



ENERGATE Project Overview

4th Regional Training Workshop in Budapest

*Investing in Efficiency: Financing Pathways for Energy –
Efficient Buildings in Hungary and Central and Eastern Europe*

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ENERGATE Project Coordinator, NTUA



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The Challenge

Building side

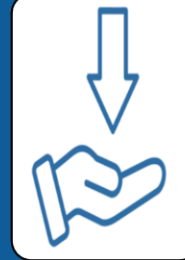
VS

Financial side



Needs

- Access to finance
- Technical expertise
- Simplified processes



Needs

- Reliable data on EE projects
- Large financeable packages
- Project evaluation and risk assessment



Interests

- Energy and cost savings
- Property value enhancement
- Enhanced Comfort and Indoor Environment Quality



Interests

- Investment Security
- Sustainable Investment Opportunities
- Portfolio Diversification



Barriers

- High upfront costs
- Complexity of procedures
- Lack of awareness and information



Barriers

- Perceived Risks
- Lack of Standardised Procedures
- Uncertain or weak economic environment



The ENERGATE Project



<https://energate.epu.ntua.gr/>

**Smart energy
marketplace
for sustainable
investments**

January 2023 – December 2025

The ENERGATE vision

Enable easy, predictable and risk-weighted renovation investments



**Project development of retrofitting
actions**



**Access to sustainable finance
for renovation projects**



**Business matchmaking in a user-
friendly ICT-enabled platform**



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The ENERGATE Consortium

- **Well-balanced in terms of company types, expertise and value chain.**
- **Complementary expertise, from research and industry area:**
 - Research
 - Public sector
 - Consultants
 - ESCO
 - Asset managers
 - IoT, cloud-based service providers
 - International organization
 - HVDC Associations
- **Deliver successful exploitation of project results**



Project
Coordinator

EPU
N · T · U · A

Project Objectives



Project development

A large standardized project development facility for EE project sponsors and owners or private or public entities



Aggregation

An aggregation, due diligence, and cash flow enhancement process, where projects and measures shall be packaged and enhanced appropriately, to be offered to financiers

Feedback loops

Appropriate feedback loops that will measure the impact of the ENERGATE platform, i. e. by means of suitable M&V processes.



Business matchmaking

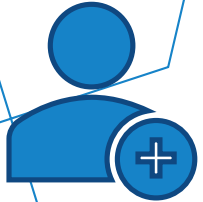
Providing added value services to all of its users, by enabling business matchmaking, quality assessments and user profiling and generally facilitate data and information exchange.



ENERGATE is an energy efficiency marketplace, where some parties would use it to increase the probability of their projects being financed and some parties would be able to source ready-made projects and build portfolios.

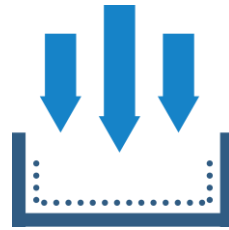
<https://energate.epu.ntua.gr/>

Platform Stages



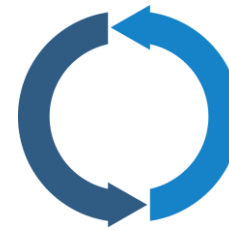
Zero

- User profile
- Registration
- Insertion of user-related data



Fetch

- Collection of structured information about projects
- Ensuring that key technical and commercial information is properly declared



Process

- Identification of similarities between projects and investors KPIs
- Project aggregation and bundling
- Matching opportunities with investors (financial and energy related KPIs)

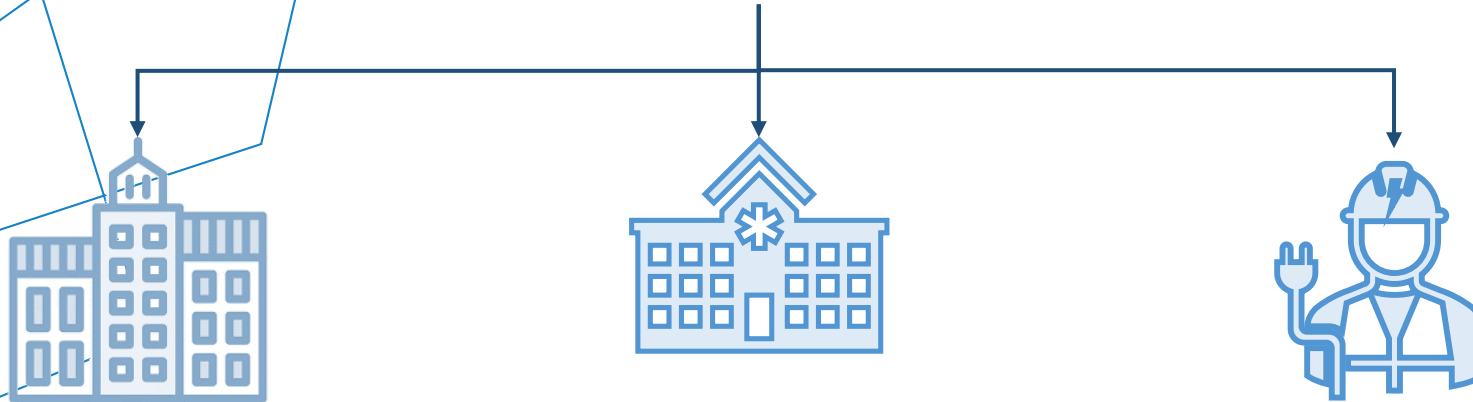


Deliver

- Follow up on projects
- Validation of M&V methodologies
- Definition of relevant KPIs and benchmarks

ENERGATE Target groups

Category A



Building Owner

- ❖ Building manager
- ❖ Property manager
- ❖ Asset manager
- ❖ Real estate agent etc.

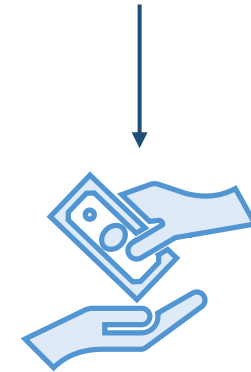
Public Body

- ❖ Municipality
- ❖ Public procurement body
- ❖ City/ Region
- ❖ Commune etc.

Implementor

- ❖ Project developer
- ❖ ESCO
- ❖ Energy consultant
- ❖ Engineering company etc.

Category B



Financier

- ❖ Private financing body
- ❖ Public financing body
- ❖ Investor
- ❖ Financial institution etc.

ENERGATE user categories



Building owners

Private owners, building administrators, building managers, asset managers, property managers, and real estate developers

Use the platform to:

- Create profiles for your buildings
- Select energy efficiency measures to be applied
- Select preferred type of financing
- Search for renovation experts



Financiers

Funds, investors, banks financing bodies, financial institutions

Use the platform to:

- Declare financial and non-financial criteria to be matched with projects
- See the projects ranked according to the declared criteria and preferences
- Access information about the projects
- Provide financial support
- **Banks: promote their financial products**



Implementors

Project developers, ESCOs, architect & design companies, engineering companies, real estate companies with technical teams in-house

Use the platform to:

- Insert buildings or be matched with buildings that need renovation
- Extract well-structured offers with project details
- Aggregate projects
- Find financial support



Public bodies

Municipalities, cities, regions, communities, public procurement bodies

Use the platform to:

- Announce energy efficiency projects to inform Implementors and Financiers about upcoming renovation needs
- Explore EU/national funding for public sector projects
- Notify users of needed support based on project stage and budget
- **Match with Financiers for KPI-defined projects with assigned Implementors**
- **Directly engage Implementors for small-scale, non-tendered projects**

New!

ENERGATE Pilots

Deployment & validation phase to be done by indicative representatives from building and financing side – strategically selected to ensure diversity



Energy Consulting, Design of cost optimal solutions for EE



SME, expertise of asset and project management



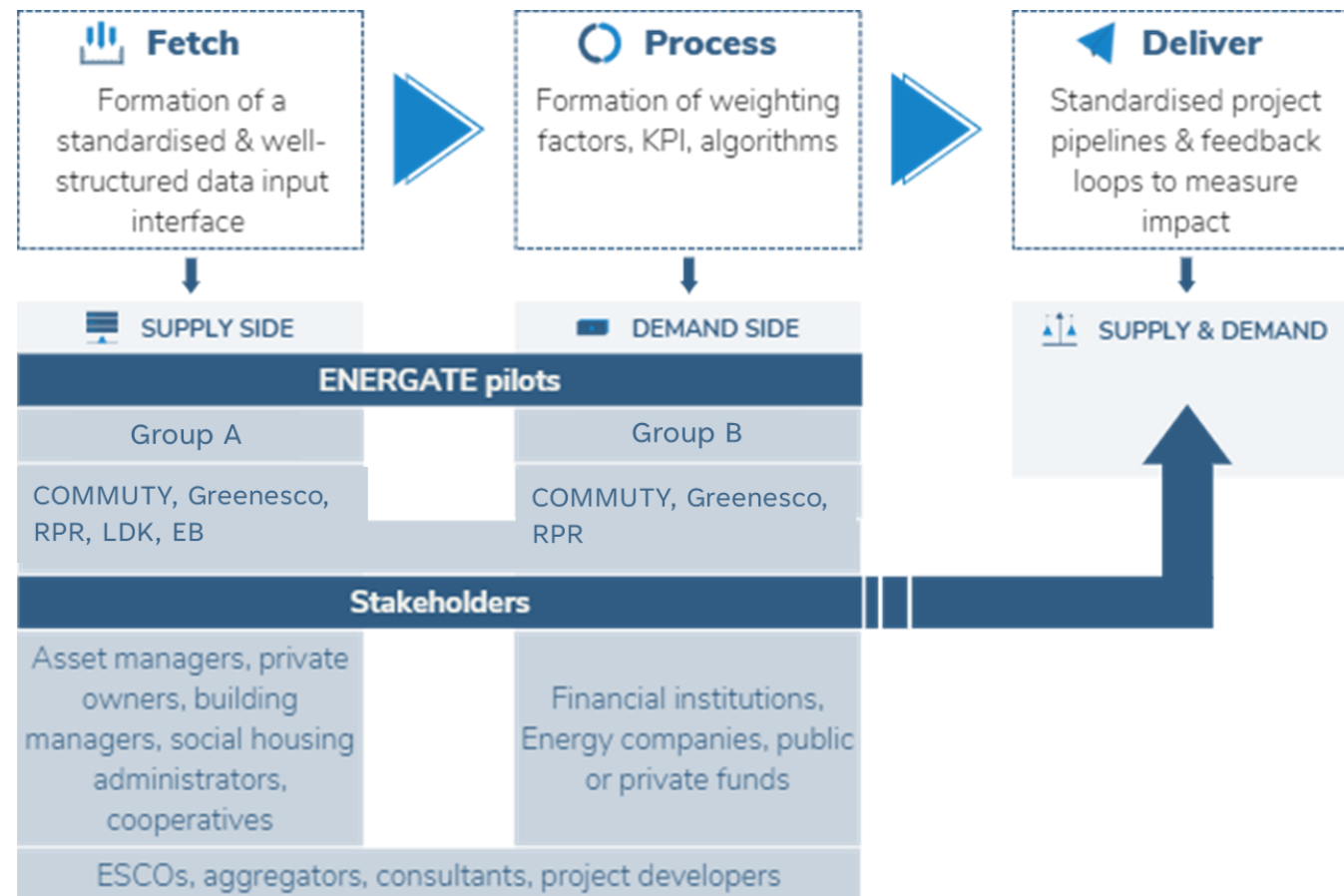
Turns energy-wasteful building into smarter (IoT, algorithms).



Planning socioeconomic development of Riga, identification of projects

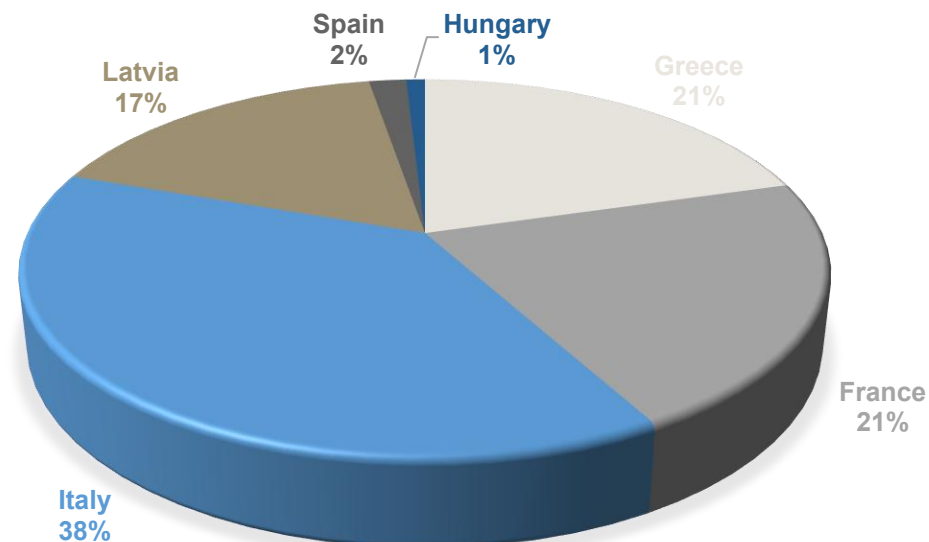


Founded by Attica Finance & PPCR, access to infrastructures & buildings

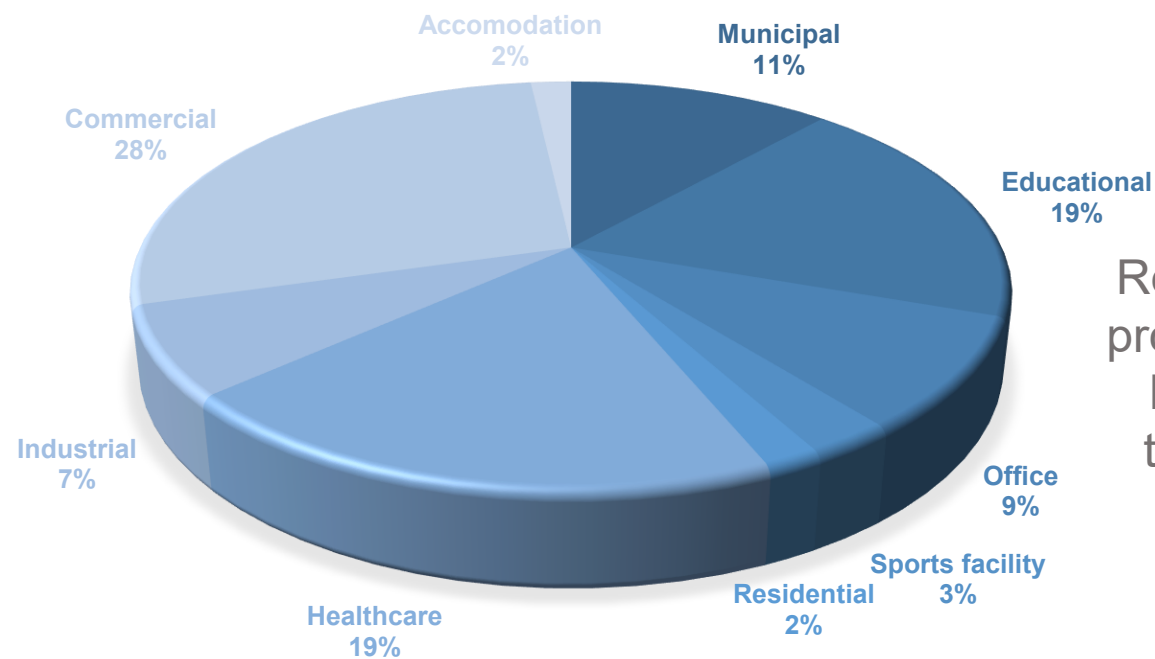


ENERGATE Pilots

Registered projects per country



Registered projects per building typology



Expected Impact

5

Pilot Partners

6

Countries

UP TO
66
GWh/year

Final energy
savings

UP TO
180

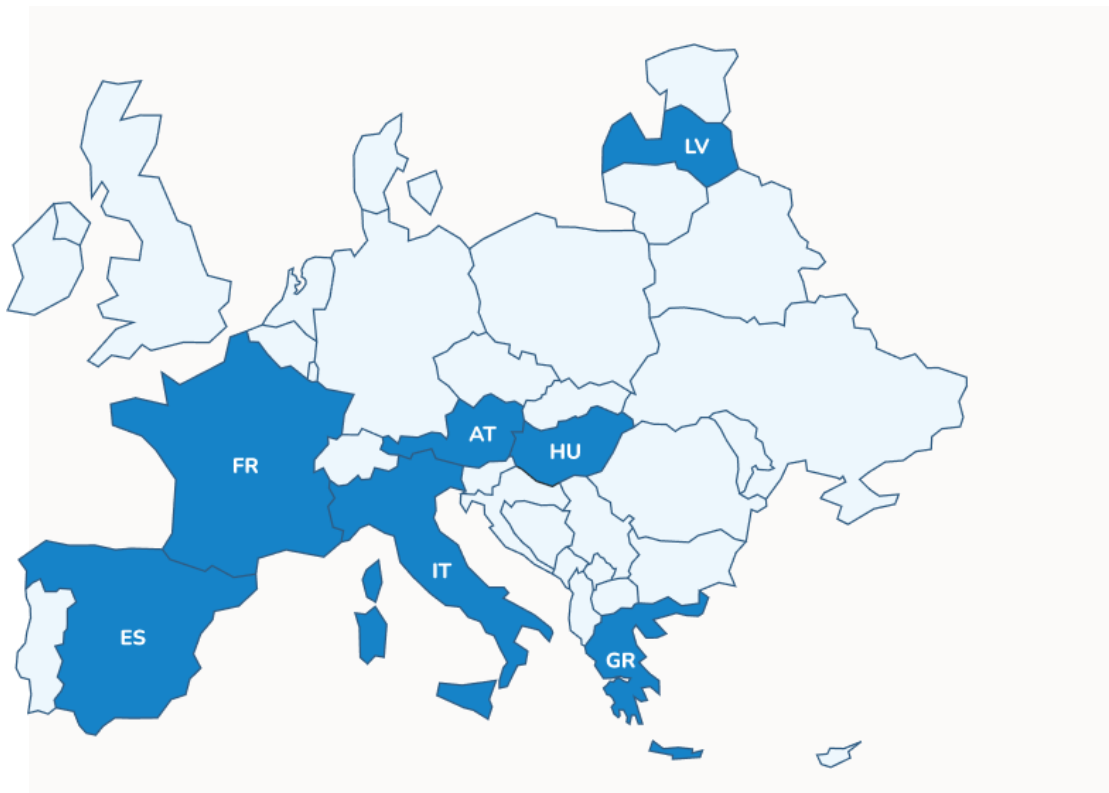
Building Renovation
Projects

UP TO
86
tCO₂eq/year

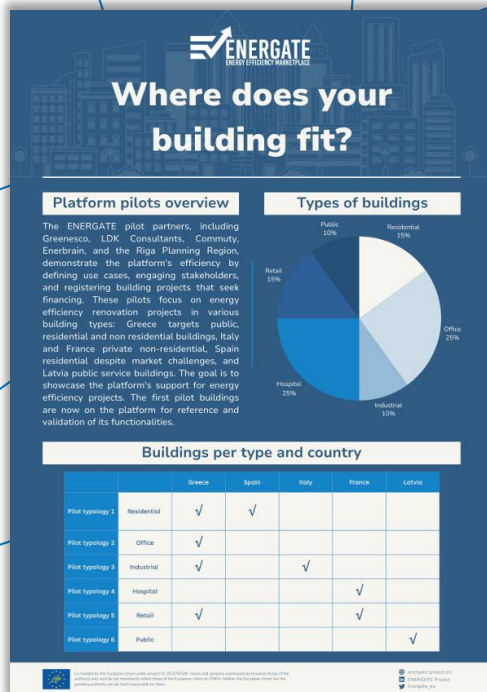
GHG emissions
saved

UP TO
157
Million Euros

Triggered
investments



Explore our Results



What is the ENERGATE Platform?



Discover ENERGATE - Your Energy Efficiency Aggregation Marketplace



ENERGATE Infographic on Planning the Main Pilot Typologies



ENERGATE Video

ENERGATE Use Cases

ENERGATE Factsheet on Financing Typologies for Building Renovation

Explore our Results

The road to Efficient buildings

Key takeaways from the Verde.tec session

Buildings are heavy energy consumers

Limited capacity in the public sector

is a major issue: staff shortages and lack of technical expertise hinder effective energy data management and funding access.

But not only...

Governance of shared properties, where full consensus is not always easy to achieve

Bottlenecks like lack of maturity, coordination and administrative preparedness

Asynchronous rollout of policies, creating competitive imbalances between national markets and uncertainty perceived by investors.

Scattering of data, which is not standardised and thus becomes unusable

Factsheet on ENERGATE Verde.tec International Exhibition Workshop

What do investors need from energy efficiency?

Investors look to the future

Investors prefer to invest today in a low-performing asset that has a plan to improve in the future than to invest in a high-performing asset that is not prepared to survive in the long term.

Lifecycle as a metric

Data models should look at the construction, but also at what will happen to the building materials in the long-term.

Everyone wants efficient buildings

The waste of resources decreases their market value.

Knowledge gaps inflate the price bubble

Quantification of risk and building depreciation is of vital importance – when it is missing, the perceived risk is higher.

Disclosing data is uncomfortable

Investors are not comfortable in disclosing data, mostly because it may affect the market value of their assets and the behaviour of the market itself.

Training needed on ESG

Investors need a simple ESG (Environmental, Social, and Governance) guide and education on the topic.

A three-fold approach to costs:

- Preserving asset value
- Anticipating mandatory measures
- Implementing unplanned mandatory measures

Factsheet on ENERGATE Regional Training Workshop in Madrid

Financing solutions for municipalities through the ENERGATE platform

Local challenge

The region of Riga faces the challenge of renovating many multi-apartment buildings. In Latvia, financing for energy efficiency projects often involves governmental, EU funding, and grants for public bodies. To support these efforts, ENERGATE provides a structure to find financing solutions for these renovations.

The platform

The ENERGATE platform is a match making platform for the building and the financial sector for the different regions in Europe.

EU and other fundings

Municipalities benefit from having information and exploring financial mechanisms offered by the EU or other financial (private or public) organisations.

Barriers

Regulatory barriers make long-term Energy Performance Contracting difficult because it involves complex Private Public Partnerships.

Energy Investment

Public and municipal buildings promote renewable energy technology and investment in Improving Energy Efficiency. ENERGATE helps by opening doors to various financial resources, investigates and reveals the costs and payback period of investments, making easier for investors to make informed decisions.

Interactivity

The ENERGATE platform is intended to be interactive, building on European initiatives, with objectives to expand beyond pilot countries through interactions with stakeholders.

Effectiveness

The platform's effectiveness depends on reducing administrative complexity, accurately maintaining user information, and articulating ownership.

Assistance

The platform intends to engage investors displaying pilot project data and assist municipalities as governmental institution with appropriate financial options and project consolidation.



Insights from the ENERGATE Workshop in Riga

ENERGY EFFICIENCY FINANCING IN PUBLIC BUILDINGS

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Key takeaways from ENERGATE Greek Workshop

Discussion topics on energy-efficient building renovation in Greece

The energy-efficient building renovation sector in Greece faces several challenges and priorities that must be addressed to meet ambitious EU and national targets.

Strengthening financial tools, establishing energy communities, enhancing production capacity, and fostering collaboration between municipalities, the state, and academia are critical steps toward progress.

Municipalities play a key role in energy-saving initiatives but are hindered by bureaucratic obstacles and limitations within their jurisdiction.

Mobilising the mass renovation of energy-vulnerable households is also a priority, emphasising the necessity of a well-organised energy-saving market, the implementation of deep building renovations to address energy poverty, and complementary set of tools, such as energy communities and Energy Performance Contracts.

Innovative financing mechanisms for mobilising the mass renovation of energy-vulnerable households are essential to accelerate energy efficiency efforts in buildings.

National guidelines should be further developed to align with EU goals while also considering Greece's socio-economic conditions.

A significant investment of €25 billion is estimated to upgrade buildings in category E or below by 2035, with another €25 billion allocated for phasing out boilers by 2040.

Eliminating gaps in technical expertise and improving vocational education are crucial for successfully implementing these initiatives.

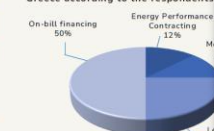
Service Company (ESCO) model and Energy Performance Contracts (EPCs) are vital for financing large-scale renovation. The lack of historical energy data prevents engaging in efficiency projects, as proven energy savings are needed for funding. EPCs offer a model where ESCOs design, finance, and recover costs through financial savings, particularly useful for businesses and public buildings. However, EPCs face barriers such as regulatory complexity, financing difficulties, and a shortage of qualified professionals. These challenges can be mitigated by programmes, simplifying administrative processes, and fostering public-private cooperation.

Current situation and the needs for energy efficiency projects and investments

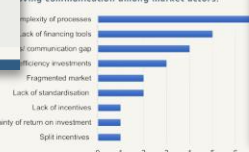
The most common financing options in Greece according to the respondents



The least common financing options in Greece according to the respondents



In Greece include complex procedures, a lack of suitable stakeholders. The ENERGATE platform has streamlined processes, standardising actions, increasing communication among market actors.



Key Outcomes from ENERGATE Workshop in Turin

ESCoS as solution providers for incentive schemes

- Providing financial and technical support tailored to the needs of customers through Energy Performance Contracts (EPCs).
- Providing flexible solutions that advance sustainability goals and encourage data-driven decision-making for energy efficiency and environmental impact.
- Italy's Superbonus revision limits ESCO incentives, but ESCOs remain key players in energy savings & sustainability.

Need for ESCOs consolidation & investment in energy efficiency

Fragmented market: The ESCO sector is fragmented and struggles to attract large-scale investors. Consolidation could help appeal to them.

Market challenges: SMEs & ESCOs face financing barriers, as banks hesitate to fund non-standardised energy projects.

Scaling for finance and collaboration: By joining forces with other companies, the sector could increase market presence and raise more capital.

Aligning regulations: Better EU-national regulation alignment needed to empower ESCOs & reduce inefficiencies.

ENERGATE driving sustainable investments

- Optimised project selection - Standardised criteria, simplifying selection based on returns, technology, and timing.
- Strong ESCO & asset owners partnerships for tailored energy efficiency solutions across regions.
- Scalability & multi-country alignment - Supports expansion across Europe with attractive investment pipeline.

Sustainability & energy efficiency in the face of global population growth

- Population growth and urban demand cause increasing pressure on resources, housing, and infrastructure.
- Over 2 billion people currently live in inadequate living conditions, underscoring the need for sustainable solutions.
- Innovative approach to address the above issues: Focus on integrating sustainability across four pillars: Energy & Ecosystem Resources, Built Environment, Technology, Social Innovation.
- EPBD compliance remains a challenge, especially in Italy—long-term investments in future technologies are essential.
- CO₂-focused incentives & standardised criteria are crucial for sustainable energy progress.

How the ENERGATE Platform ensures flexibility to accommodate the unique needs of its users

- Benchmarking functionality unlocks strategic insights & informed decisions.
- Flexible, modular services with potential for enhanced usability through vertical and geographic features.
- Regional filters for better matching, especially in countries with diverse regulations and market conditions.
- Keyword-based search can improve project selection and connectivity.
- Connecting stakeholders, bridging market fragmentation, creating opportunities for scaling and driving impactful change.

Factsheet on ENERGATE International Workshop in Greece

Factsheet on ENERGATE 3rd Regional Training Workshop in Turin

Factsheet on ENERGATE 2nd Regional Training Workshop in Riga

ENERGATE Brief on 2nd Regional Training Workshop in Riga

THANK YOU

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