

De-risking Instruments for Energy Efficiency in the Philippines

 **Joint Stakeholder Workshop**

 **The Department of Energy (DoE), Insurance Commission & Asian Development Bank (ADB)**

 **5th December 2023**



Purpose and Objective of Market Scoping

Purpose:

The market scoping for financial de-risking instruments being conducted under ADBs Technical Assistance (TA) Program on "**Support for the Implementation of the Asia-Pacific Climate Finance Fund (ACliFF)**".



Objectives:

- To present the **concept brief** on the financial de-risking instruments promoting energy efficiency investments.
- To capture **stakeholder views** about perceived risks, barriers, regulatory, policy or technology issues, market behavior and other related subjects.
- To discuss the proposed or **potential role for key stakeholders**, from government to private sector.
- To identify and document the areas for **capacity building** for key stakeholders.
- To map and assess the **potential market opportunity** for guarantees, insurance, and other de-risking instruments for energy efficiency investments.

Our Approach to Assess the Potential Market Opportunities for De-Risking Instruments

Preparation of a 'Concept Brief'

Summarizing different types of de-risking instruments and risk management solutions that can support the development, and expansion of energy efficiency financing and investments in Asia and Pacific.

Selection of Priority Countries

Where scoping studies can be conducted for assessing the potential market opportunities for de-risking instruments for energy efficiency investments.

Conduct Scoping Studies

Identify and conduct meetings/workshops with stakeholders, document key market barriers that inhibit the uptake of energy efficiency de-risking instruments and the key market requirements.

Prepare Detailed Reports

To summarize the potential approach to support the design and implementation of most suitable de-risking instrument for energy efficiency investments. Also map the market opportunities.

Conduct Stakeholder Workshop

To present, discuss and finalize the possible de-risking instrument and explore the possibility of a pilot project design.

The Concept Brief for Financial De-Risking Instruments for EE

ADB has prepared a **“Concept Brief on Financial De-risking Instruments for Energy Efficiency”** which:

- Identified, mapped and evaluated the available financial de-risking instruments and economic sectors that are most promising for investments in innovative energy efficiency technologies and the suitable de-risking instruments that could be implemented in those sectors.
- Mapped the existing guarantees, insurance, and other de-risking instruments for energy efficiency investments.
- Compiled existing international examples of de-risking instruments.
- Documented the perceived risks and barriers.
- Presented the frameworks and mechanisms adopted for implementation.
- Discussed the potential for implementation in Asia-Pacific countries.

Energy Efficiency Finance – Scale of the Opportunity

- The International Energy Agency (IEA) has shown that energy efficiency measures could deliver **more than 40%** of the emissions abatement required to reach the Paris Agreement goals in a sustainable development scenario.

- IEA estimated that global energy efficiency investments reached **\$560 billion** in **2022**.

- ASEAN and other countries in Asia and Pacific are **setting-up policies** and **targets for energy efficiency and conservation**.

- ASEAN countries have developed advanced financial schemes, frameworks, and instruments to finance energy efficiency. The key examples are:
 - Energy Efficiency Revolving Fund (EERF) in Thailand
 - Energy Performance Contracting Fund (EPCF) in Malaysia
 - Energy Efficiency Fund (E2F) in Singapore
 - Infrastructure Fund and the Viability Gap Fund (VGF) in Indonesia
 - National Technology Innovation Fund (NATIF) and the Viet Nam Environment Protection Fund (VEPF) in Vietnam.



Energy Efficiency – Key to deliver Philippines NDC Goals

Philippines has committed to ambitious NDC targets:



75% of emissions to be reduced by 2030 (2.71% unconditional and 72.29% conditional)

Power sector accounts for the largest share of GHG emissions

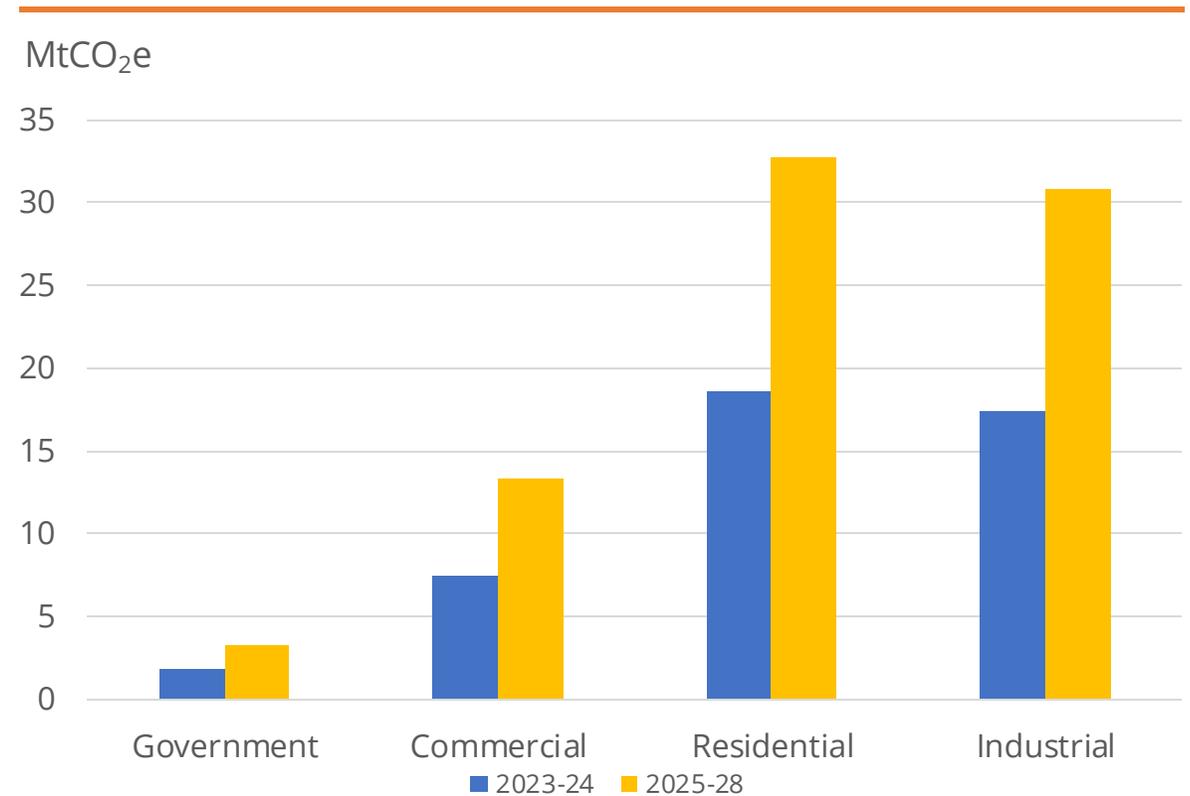


56% of total GHG emissions with 70 MtCO₂e (2020)

Energy efficiency, including buildings, is an important part of GHG abatement

Energy Efficiency and Conservation Act approved in 2019 to deliver energy efficiency across all sectors

Potential GHG reductions from energy efficiency programs in the Philippines, by subsector



Source: Philippines National Energy Efficiency and Conservation Plan and Roadmap 2023-2050

Constraints in Energy Efficiency Investments

1. Significant gap between investment opportunities and the level of investments in energy efficiency in developing countries.
2. Poor financial environment for investments in energy efficiency in developing countries. Familiarity of financial institutions with financing energy efficiency projects is relatively low.
3. Financial institutions view financing of energy efficiency as risky proposition compared to other types of projects.
4. Low awareness about the multiple benefits of energy efficiency projects.
5. Absence of tax incentives and low-interest loans for energy efficiency projects.
6. High cost of capital, lack of government incentives and lack of availability of financial de-risking instruments.
7. Poor capacity of ESCOs, risk management providers, banks and other lenders in implementing the de-risking instruments.
8. The policy and regulatory environment is improving in most of the developing countries but still the roles and responsibilities of various public and private sector stakeholders are not defined.
9. High dependence on donor agencies for funding the pilot programs.

Financial De-Risking Instruments – Guarantees & Insurance

Out of various available instruments, the widely used instruments are the guarantees and insurance.



Credit Guarantees

that are used as pure financial guarantees



Performance Guarantees

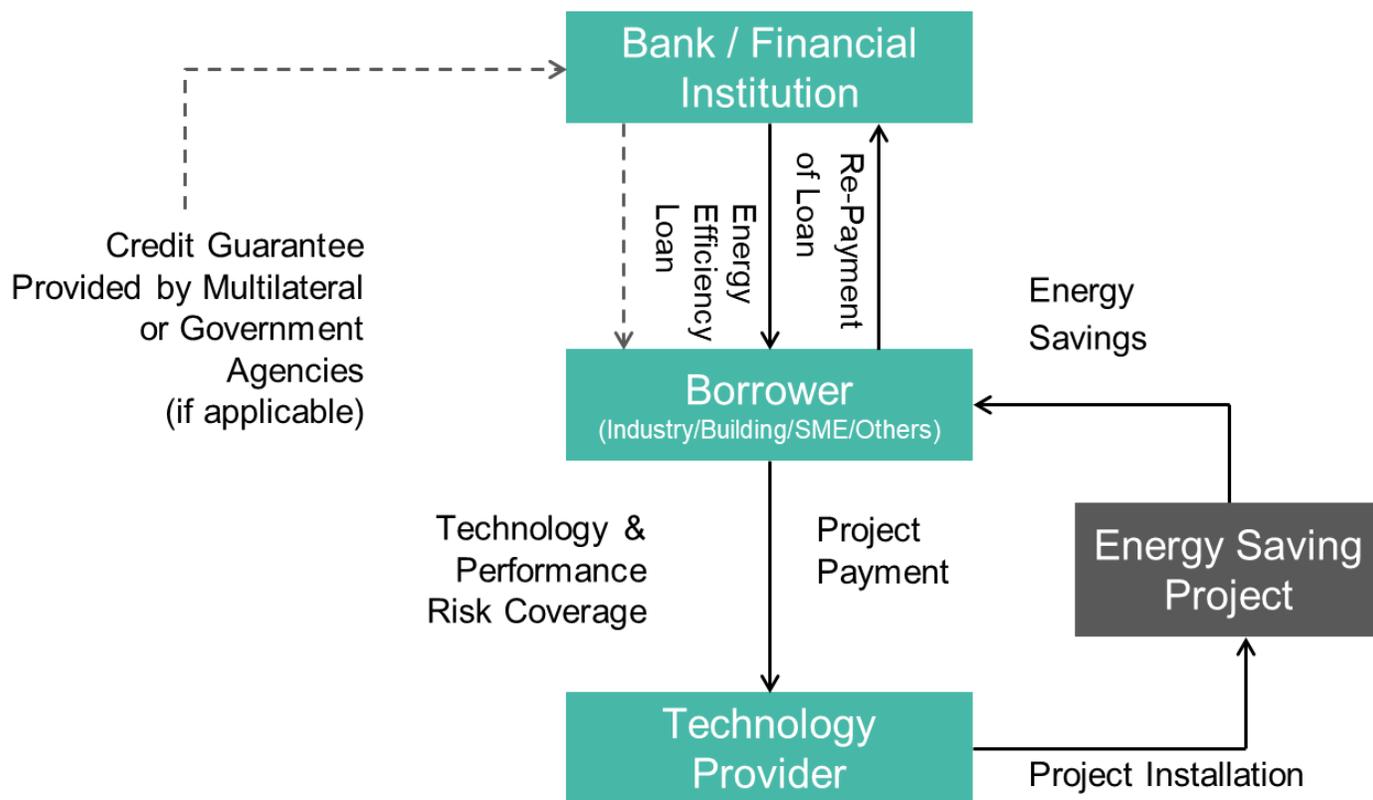
that are used to support insurance financing models



Insurance

that are to cover the losses if the anticipated energy savings are not delivered

Financial De-Risking Instruments – Credit Guarantees



Implementation Framework of Credit Guarantees

Credit Guarantees



- Credit guarantees are the most successful, easily replicable, and market-friendly interventions to ease and broaden access to finance.
- Credit guarantees are provided by international financial institutions (IFIs) or governments to local financial institutions through public energy efficiency investment programs.
- Credit guarantees give commercial banks incentives to lend because they partially compensate financial institutions for losses caused by the default of the borrowers.
- The use of loan guarantee programs, backed with public funds, helps cover perceived high initial business risks.

Successful Examples of Credit Guarantees

- **Energy efficiency in public buildings and infrastructure program, South Africa** – To support ESCOs in raising the necessary finance for entering contracts with the public buildings.
- **Commercializing energy efficiency finance (CEEF), Central and Eastern Europe** – A joint program of the International Finance Corporation (IFC) and Global Environment Facility (GEF) for buildings and industrial sectors.
- **Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE), India** – A risk-sharing mechanism that enables Participating Financial Institutions (PFIs) to partially pay the risk associated with granting loans for energy efficiency projects.
- **Partial Risk Sharing Facility for Energy Efficiency (PRSF), India** – The Facility aims to finance EE projects in MSMEs.
- **Energy Performance Contracting (EPC) Fund, Malaysia** – RM200 million fund developed by Malaysia Debt Ventures (MDV) with credit guarantee and 1% interest subsidy from the Malaysian Government and the UNDP-GEF to finance ESCOs.
- **FOGAPE** – A Chilean credit guarantee scheme funded by the national government and administered by BancoEstado Bank to provide credit guarantees to financial institutions.

Financial De-Risking Instruments – Performance Guarantees

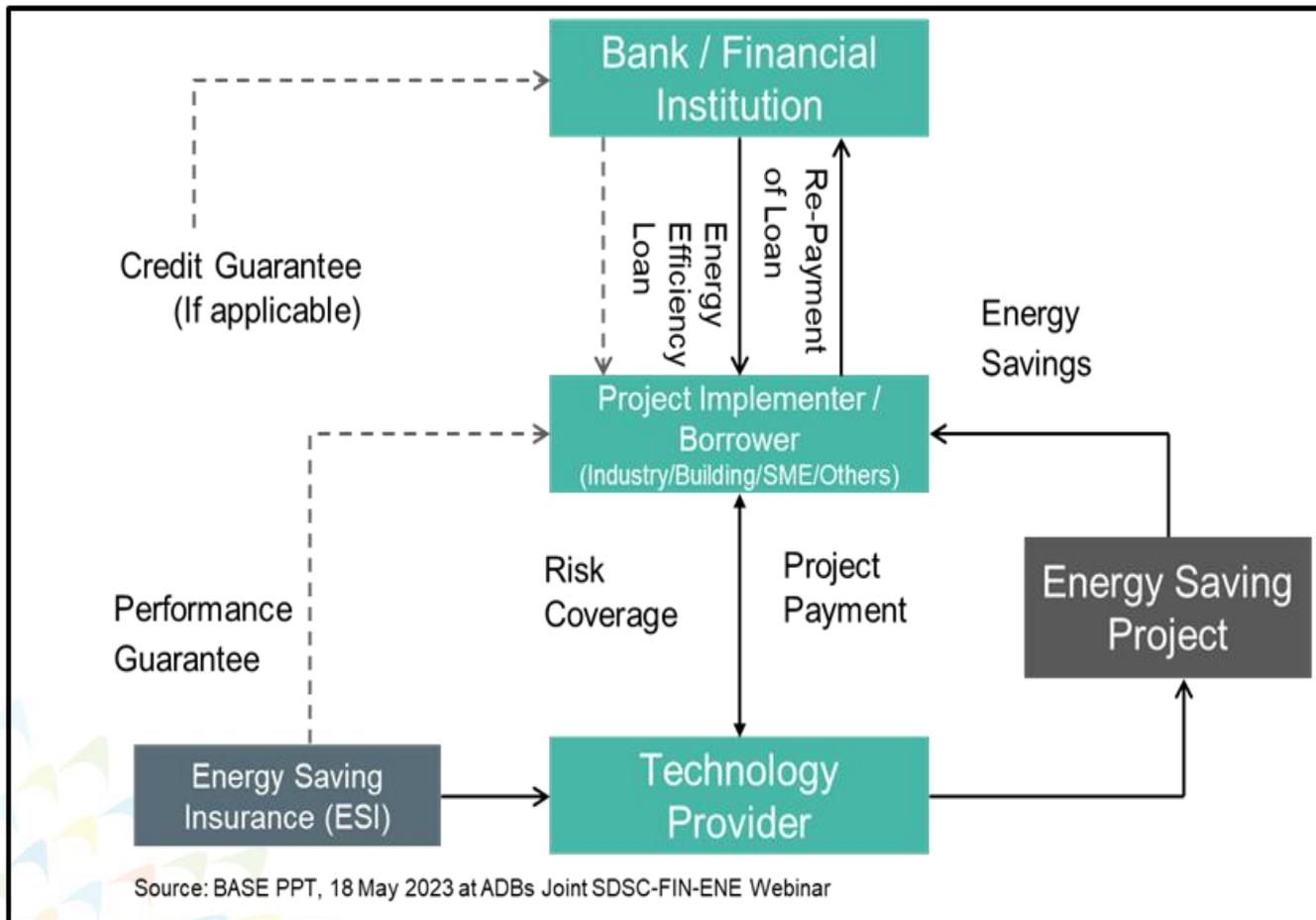
Performance guarantees cover the instruments like Energy Saving Insurance (ESI).



Energy Saving Insurance

- These are instruments for mitigation of technical risks thereby enhancing the creditworthiness of the investors in EE technology. If the project does not achieve the pledged savings, the guarantor, usually a specialized insurance agency, will financially compensate the client.
- At the core of the energy saving insurance is the standardized contract, with energy savings guaranteed, which can also be an instrument used by ESCOs.
- Energy Saving Insurance is made up of four main components :
 - A standardized contract to lower transaction costs, including a provision passing some of the risk of poor performance to the technology provider.
 - Energy savings insurance by a third-party insurer to provide risk coverage for the businesses if the energy savings promised by the technology provider do not materialize.
 - A validation process by an independent validation entity with experience in energy project compliance; and
 - A competitive financing structure which may include credit lines from development banks for concessional loans, grants, and other incentives.

Framework for Energy Saving Insurance (ESI)

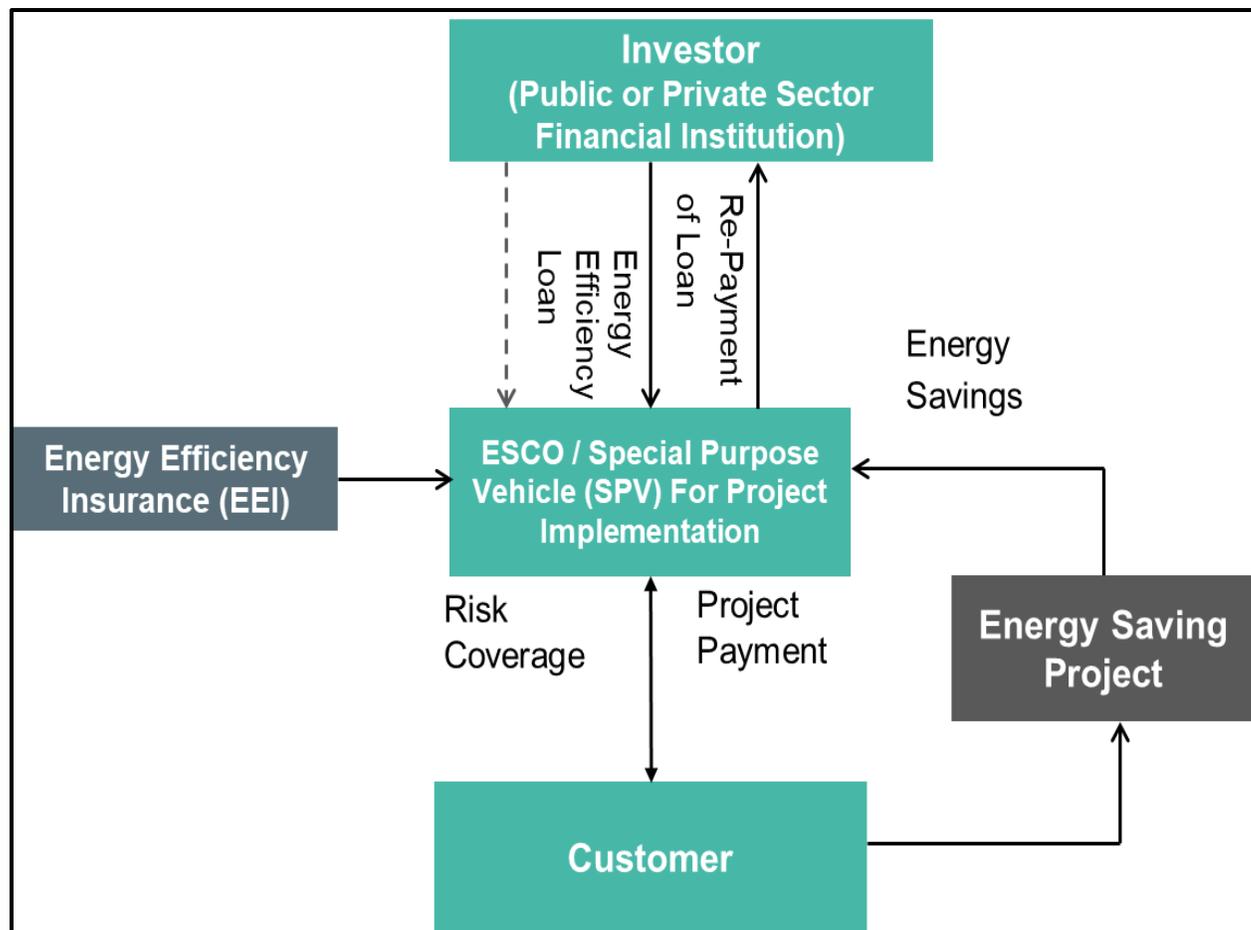


Implementation Framework of Energy Saving Insurance

Examples of Energy Saving Insurance

- **In Latin America**, Energy Saving Insurance model is currently being implemented in Argentina, El Salvador, Columbia, Chile, Brazil, Mexico, Nicaragua, Paraguay, Peru, by the IDB and its supporting partners. In Europe, it is being developed in Italy, Portugal, and Spain by BASE with funding from the European Commission's Horizon 2020 Research and Innovation Program.
- **Brazil's three development banks** – BRDE (State of Rio Grande do Sul), Bandes (State of Espírito Santo), and Goiás Fomento (State of Goiás) are working together to implement the Energy Saving Insurance Program.
- **Colombia** has issued the Energy Savings Insurance Program with BANCOLDEX, its business development bank. SURA one of the main insurers in Latin America has insured a few projects.
- The energy saving insurance model is now being adapted for **Croatia, Greece and Slovakia** under the Energy Saving Insurance Europe 2.0 program funded by EU's Horizon 2020 program.

Framework for Energy Efficiency Insurance (EEI)



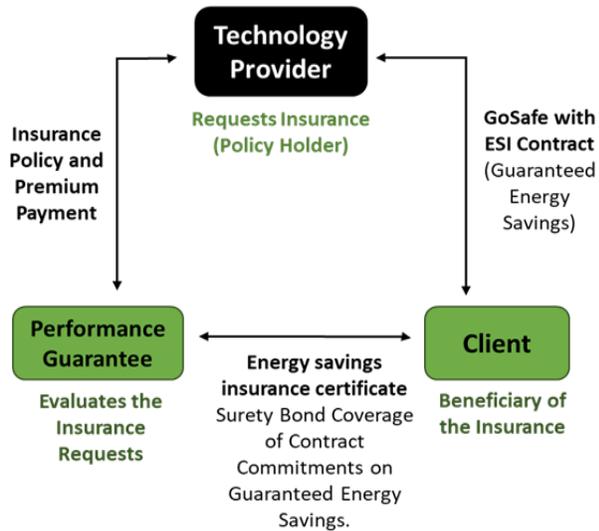
Implementation Framework of Energy Efficiency Insurance

Energy Efficiency Insurance

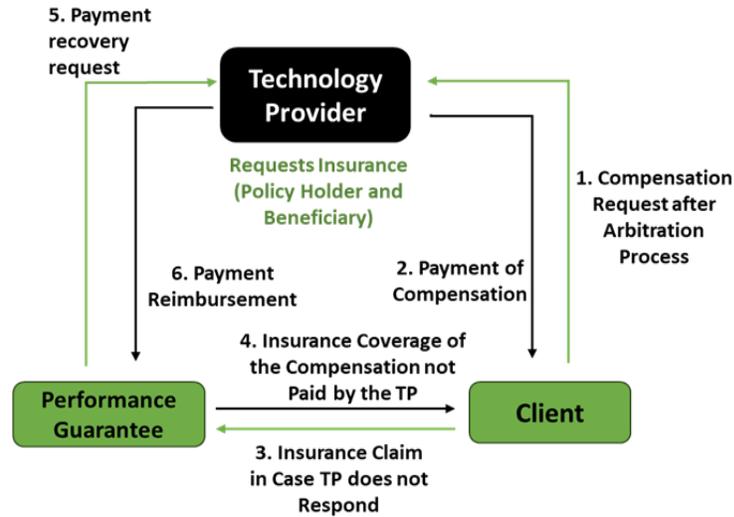
- **HSB**, a member of Munich Re's Risk Solutions family has **introduced energy efficiency insurance** cover focusing on **providing up to five years of protection for all aspects of the EE project**, ranging from material damage (equipment breakdown) to business interruption (protecting against loss of revenue in the event of equipment failure).
- Energy Efficiency Insurance mainly **to support the credit enhancement of ESCOs**.
- The element which makes energy efficiency insurance unique is the asset performance insurance covering a shortfall in energy savings.
- Energy Efficiency Insurance is aimed mainly at **ESCOs who create a Special Purpose Vehicle (SPV)** for the implementation of energy efficiency project.
- To date, EEI has been written in UK, Ireland, Spain, US, Canada.

Comparison of ESI and EEI

Energy Saving Insurance (ESI)

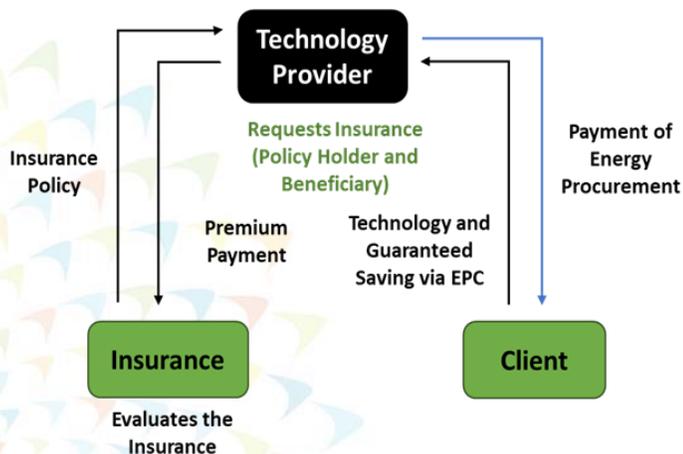


Insurance Claim

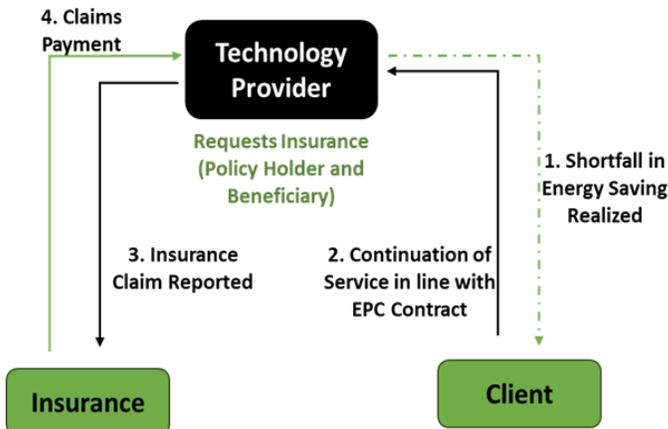


The **EEI** is purely an insurance product whereas **ESI** is a type of guarantee product. Under EEI, there is no recourse taken from the ESCO in case of a claim to the insurance policy and this also provides additional security to ultimate investor. In case of ESI the guarantor will recourse the claim amount from the ESCO.

Energy Efficiency Insurance (EEI)



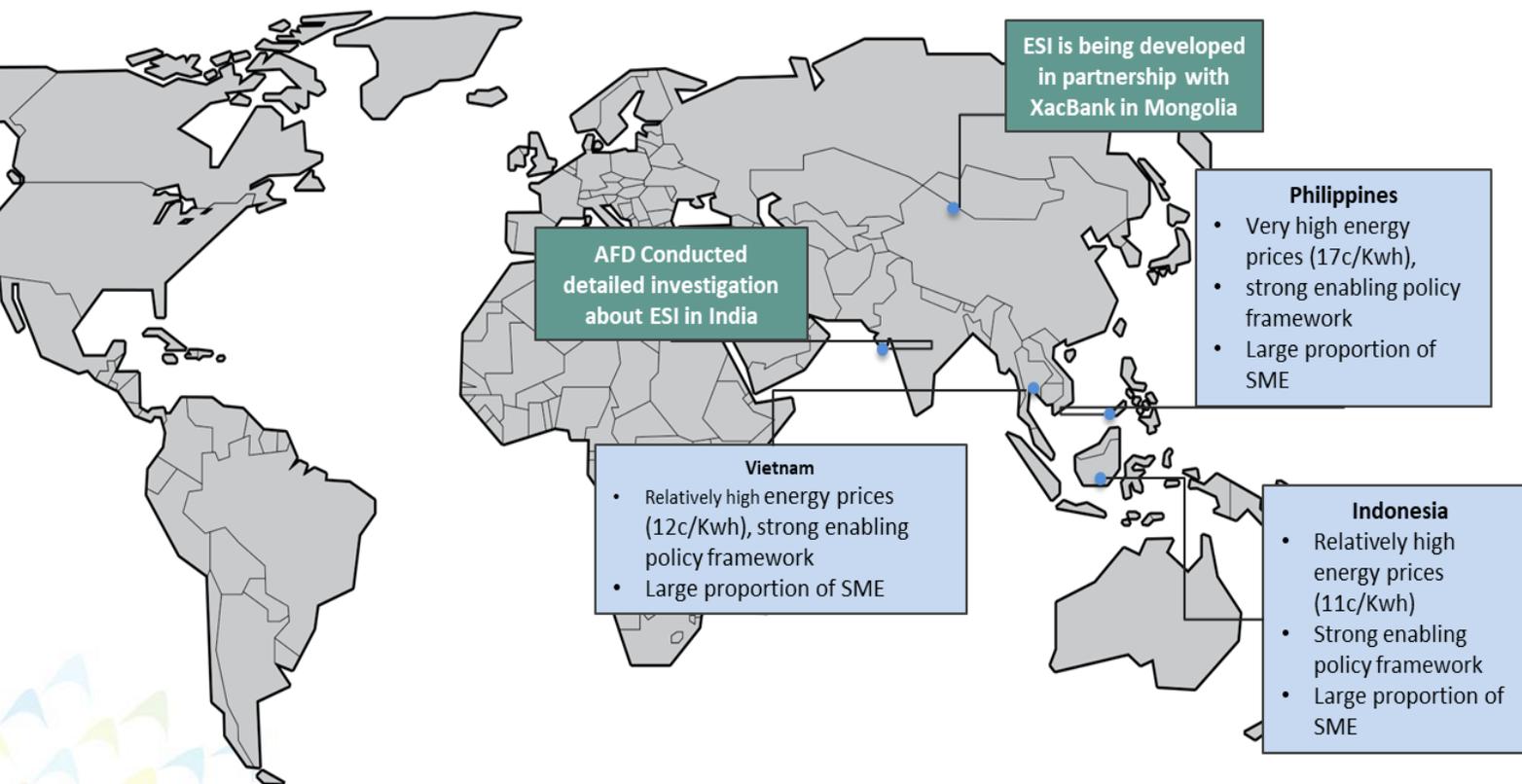
Insurance Claim



Barriers in Implementation of De-risking Instruments

- **The supportive regulatory and policy environment for energy efficiency is still emerging in many developing countries.** This delays the decision making at various stages.
- The emerging economies around the world are the most suitable candidates for implementation of risk management instruments, but **in most of the emerging economies, ESCO markets are not very well developed.**
- **SME sector in emerging economies is hesitant in obtaining finances** for implementation of structured EE projects. SMEs interest in energy efficiency investments are limited to those which can be paid for without going to the bank or financed under any public or donor agency scheme.
- **The banks and insurance service providers are reluctant to engage in the new market** due to their existing capacity and limited understanding of the benefits.
- The **insurance service providers in developing countries are more comfortable insuring the equipment, rather than complex programs.** Insuring energy savings is still outside the comfort zone of local insurers.
- The **stakeholders in emerging economies need targeted capacity building** to support the local financing institutions and insurance service providers improving their understanding of the energy efficiency market.

Implementation Potential in Asia-Pacific



Implementation Potential

- The inclusion of **performance guarantee or insurance in the energy investment contracts will help in developing the ESCO market.** Currently, the ESCOs are functioning only in a few countries. ESCOs performance and reach can be improved once the risk mitigation instruments are introduced.
- The **ESI / EEI models can offer a “package” of standardized interventions that together help build energy efficiency markets by addressing technical and financial risks** and building confidence among key market actors including end users/investors; ESCOs, technology providers; financial institutions; and insurance providers.

Estimated Timeline for Market Scoping in the Philippines

S. N.	Details	Timeline							
		Aug 23	Sept 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24
1.	Finalize Concept Brief								
2.	Final plan for scoping study and completion of home office tasks								
3.	Visit to Philippines (in December 2023 and Feb-March 2024)								
4.	Analysis of information and presentation to DOE and Insurance Commission								
5.	Workshops								
6.	Draft and Final Report								

Key Questions for Discussion



OPEN
DISCUSSION and
Q&A

- Is there an interest from the market in providing financing for energy efficiency ? If yes, why? What are drivers ? If not, what are the challenges?
- Do you see the potential for design and implementation of guarantees, insurance, and other de-risking instruments for energy efficiency ? If yes, which de-risking instrument would be more useful for the Philippines ?
- Which are the potential sectors for implementation of proposed de-risking instrument – SMEs / buildings / industries / others ?
- Do you think the existing ESCOs, risk management providers, banks and other lenders have the capacity to implement the de-risking instruments. If not, what kind of capacity building support is required ?
- What are the key barriers that you envisaged for the introduction of proposed de-risking instrument. How to overcome these barriers ?
- What could be the potential role for DoE, Insurance Commission, international agencies, financing institutions, insurers and re-insurers, and other stakeholders in the implementation ?
- Would you be interested to pilot a de-risking instrument for energy efficiency ?

Thank you

