions to support climate action. ESI projects in El Salvador, Mongolia, Paraguay and Argentina have received funding from GCF. OECD could evaluate different transactions using the ESI framework to better understand drivers of success. Access to GCF funding should be country-driven, implemented by an accredited entity and delivery partner. ESI programmes can be developed with the support of international experiences and focused on promoting innovation throughout the value chain.



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Next Steps

- A second focus group discussion will be held in each of India and Indonesia to engage with other government agencies, local insurance companies, SMEs, donors and financial institutions. These country focused events will discuss potential barriers and solutions for strengthening the ESI elements in each country and discuss the role of different stakeholders in developing an ESI programme.
- The OECD will also collaborate with the government, other stakeholders and partners to support the development of a needs assessment for an ESI programme to help identify market potential and financing needs for pilot projects.