Driving Investments in Energy Efficiency with Energy Savings Insurance model


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About BASE

BASE is a Swiss not-for-profit foundation and a Specialized Partner of UN Environment.

We develop innovative, actionable financial strategies and market-driven solutions to unlock investment in sustainable energies and to tackle climate change.
The ESI Model around the world
Why is the ESI model needed?

Investments in energy efficient systems...

...have benefits:
- Reduced operational costs
- Higher productivity and competitiveness
- Improved environmental impact

...but face barriers:
- Higher upfront costs
- Lack of trust (among actors, in future energy savings)
- Competing investments opportunities
ESI Europe Project

GOAL: Development of the Energy Savings Insurance (ESI) Model in Italy, Portugal, and Spain

The expected outputs:

- Setting up the mechanisms the model, and capacity building of market stakeholders
- Mobilising private investments in energy efficiency, with special attention to Small and Medium sized Enterprises (SMEs)
- Development of marketing material, an ESI Europe toolkit and video to promote the uptake and replication of the ESI model in other European countries.

Consortium partners:

- BASE: www.energy-base.org (coordinator)
- FIRE: www.fire-italia.org
- BCSD: www.bcsdportugal.org
- energylab: www.energylab.es
CREATING TRUST IN ENERGY SAVINGS

GoSafe with ESI is an integrated solution designed by ESI Europe to help companies from multiple sectors use energy more efficiently with guaranteed savings.

The ESI Europe project has received funding from the European Union’s Horizon 2020 research and innovation programme to roll out the successful ESI Model developed in Latin America and under study in many other countries.

www.esi-europe.org
GoSafe with ESI elements

**GOSAFE WITH ESI CONTRACT**
An agreement between technology provider and client with guaranteed energy savings clause.

**ENERGY SAVINGS INSURANCE**
Coverage of the guaranteed energy saving provided by an insurance for up to 5 years.

**TECHNICAL VALIDATION**
The project and the guaranteed savings are validated by a third-party validation entity that also act as an arbiter in case of disagreement.

**GREEN FINANCING**
Facilitated access to green credit lines with competitive conditions by financial institutions to customers.
How it works

1. PREPARATION PHASE
An energy efficiency technology provider offers a project with guaranteed energy savings.

2. CONTRACT ACTIVATION
A third-party validation entity evaluates the project’s energy savings.
The insurance company covers the validated energy savings, and the contract is activated.

3. IMPLEMENTATION PHASE
The technology provider installs the energy efficient equipment, and the validation entity validates on-site it is according to the contract.
How it works

5. SAVINGS MONITORING
The energy savings are measured and reported by the technology provider via a simple online system where they are checked and can be approved.

4. OPERATION PHASE
The operation of the new equipment results in reduced energy costs and improved productivity.

Maintenance services by the technology provider ensures that the equipment is operating optimally.

6. INSURANCE COVERAGE
In case of disagreements on the savings achieved, the validation entity steps in as an arbiter.

If the savings are not achieved, and the technology provider is not able to respond, the insurance covers the guaranteed savings.
Market Assessment

- Identification of potential market for investments in EE and prioritised sectors

- Initial engagement of stakeholders:
  - sector associations
  - financial institutions
  - technology providers

- Identification of priority technologies:
  - Lighting
  - Motors
  - Air Compressors
  - Boilers
  - Refrigeration
  - HVAC
  - Co-generation
  - PV Panels
  - Solar water heaters
Validation Process

Main characteristics:

- conducted by an independent technical validation entity
- Methodology of General Process and Handbook per technology
- based on Option A – Methodology of the IPMVP® protocol

Contract Activation
- Validation of the EE project and promised savings

Implementation Phase
- Verification and validation of the installed EE project

Savings Monitoring
- 1st year savings validation (optional for following years)

Arbitration
- In case of disagreements between TP and client. Necessary for insurance claims
GoSafe with ESI Contract

Main characteristics:

- Easy-to-understand
- Creates trust
- Future savings guaranteed by the provider
- Technical validation and insurance requirements defined in contract

- Structured on a standard supply, installation and maintenance contract model
- Prepared and adapted to the country regulations and practices
Energy Savings Insurance

- Technology Provider
  - Requests Insurance (policy holder)
  - GoSafe with ESI Contract (guaranteed energy savings)

- Insurance
  - Evaluates the insurance request
  - Energy savings insurance certificate
  - Surety bond coverage of contract commitments on guaranteed energy savings.

- Client
  - Beneficiary of the insurance

- Guarantee and de-risk
- Surety bond type of insurance: three parties involved
- Covers clients in the event promised energy savings are not achieved, and the TP cannot fulfill its commitments
- Equivalent to a bank guarantee
Financing Structure

Main characteristics:

✓ Client as investor and credit taker

✓ Banks mobilise their green credit lines (or create new products)

✓ Links existing supporting financial mechanism (e.g. incentives, credit guarantees, etc.) and the European Green Deal.

✓ Capacity building for financial institutions
Other features

✓ Marketing and promotion:
  ○ Creation and registration of the brand “GoSafe with ESI”
  ○ Digital marketing strategy

✓ Building the pipeline of projects using GoSafe with ESI
  ○ Assisting companies in the process of technical validation, insurance evaluation and access to finance

✓ Long Lasting tools:
  ○ GoSafe with ESI toolkit

✓ Online platform:
  ○ Project process: validations and reporting of savings
  ○ Developed in blockchain
  ○ Increased transparency, trust, traceability and reliability of information
CASE STUDIES: COLOMBIA

Case I – NEIVA PLAZA

- Location: Neiva Huila
- Project: Replacement of boilers for solar thermal system for water heating. Capacity of 600 L/day
- Total Investment: COL$120 M (USD 30k)
- Energy Savings: 70% vs old system.
- Payback: less than 3 years

- Supporting the technology provider in the implementation of the program

ESI program in Colombia:

- +17,500,000 USD investments
- +50 projects in PV, air conditioning, solar thermal and engines

Source: Interamerican Development Bank
https://youtu.be/UBryusgsYco

www.greenfinancelac.org
CASE STUDIES: COLOMBIA

Case II – HOSPITAL UNIVERSITARIO MAYOR - MÉREDI

✓ Location: Bogotá
✓ Project: Replacement of old solar water heating system (30 years old) for a new one. Capacity of 28.800 L/day plus backup system with heat pumps of 15 ton c/u
✓ Total Investment: COL$700 M (USD 200k)
✓ Energy Savings: 46.200 m³ gas/year (COL$ 74 M/year)

✓ Provider selected via tender. Support requested from the final client side (hospital). Support in the validation process of the provider and the project. Support to the hospital and the technology provider

Source: Interamerican Development Bank
https://youtu.be/Ss-ZRh1-HkM
THANK YOU!

www.gosafe-esi.com

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