

# ROUNDTABLE ON FINANCE FOR ENERGY EFFICIENCY IN GREECE



25  
October  
2018

Athens

Event organised in the frame of the Sustainable Energy Investment Forums funded by the Horizon 2020 programme of the European Union

Table of contents

**Executive Summary**.....2

**Background to the event**.....5

**Introductory plenary**.....6

**Introductory Remarks**..... 6

        Michalis Verriopoulos, Secretary General of energy, Ministry of Environment and Energy ..... 6

        Dimitris Athanasiou, DG ENERGY, European Commission..... 6

        Nikos Mamaloungkas, Vice-Director, Environmental Sector, Ministry of Economy and Development..... 6

        Charoula Apalagaki, Secretary General, Hellenic Banking Association ..... 6

**Topic group 1: Energy Renovation of RESIDENTIAL BUILDINGS** .....7

    Moderator: Christos Tourkolias, CRES .....7

**PadovaFIT - Financing Investment Tool for the retrofitting of housing and service facility buildings in the PADOVA area, Italy**..... 7

        Marco Devetta, Consultant and Trainer, Sogesca .....7

**Latvian Baltic Energy Efficiency Facility (LABEEF)**..... 7

        Nicholas Stancioff, Chairman, LABEEF.....7

**Background** ..... 7

        Key Questions..... 8

**Conclusions**..... 9

**Topic group 2: ENERGY Renovation of public BUILDINGS**..... 11

    Moderator: Vlasios Oikonomou, Institute for European Energy and Climate Policy ..... 11

**Public building retrofit in the Province of Liege, Belgium - RENOWATT Project**..... 11

        Erika Honnay, Director RENOWATT..... 11

**The Energy Retrofit Programme of Public Buildings in Ljubljana** ..... 11

        Alenka Loose, Energy Manager of the City of Ljubljana ..... 11

**Background** ..... 12

        Key Questions..... 12

**Conclusions**..... 13

**Topic group 3: De-risking energy efficiency investments** ..... 15

    Moderator: Nikos Gkonis, Senior Energy Efficiency GIZ ..... 15

**De-risking and financing (incl. mechanisms) energy efficiency projects in commercial buildings**..... 15

        Ioannis Orfanos, Head of Urban Land Institute (Greek Sustainability Council)..... 15

**eQuad platform – Bridging the financial gap between project developers and investors** ..... 15

        Caroline Milne, Director of Communications and Marketing, Joule Assets ..... 15

**Background** ..... 15

        Key Questions..... 16

**Conclusions**..... 17

## EXECUTIVE SUMMARY

The European Commission, in partnership with the Ministry of Environment and Energy of Greece and the UN Environment Finance Initiative, organized a round table in Greece on 25 October 2018 on financing energy efficiency in Greece. The event was attended by 87 experts from Greece and European institutions who are engaged in financing energy efficiency across multiple sectors of the economy. Those represented included national Government, local and regional authorities, the financial sector, project developers and the renovation supply chain.

The objective of the National Roundtable was to initiate a dialogue between key Greek stakeholders on how to improve access to finance for energy efficiency investments, and to identify common objectives and potential improvements to be made in the current policy framework and business practices. The working sessions focused on the energy renovation of residential buildings, the de-risking of energy efficiency investments and the energy renovation of public buildings.

The Roundtable resulted in the following five proposed key actions, to be possibly followed at the follow-up roundtable:

1. A workshop focusing on **strategically selected case studies** on financing energy efficiency projects to be organized in March 2019, most probably as part of the follow-up roundtable, in an attempt to consolidate the available experience, define best practices for successful project financing and implementation, as well as follow up on the key recommendations given by this session.
2. There is a need to **promote energy efficiency projects** in the Greek real estate market, addressing the market's particularities. This will be done by communicating the energy saving potentials among the end users, but also with a particular focus on non-energy benefits (e.g. property values, indoor comfort and overall quality improvements). Energy poverty also needs to be addressed.
3. **One-stop-shop services** are required to facilitate energy renovations to assist in creating simplified and standardized procedures (thereby reducing transaction costs) and to develop commonly accepted methodologies for assessing and calculating energy benefits and non-energy benefits, including the increase in property values, as a result of implementing energy efficiency measures. Pilots on such services should be initiated.
4. The creation of a **specific database** (platform) can assist in further debottlenecking the procedures, providing standardized documents and templates for tenders and other legal procedures, such as contracts, business plan templates and other relevant information and documents describing the benefits of specific energy efficiency measures. Access to specialized training activities for banking officers, as well as the hiring of qualified technical personnel are critical for the fruitful collaboration between stakeholders and the successful support of projects.
5. The creation of a **database including data on end-users** (households, measures implemented and energy consumption) was also proposed. It should be updated on a decentralized basis, i.e. by end-users themselves and other involved parties, while it can be directly linked to other European or international databases (e.g. EEFIG toolkit, DEEP

platform) to enable project aggregation through benchmarking and standard key figures. This will improve risk mitigation and decrease transaction costs through standardization.

The outputs from the three in depth topic groups can be summarized as:

### **Topic Session 1: Energy renovation of residential buildings**

- There is a need to promote the one-stop-shop concept covering all the needed steps for implementing EE measures
- Facilitators need to be engaged in identifying, recruiting and assisting project implementation. Facilitators must have the necessary technical qualifications, as well as communication skills for convincing consumers to take part in the energy renovation programs.
- Stakeholders need to assist in the simplification and standardization of procedures, developing databases or platforms with document templates for energy performance contracts, business plans, legal forms, key performance indicators and other relevant information. One-stop-shop solutions could also provide technical, financial and legal support for a series of issues related to renovation of the building stock
- Particularities, for instance the difficulties arising in implementing projects in regions such as the Greek islands, as well as the existence of numerous unauthorized constructions, were also mentioned, as intrinsic issues of the Greek real estate market.
- There is a clear need to assess the potential role of ESCOs in the residential market.

### **Topic Session 2: Energy renovation of public buildings**

- Municipalities need to be motivated around standardization procedures, one-stop-shop facilities and project aggregation, ideally integrating energy renovation actions in regional and municipal strategic plans.
- Energy Officers must be appointed to each public building to assist in identifying saving opportunities and measures and monitor and verify energy consumption and savings.
- Energy renovation projects are hindered by lack of energy data on buildings. This is mostly due to the fact that many are leased and owned by private individuals.
- Special provisions need to apply for public buildings which are regarded as cultural heritage.

### **Topic Session 3: De-risking energy efficiency investments**

- The further promotion of energy efficiency projects in the Greek real estate market needs to be strategically planned bearing in mind important factors such as the Greek market size, structure and particularities.
- Standardized methodologies need to be developed for assessing / calculating energy benefits and non-energy benefits, including the increase in property values, from the

implementation of energy efficiency measures, in order to improve risk mitigation and decrease costs through standardization.

- The creation of a database is proposed, to enable project aggregation through benchmarking and standard key performance indicators, as well as standardised procedures and standard documents/protocols (possibly connected with EEFIG, DEEP).
- The creation of consortia between ESCOs and energy providers was mentioned as a potential solution to develop mediators who will facilitate the maturing of projects and attract investors.

For further details and background information please refer to the sections below.

## BACKGROUND TO THE EVENT

As part of the "Smart Finance for Smart Buildings" initiative, the European Commission is organising a series of "Sustainable Energy Investment Forums" to enhance the capacity of and co-operation between public and private stakeholders to develop large-scale investment programmes and financing schemes. The SEI Forums will consist of more than 30 events in up to 15 Member States in 2016-2019; information on past and upcoming events can be found on the SEI Forums [webpage](#).

An initial public conference on Financing Energy Efficiency in Greece and Cyprus took place in Athens on 31 May 2018. This event gathered 183 participants from the financial sector, project developers, the renovation supply chain and local and regional energy agencies. The presentations and proceedings from that event can be found [here](#), and make useful background reading in relation to the National Roundtable.

## INTRODUCTORY PLENARY

### Introductory Remarks

#### **Michalis Verriopoulos, Secretary General of energy, Ministry of Environment and Energy**

According to Mr. Verriopoulos, the energy efficiency sector has an enormous potential to contribute to reaching the European Union targets for 2030 and 2050. Residential building renovation rate needs to be kept at over 40,000 homes / year for the next 12 years in order to comply with the EU target. SME's also play a major role in the Greek energy renovation market. For this sector, a new call for applications for energy renovation financing will launch November 2018. The introduction of energy efficiency options, focusing on low-income households, fuel savings and combined actions, is expected for the Greek market in 2019.

#### **Dimitris Athanasiou, DG ENERGY, European Commission**

Mr Athanasiou presented the latest state of play on energy efficiency policy and financing, focusing on the wider benefits from the endorsement of the “energy efficiency first” principle on economic growth, unemployment and environmental protection. The revision of the EU Energy Efficiency Directive is in the last stages of legal processing and will be published soon. Rationalization of article no. 7 is vital for the standardization of energy savings calculations, while project financing is critical in the hope of transforming the available building stock in the market to NZEB class by 2021, whereas if renovations continue with the current rate, in 2050 80% of the building stock will not be energy efficient. Buildings of course are a quite complicated sector, due to the existence of numerous stakeholders and barriers, as well as market failures and vague legal framework.

#### [Presentation](#)

#### **Nikos Mamaloungkas, Vice-Director, Environmental Sector, Ministry of Economy and Development**

According to Mr. Mamaloungkas, public buildings present large financing needs, as they combine enormous operational costs with substantial financing incapability. A total of 170 million € is provided from EU's OPIE program for energy savings in Greece. The three main axes for project implementation are: a) energy renovation of public buildings, b) replacement of oil boilers with natural gas boilers and c) district heating applications, especially in poverty-stricken areas. Another financing mechanism would be energy performance contracting. In all cases, a combination of actions and available tools is needed to debottleneck this sector.

#### **Charoula Apalagaki, Secretary General, Hellenic Banking Association**

Mrs. Apalagaki stressed the banking sector's constant support of the real estate market in Greece. However, the banks are still hesitant in funding small-scale energy efficiency projects, in fear of losing their money in the case of bankruptcy of the clients, especially in the case of low-income households. She insisted on the need to build confidence and trust between all different stakeholders.

## TOPIC GROUP 1: ENERGY RENOVATION OF RESIDENTIAL BUILDINGS

**Moderator: Christos Tourkolias, CRES**

### PadovaFIT - Financing Investment Tool for the retrofitting of housing and service facility buildings in the PADOVA area, Italy

**Marco Devetta, Consultant and Trainer, Sogesca**

[PadovaFIT](#) is a programme initiated by the Municipality of Padova in 2012 aiming at implementing a large-scale housing retrofit programme of energy efficiency and renewable energy sources (RES) measures addressing private households - in particular apartment buildings- and, to a smaller extent, public housing and service facility buildings in the Padova urban area. The retrofit programme is based on the principle of Energy Performance Contracting (EPC).

Mr. Devetta stated that a prerequisite for extensive project implementation is communication of benefits and promotion of public awareness on energy saving potential and benefits. Facilitators can participate at all different stages of project implementation including conducting feasibility study and doing the final validation of energy savings compared to the contract terms. Communication skills are particularly necessary to convince owners to invest in energy renovation projects.

[Presentation](#)

### Latvian Baltic Energy Efficiency Facility (LABEEF)

**Nicholas Stancioff, Chairman, LABEEF**

The Latvian Baltic Energy Efficiency Facility (LABEEF) developed within the SUNShINE project has initiated a promising initiative to foster the development of ESCOs using proceeds from energy savings to de-risk and finance large scale deep renovation in multi-family buildings. This is supported by several technical, economic and financial tools and with various templates and applications (e.g. contracts, protocols, reporting).

A major point made by Mr. Stancioff was that ESCOs could play an important role in maturing projects. ESCO projects may be promoted through combination with public funds and which would enable more favorable interest rates from the banks. Public funds could also consist of an alternative way to provide guarantees.

[Presentation](#)

### Background

The public conference stressed the need to bring all stakeholders together and favor an integrated approach involving knowledge transfer and capacity building, while several speakers mentioned the need to more efficiently involve and empower citizens. The importance to assist cities/public authorities in their roles either as facilitators for energy efficiency investments in the

private sector or be involved in the available financing mechanisms (ELENA and Project Development Assistance programs) was also highlighted.

Moreover, many financial and non-financial barriers affecting the residential sector should be confronted, such as citizens' low awareness of the multiple benefits of energy retrofits, competing household priorities or lack of adequate skills to carry out high quality refurbishment. As a result, the energy renovation process should be made as easy and attractive as possible for all the involved stakeholders in order to mobilize the energy renovation of the residential buildings.

On this background, the working group focused on how to support homeowners in the whole journey of home energy renovation, i.e. identification of the energy efficiency measures, selecting construction companies, supervision of the works, structuring the financing plan, etc., based on the idea that an integrated service (one-stop-shop) can simplify to a large extent the renovation process and thus increase renovation rates.

The working group further focused on the prospects and challenges considering the contribution of the Energy Efficiency Obligation Scheme in the mobilization of the energy efficiency interventions in the residential buildings. Special emphasis was given on the effective cooperation of the various actors (obligated parties, financial institutions and technical associations and actors including ESCOs) so as to ensure the energy renovation of the residential buildings.

Finally, the potential exploitation of alternative financial mechanisms including EPCs was assessed including the analysis of the required regulatory and legislative changes.

Mr. Christos Tourkalias from CRES, Greece, presented the main principles of the Energy Efficiency Obligation Schemes and an overview of existing best practices in EU targeted to the residential sector. Emphasis was given on the design elements and the challenges of the Energy Efficiency Obligation Scheme, which should be taken into consideration from all the involved stakeholders for the effective implementation in Greece until 2030.

## **Key Questions**

### **First session**

- 1.1. What should be the key components of a one-stop-shop service that is best suited to meet the needs of the residential sector in Greece? Which actors need to be involved in a one-stop-shop?
- 1.2. Which legal changes are needed to improve access to finance for residential buildings for both households and the companies?
- 1.3. How can the willingness of householders to borrow for home renovation be improved? What role could municipalities play in increasing awareness of and confidence in the process?
- 1.4. Which kind of capacity building programmes is needed and for which actors?

## Second session

- 1.5. What are the prospects and challenges for fostering the energy renovation through Energy Efficiency Obligation Scheme? How the effective cooperation of the various actors (obligated parties, financial institutions and technical associations and actors) will be ensured? Is it possible to target on energy poverty?
- 1.6. What regulation could foster the further development of green mortgages or other alternative financial schemes including EPCs? Is there any specific Greek regulation to be addressed?

## Conclusions

- Lack of information and awareness, as well as lack of qualified personnel and specialized structures for handling energy efficiency projects, is observed at almost all stakeholders, stressing the need for enhancing the involved personnel's skills and knowledge through training programs.
- More aggressive and effective marketing is required for residential sector projects, focused on the triggered multi-benefits from the materialization of energy efficiency projects, emphasizing on non-energy benefits as an extra selling factor, such as thermal comfort, health and security.
- The development of simple and comprehensive business plans for energy efficiency projects regarding the renovation of residential buildings is vital for the financial institutions and bodies to approve the requested financing.
- The idea of a one-stop-shop service is particularly relevant for the residential sector and especially for pilot projects, in order to provide guidance for the implementation of necessary measures covering various issues such as the conduction of the foreseen measurement, monitoring and verification methods, the compilation of business plans, the preparation and publication of standardized documents and templates and the provision of technical assistance for various emerging legal and financing problems. Public awareness could also be improved through the development of specialized databases with energy efficiency products and interventions, which will be introduced by owners and companies through certified and standardized procedures.
- The appointment of facilitators, who will have both the appropriate technical background and communication skills, is imperative for the effective operation of the one-stop-shop service.
- Energy performance inspectors can act as facilitators in one-stop shop services, providing new roles for the energy performance certificates, or promoting alternative means such as the energy renovation passports.
- The creation of the required trust and the improvement of financing and lending conditions can be achieved through alternative guarantee mechanisms, such as the acceptance of energy performance contracts as guarantee and the integration of the energy efficiency concept and the expected financial benefits additionally to the investor's profile into the procedure for the quantification of the risks from the financial institutions and bodies.
- Provision of tax incentives or deductions is considered an effective policy measure for promoting energy efficiency in households. Special provisions need to be taken in

addressing the Greek market particularities, e.g. solving the problem of unauthorized constructions, or for areas such as the islands. The simplification of administrative and other bureaucratic procedures is essential for the facilitation of energy efficiency investments. Connecting municipal taxes with the energy performance of buildings can be an alternative mechanism capable of mobilizing the renovation of residential buildings.

- The prospects of the energy efficiency obligation scheme are auspicious, while its effectiveness can increase through the combination of the obligation with public funds so as to improve the leverage stimulating hard energy efficiency projects, the adoption of specific regulatory adjustments (public procurement issues and long-term contracts with the customers) and the achievement of satisfactory financing and lending conditions.
- The identification of mature, aggregated energy efficiency projects with short payback period by specific stakeholders, such as municipalities, ESCOs and owners' associations is challenging for the involved parties in order to fulfil their obligation within the energy efficiency obligation scheme.
- The connection of the municipal taxes with the energy performance of the buildings can be considered as an alternative mechanism, which can mobilize the renovation of the residential buildings.

## TOPIC GROUP 2: ENERGY RENOVATION OF PUBLIC BUILDINGS

**Moderator: Vlasis Oikonomou, Institute for European Energy and Climate Policy**

### Public building retrofit in the Province of Liege, Belgium - RENOWATT Project

**Erika Honnay, Director RENOWATT**

The RENOWATT project has served as an exemplary model for replications in terms of innovative financing, and as a one-stop-shop for public building retrofit created by the province of Liege through the regional development agency (GRE-Liege).

[Presentation](#)

### The Energy Retrofit Programme of Public Buildings in Ljubljana

**Alenka Loose, Energy Manager of the City of Ljubljana**

The [Energy Retrofit Programme of Public Buildings](#) in Ljubljana involves more than 350 properties owned or managed by The City of Ljubljana (Slovenia). The retrofit programme has received funding for project development assistance through the ELENA programme (EIB) and has introduced Energy Performance Contracting.

[Presentation](#)

The main part of the following discussion focused on EPC type projects, as they are relevant for public building renovations and other projects (e.g. street lighting). The EPC model, however, is not always sufficient. A bridging of different funding opportunities must be done, as also shown from the Belgian and Slovenian examples. This strategy ensures a wider spectrum of choices and alternative solutions.

The example of PRODESA project was also presented, which launched the idea of commissioning techno-economic analyses for specific buildings and energy retrofits proposed, and afterwards to assess these renovations and categorize them based on their suitability for EPC and their profitability (payback period). Available templates from PRODESA are available for future use. An important aspect which was discussed was the need for project standardization, which can also address the requirements of the bank sector and contribute also in the direction of project pre-screening. Two points were mentioned:

- (1) The standardization must be performed based on the investment risks. For example, the “triple A” approach was described as a possible pathway to describe energy efficiency measures with financing terms.
- (2) Standard project fees must be prepared, which can establish a common understanding between banks and project developers.

## Background

The working group looked into how to increase the renovation rates for public buildings, which is often limited by the capacity of public building owners to identify and implement energy efficiency projects. Energy performance contracting (EPC) could be part of the solution, but the market still needs to be developed and better structured in Greece.

In principle, energy efficiency investments in public buildings share many of the benefits of commercial buildings (size, energy intensity, concentrated ownership, professionalized facilities managers) but face additional challenges of more cumbersome procurement procedures, potential split incentives between different divisions responsible for procurement and for the energy bills, balance sheet restrictions and limitations under public accounting rules.

The session brought together the views from relevant stakeholders (such as Public authorities presenting public funding programs, regional authorities representing the demand side for financing tools, agencies on experiences from the administrative point of view as well as utilities/ESCOs and financing bodies from a market perspective). Insight on the Greek market is the triggering point for realizing the potential and the issues that investors/financiers and public building owners face when they are discussing the bridging of financing (with national, structural, regional funds and third-party financing).

The session further shared experiences from various Greek municipalities and regions/provinces that have already materialized investments, including the challenges they have faced in bridging finance to projects and how they have overcome these.

Possibilities for extrapolating the European comparable experience in the Greek market and how to reduce the risk in these investments was debated.

The positions of both supply and demand of finance was debated and the aim was to identify clear and tailored solutions for bridging the knowledge/risk gap in the Greek market.

## Key Questions

### First Session

- 2.1 What are the challenges faced in the first steps of setting up financing for public buildings from both the building owners and the investors? Which steps would be considered as blueprint to overcome the initial hurdles from practical experiences?
- 2.2 Could public funding be allocated in the form of project development assistance, which has a higher leverage factor than investment grants/public loans? How to improve access to ELENA and H2020 PDA funding?

## Second Session

- 2.3 What are the needs of public building owners in Greece when it comes to supporting them in their energy renovation projects? How could they be assisted? Who could deliver this assistance and how?
- 2.4 What is needed to upscale the market for energy performance contracting, including legislative framework? How can regions and municipalities facilitate through their authorities/policies the EPC/Innovative financing adoption?
- 2.5 What is the minimum level of project aggregation required (in public buildings specific types of interventions) from investors in order to make the investments attractive?
- 2.6 How can access to finance for ESCOs be improved? For example, through mechanisms such as standardisation and forfeiting of EPCs be supported?
- 2.7 What is needed in terms of awareness raising and capacity building for public building owners?

## Conclusions

- Energy Managers are needed to assist on identifying measures and monitor and verify energy consumption and savings in the public buildings. However, most public buildings do not contract such a manager (who can also be an employee to the region or city) and if they do, it is often only on a temporary basis. A new program announced by the Ministry of Energy and Environment will require nomination of Energy managers in public buildings as a prerequisite for receiving funding from public programs.
- Energy renovation projects are hindered by lack of energy data on buildings, as energy consumption records are not kept and/or updated for public buildings. This is mostly due to the fact that many are leased and owned by private individuals and there is also the split incentive issue in the case, where private individuals are hesitant in investing in large size buildings.
- The mapping and registration of public buildings is another issue. For public buildings, there is no record of the owners and in many cases these buildings may be quite old dating before 1950's, making ownership tracking more challenging.
- Apart from the registration issues, and especially for old buildings, issues arise regarding building preservation, risks from short-term renovation contracts, as well as the construction status itself. The guest speakers also identified the problem and its importance but stressed that such a registration procedure may take a great deal of time itself. A solution to this can be to proceed with buildings that are already registered and for which operation and construction data are available in order to carry out an energy retrofit project, while promoting the registration of other municipality buildings.
- Many buildings, especially from the regional governance, are considered as cultural heritage, and the energy renovations of such would be connected with higher risks and would require special terms and provisions (e.g. longer project duration).

- EPCs can be a main vehicle to implement energy efficiency measures in public buildings, but they would need to be based on strict requirements (codes) from the public building owners (in relation to guarantees, payback times etc.) and public procurement tenders should include requirements for high energy efficiency standards and overcoming barriers.
- ESCOs can take over projects with well-defined payback periods, while projects which employ very difficult and complex renovations may be more suited to be funded through other funds (e.g. cohesion funds). EPCs could be even better promoted by combining various forms of financing (thereby creating better conditions and reducing risks).
- Particularly in relation to EPCs, the need for standardization and standard templates was emphasized. This would also include standard procedures and standard catalogues for key measures (with key figures). Banks called for simplified procedures and standards to make energy efficiency projects more understandable and manageable by banks; moreover, they have stressed their interest in participating in such funding processes when the energy efficiency investments are proven in the market in terms of savings, and the investor has already a track record of such investments.
- Political commitment is a prerequisite for the implementation of such projects at least over a four-year course. The role of municipalities and energy agencies is also very important. They should facilitate that project developers have the required experience and a proper track record.
- The role of the Central Union of Municipalities is also very important, and it could play the role of the project aggregator for a group of municipalities. They can also provide/organize support for Project Development Assistance.
- The regions are responsible for managing program. Therefore, they can also incorporate some terms and requirements for complying with certain savings or contract requirements.
- The role of municipalities must be reinforced, and this is also a responsibility for smaller municipalities. Larger municipalities can be intermediaries and train smaller municipalities in attracting financing.

## TOPIC GROUP 3: DE-RISKING ENERGY EFFICIENCY INVESTMENTS

**Moderator: Nikos Gkonis, Senior Energy Efficiency GIZ**

### De-risking and financing (incl. mechanisms) energy efficiency projects in commercial buildings

**Ioannis Orfanos, Head of Urban Land Institute (Greek Sustainability Council)**

Ioannis Orfanos presented challenges and opportunities related to de-risking and financing of energy efficiency projects in commercial buildings, focusing on the Greek market.

A major point by Mr. Orfanos was that, energy efficiency interventions except of stand-alone investments should be also examined in a broader framework of improving the health and wellbeing of commercial buildings, pointing out the holistic added value of such schemes and the importance of the co-benefits of energy efficiency.

[Presentation](#)

### eQuad platform – Bridging the financial gap between project developers and investors

**Caroline Milne, Director of Communications and Marketing, Joule Assets**

[eQuad](#) is a platform to bridge the financial gap between project developers and investors. eQuad significantly lowers upfront due diligence costs for investors by standardizing pre-qualification processes. Funds or investors can grow their investment pipeline from a larger pool of already vetted, insured, and certified opportunities that meet their investment criteria.

Ms. Milne also presented the Investor Confidence project, which was launched in the USA and afterwards expanded in the European market. Ms. Milne stressed that according to statistics only up to 15% of financially viable projects receive funding, while credit worthiness of both the client and the ESCO is critical. Finally, performance insurance can bring security to both sides and can also cover the collateral that usually banks require.

[Presentation](#)

## Background

The topic group focused on how energy efficiency investments are viewed from different stakeholders' perspective and in this context whether energy efficiency investments can be deployed at the necessary scale and become a real case in the Greek market. Particularly focus was given to explore whether and how the common de-risking mechanisms of such investments can succeed in boosting energy efficiency through sustainable retrofits in commercial buildings and if the particularities of Greek real estate market can be faced adequately. What are the actual

benefits of investing in the energy retrofit market, which are the main stakeholders involved and how can they be supported?

Under current market conditions energy efficiency investments are characterized by a certain level of risk due to their nature and are not sufficiently attractive for investors. The small size of many such projects, the lack of standardization as well as the split incentive phenomenon are among the factors behind this situation. Banks often make loan agreements based on the credit status of their clients or the property value whereas the benefits arising from the energy efficiency improvements are often not taken into account. The Energy Efficiency Financial Institutions Group (EEFIG) published in 2015 a [report](#), highlighting among others the following problems:

(1) Lack of evidence on the performance of energy efficiency investments makes the benefits and the financial risk harder to assess.

(2) Lack of commonly agreed procedures and standards for energy efficiency investment underwriting increase transaction costs.

The Public Conference included presentations giving an overview of the work carried out to standardise energy efficiency projects under the EEFIG de-risking products, the [Underwriting Toolkit](#) and [DEEP](#).

The EEFIG Underwriting Toolkit provides guidance to financial institutions (and to other interested stakeholders) on how to assess the risks and benefits associated to energy efficiency investments, bringing a shared language in evaluating investments and is helping to create projects that are better aligned to need of financial institutions. In order to address the lack of data available, the European Commission, in collaboration with EEFIG, has developed [The De-risking Energy Efficiency Platform](#) (DEEP). DEEP is an open source database for energy efficiency investment performance monitoring and benchmarking, based on evidence from implemented projects.

## Key Questions

### First session

- 3.1 Who can be described as Real Estate Investors in the Greek market? How important is energy efficiency of buildings to these investors? Can they expect realistic benefits?
- 3.2 What is the added value that energy efficiency can offer in commercial buildings and how can it be monetized by asset evaluators?
- 3.3 How important are the energy efficiency characteristics of buildings to tenants? What are the terms usually posed by them before engaging in commercial buildings' lease agreements? Do energy efficient buildings have better market resilience?
- 3.4 What are the obstacles faced by small commercial building owners who cannot be described as investors? What is their motivation to upgrade the buildings?
- 3.5 Property owners have weak incentives to upgrade their assets, since they are not the direct users, while tenants also have insufficient incentives as they are not property owners (split

incentive). Which are the potential solutions to this presumably unresolvable situation? How can the state and the legislative framework assist in resolving this issue?

- 3.6 Benchmarking is a valuable tool for understanding the performance of assets and portfolios. What available data can be shared through mechanisms such as the EEFIG DEEP database or others (RICS, ULI or GRESB)? How can available databases be utilized by stakeholders to promote the development of the energy efficiency market in commercial buildings?
- 3.7 At asset level, which critical data must be recorded and how can data collection help the realization of energy efficiency investments?
- 3.8 Which is the relationship between sustainability, wellbeing and energy efficiency and how are they measured and monitored at asset and portfolio level? Considering the existing real estate market, which are the stakeholders targeted by existing building certifications (e.g. LEED, BREEAM, WELL)? Could these apply to a wider range of property owners? Is there added value to this procedure, and in which sectors is it located (workers' productivity, commercial value)?

## Second session

- 3.9 Which are the main obstacles discouraging financial institutions from supporting energy efficiency investments?
- 3.10 Are there actual Energy Performance Contracting examples? Can ESCOs solely undertake the risk of energy efficiency projects? Should they be focusing mainly on public projects?
- 3.11 Could Facility Management companies identify intervention opportunities targeting at raising the energy efficiency of buildings? How could they encourage such actions as intermediates between owners and tenants? Which other stakeholders could function as small-scale project aggregators (investment boards, innovative sustainability groups)?
- 3.12 How can the EEFIG underwriting toolkit best be used within Greece? What kind of support is needed to encourage its public dissemination and adoption? Which institutions and individuals could be key advocates?
- 3.13 How can the new Infrastructure fund support energy efficiency investments?
- 3.14 Which are the most important challenges for the growth of the Greek energy efficiency market and why has the participation in such kind of projects been limited until now?

## Conclusions

- The discussion concluded a clear connection between the energy performance of buildings and the market value of properties. However, the absence of this aspect from the valuation standards was highlighted. Thus, the need for a common methodology for the monetization of this impact was pointed out. The same barrier exists also for various co-benefits and macroeconomic benefits of energy efficiency interventions (environmental, health and wellbeing, productivity etc.) which at the end could demonstrate the cost effectiveness of energy efficiency projects.

- The Greek real estate market is quite different from the average EU market, and this particularly has to be considered when designing mechanisms for de-risking investments and particularities related to investors.
- There are no flexible private funds that can invest in energy efficiency projects in the Greek real estate market. Properties are fractured among numerous small owners, and it is difficult to promote energy savings and their associated benefits in this market.
- As for the split incentives issue, although there are indicative solutions in bibliography, in terms of legislative frameworks and financing schemes, for the Greek market this phenomenon seems to be high importance obstacle, as the legislative provisions for overcoming it are quite limited.
- The non-energy co- benefits of energy efficiency projects need to be highlighted. However, they can be very difficult to assess, both on the part of real estate evaluators and those assessing energy efficiency investments. These non-energy benefits could be very important both with regard to social aspects of projects and the financial aspect of the projects.
- Energy efficiency actions are usually a part of renovation projects and they are not isolated. It is important that the relevant instruments support this “double framework” without creating additional problems.
- Banks are eager to finance energy efficiency projects but are looking for mature projects. It was mentioned that the development of project guidelines on technical, regulatory and legal issues etc., and preferably on state level, would help the maturation of projects and would be useful tools for the banks to more concisely manage and understand energy efficiency projects (de-risking mechanism). The guideline issued on street lighting was mentioned as a good example.
- The energy efficiency potential and the related cost saving potential seems to be unknown for the most owners and users of buildings, as its quite technical for being understandable from their side. Existing databases such as DEEP, which potential could facilitate this lack, seems to be unknown from the citizens.
- It was proposed to create a database enabling aggregation of smaller projects through benchmarking and standardized calculation of energy savings potential.
- Energy audits could play a crucial role for linking the investors with clients. The outcomes of the energy audits will bring in light an unexploited energy efficiency potential, creating a strong database of mature projects. To this end energy audits need to be further promoted in all levels (non-obligated parties). The newly published electronic platform for energy audits is viewed as a step in the right direction, as it is very user-friendly.
- Regarding energy performance contracting, the potential of creating consortia between ESCOs and energy providers in the framework of Energy Efficiency Obligation Scheme was proposed as a solution to boost market growth and project maturity.