



CORDIS Results Pack on private finance for energy efficiency

A thematic collection of innovative EU-funded research results

January 2022

New solutions for funding Europe's energy transition



Research and
Innovation

SECOND
EDITION

Contents

3

Reducing the risk and capital associated with deep energy efficiency renovations

5

Real estate decarbonisation – Assess, manage & avoid carbon risk through the Carbon Risk Real Estate Monitor

7

A data portal for standardised energy efficiency mortgages

10

Country-specific financing mechanisms for viable energy efficiency investments

12

Reduced risk for SMEs contemplating energy efficiency

14

Helping homeowners invest in sustainable renovation

16

More predictable outcomes for energy efficiency projects

18

A EUR 150 million pipeline bringing liquidity to energy efficiency investments

20

Quality assurance for successful energy efficiency services

22

Putting the cost of energy efficiency renovations on the meter

24

Green mortgages to boost the demand for energy-efficient homes

26

Innovative financial instrument can accelerate the deep renovation of Latvia's Soviet-era buildings

28

Innovative financing solution for mid-scale energy efficiency / renewable energy investments in industry

Editorial

New solutions for funding Europe's energy transition

Making European societies and economies more energy-efficient will play a key role in allowing the EU to meet its climate ambitions, create growth and improve well-being, particularly to meet the goal of making the EU carbon-neutral by 2050. Whilst energy efficiency has not always been considered as an attractive investment by the financial sector in the past, this updated CORDIS Results Pack features 13 EU-funded projects that have set a new dynamic for accelerating and upscaling private financing of energy efficiency investments across the EU, as well as making such investments much more attractive to investors.

Whilst the EU has increased the amount of public funds available for energy efficiency, there is a need to further unlock private financing. In order to meet the EU's 2030 climate and energy targets, such as cutting carbon emissions by 40% from 1990 levels and achieving an energy efficiency target of 32.5%, all as a part of the ambitious European Green Deal, an additional EUR 260 billion per year will be necessary over the period 2021-2030. Much of that finance will need to come from the private sector.

Overcoming the financial impediments for energy efficiency investment

Energy efficiency investments often come with high transaction costs because projects are small and not sufficiently aggregated to appeal to investors. Energy efficiency investments such as deep retrofits of buildings tend to have relatively long paybacks, and investors are wary that the savings achieved will not justify the cost of the energy retrofit. However, there is growing evidence that the risks associated with energy efficiency investments are lower than the level perceived by markets. The challenge is to reassure investors that energy efficiency projects are overall a safe and sound business case, and help banks and other financial organisations understand and easily assess any and all risks and opportunities associated with a particular project.

There is an acute need for technical and legal standardisation at all steps of the investment value chain to simplify transactions and increase the confidence of financial institutions. The lack of standardisation of projects prevents securitisation of energy efficiency assets (loans or equity) so that financial institutions are not able to refinance their debt on the capital markets.

Typically, the cost of energy efficiency investments is expected to be recouped exclusively through the reduction in energy bills, but there is growing evidence that non-energy benefits play a key role in the decision to invest in energy efficiency. These include better comfort and indoor health parameters, increased building value, lower probability of mortgage default, and lower tenant turnover or vacancy rates. Thus there are tangible financial and economic carrots to entice financial institutions to invest more in energy efficiency.

Moreover, there is a need to set up innovative financing schemes at regional or national level in order to create the conditions for adequate supply of private finance for energy efficiency investments. EU- or nationally-funded technical assistance programmes such as EIB-ELENA and H2020/LIFE CET PDA support the creation of these, aiming to progressively maximise the leverage ratio of public funds to private finance.

Finally, finance providers, consumers, and public and private bodies must talk to each other to find workable solutions to scale up energy efficiency finance. The EU facilitates such dialogue through Sustainable Energy Investment Forums and the Energy Efficiency Financial Institutions Group (EEFIG).

Showcasing 13 projects leading the way

This updated CORDIS Results Pack specifically introduces you to 13 EU-funded projects that have been developing tools and solutions that will accelerate the financing of energy efficiency investments, as well as offering concrete evidence that these extensively tested solutions are ready to be further scaled up.

Reducing the risk and capital associated with deep energy efficiency renovations

In 2019, the carbon footprint associated with building operations such as heating increased to the highest levels ever recorded. An innovative EU-funded financing scheme has now put capital-intensive, state-of-the-art energy efficiency within reach.



© Tomas Mikl, Shutterstock

Although the energy consumption of the global building sector has remained steady, CO₂ emissions have increased dramatically, accounting for 28 % of global energy-related emissions in 2019. Enhancing the energy efficiency of buildings is imperative to bring this figure down.

New building regulations are a tempting target, but around 85 % of Europe's buildings were constructed before 2001, and most of these will still be here in 2050. Renovation is critical to meeting sustainability goals. The EU-funded Accelerate SUNSHINE (Save your bUilding by SavINg Energy.

Begin to move more quickly) project supported renovation efforts of small- and medium-sized municipalities.

Paying it forward

Standard renovations achieve 20-30 % energy savings, whereas deep renovation using state-of-the-art technologies can slash building energy consumption by more than 75 %. However, the required capital investments for this are large, and the payback period is long. Renovators need a way to pay for this deep renovation work today.

Energy service companies (ESCOs) are well-positioned to play a pivotal role. These companies provide both energy services and financing for operations. Their energy performance contracting (EPC) with renovators guarantees energy savings and/or the same energy service at a lower cost. If ESCOs are short on cash, refinancing is achieved by selling future cash flows or receivables to banks in a forfaiting transaction.

In emerging EPC markets like Latvia, banks are hesitant to get on board. Accelerate SUNSHINE's EPC scheme gave ESCOs another option: refinancing ESCO contracts by 'selling' projected (guaranteed) energy savings to the Latvian Building Energy Efficiency Facility (LABEEF) established for this purpose. "LABEEF then takes over all further risks and liabilities of building owners," explains Marika Roša from Riga Technical University and project coordinator.

Identifying barriers

This not only minimises the capital investment and risks for customers. It ensures operation and maintenance of investments and decreased energy consumption for the entire contract duration (up to 20 years in some cases). Its standardised approach to contracts and procedures also ensures stakeholders have clear responsibilities and building renovation works are of higher quality.

Accelerate SUNSHINE ran into several obstacles related to the existing regulatory framework and a lack of consistency among municipalities that hindered planned shared project management and municipal partnerships.

Despite facing challenges from political and economic barriers, Accelerate SUNSHINE was able to precipitate EUR 20.1 million of energy-related investments for the renovation of more than 100 000 m² of public and multifamily buildings. This secured energy savings of between 30 % and 60 %, and a total annual energy consumption reduction of 8.6 GWh.

The project has made significant contributions to the understanding of how to finance energy efficiency investments in Latvia, beyond the predominant approach of using public grants. In addition, the forfaiting module of the SUNSHINE platform has been created in such a way that it can be used by other countries, allowing for scaling up the scheme across Europe.

"We have shown that addressing building renovation through innovative financing works in Latvia," says Roša. "The City of Riga has acknowledged our work and committed to including energy efficiency guarantees in future renovations and new construction." Nonetheless, she adds that without mandatory inclusion of energy efficiency guarantees or EPC for the renovation of public infrastructure, a functional ESCO market will remain elusive.

PROJECT

Accelerate SUNSHINE – Save your building by Saving Energy. Begin to move more quickly

COORDINATED BY

Riga Technical University in Latvia

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/754080

PROJECT WEBSITE

sharex.lv



We have shown that addressing building renovation through innovative financing works in Latvia.



Real estate decarbonisation – Assess, manage & avoid carbon risk through the Carbon Risk Real Estate Monitor

Aiming to keep global warming under 2 °C by 2050 is a worthy aim but knowing how to get there would be even better. The CRREM project provides country- and asset-type specific decarbonisation pathways to real estate owners and stakeholders to assess, manage and avoid carbon risk.

It's no secret that many strategic sectors are far from on track to meeting the global warming control targets set under the Paris Agreement. The European real estate sector is one of them. Refurbishment rates are far too low, and energy consumption way too high.

Stakeholders involved in CRREM (Carbon Risk Real Estate Monitor – Framework for science-based decarbonisation pathways, toolkit to identify stranded assets and push sustainable investments) believe this gap is due in part to the lack of specific targets for this market. As Sven Bienert,



head of the IRE|BS Competence Center for Sustainable Real Estate at the University of Regensburg, explains: "Real estate investors and other market actors never received guidance regarding the 'fair share' of CO₂ emissions of their properties. Besides, tools and software for strategic planning and the identification of climate risks were missing."

CRREM has been answering this need by defining decarbonisation pathways to a 1.5 °C or 2 °C scenario, specific to each country and sub-sector (offices, hotels, retail, etc.). Each trajectory starts from current carbon and energy intensities and provides a clear decarbonisation pathway until 2050.

"Besides the possibility for investors to set their own targets based on these pathways, we have developed a tool that can benchmark property-specific consumption data with

these targets. Investors now have software that can effectively bring more transparency to the transition risk. They can also calculate what we call the stranding risk – the level of emissions beyond which the property exceeds its fair share of emissions

based on the trajectories," says Bienert. What is perhaps most appealing to stakeholders is the fact that results are also presented in monetary terms.

Feeding this new CRREM software with reliable data was a challenging task in a sector where market data is difficult to access and the amount of required data was enormous. Property stock, current emission levels and future development of emission factors all had to be factored in. Yet, the team succeeded, and their software is now fully operational.

A reference tool for future investments

Investors have been using CRREM extensively to manage their carbon risk, in what Bienert says is a "very strong uptake from industry." The team will therefore be focusing on dissemination

and further community building until the scheduled end of the project in January 2021.

Follow-up funding has already been secured, and a new project is now in its final phase. "We have major investors such as GPIF in Japan and Ivanhoé Cambridge in Canada using our results. Our research even made some noise in the US, where the American Real Estate Society (ARES) granted the accolade of 'Best European Research Paper' to CRREM's research paper," Bienert notes.

In the long run, the team is confident that their tool will trigger more proactive investments in energy efficiency. It should also be useful to differentiate between good and bad assets and properties when awarding green premiums or discounts.

Focusing on the Assets under Management, those owned and/or managed by the testers and users are valued at over EUR 300 billion, with over 5 million m² of lettable space analysed via the tool. There is no doubt that its impact over the coming years will be substantial.

NOTE: This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.

PROJECT

CRREM – Carbon Risk Real Estate Monitor – Framework for science-based decarbonisation pathways, toolkit to identify stranded assets and push sustainable investments

COORDINATED BY

Institute for Real Estate Economics (IÖ) in Austria

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/785058

PROJECT WEBSITE

crrem.eu



A data portal for standardised energy efficiency mortgages

Energy efficiency projects are doomed to fail without financial support, and the latter cannot be obtained without reliable data for risk analysis. The EeDaPP project, which is part of the wider Energy Efficient Mortgages Initiative, provides a market-led protocol to record such data and make it available to stakeholders.



Green bonds have been on a roll lately. In 2018, issuance of these fixed income securities – which were created to finance climate and environmental projects – reached a value of EUR 40 billion

in Europe. But it's not all roses: there is no uniform green bond standard within the EU, even though such a standard is crucial to increase the proportion of green lending and funding.



This is the first time a group of major banks and mortgage lenders, data providers, companies and organisations from the building and energy industries have proactively come together to discuss private financing of energy efficiency.

Thanks to work under the Energy Efficient Mortgages Initiative (EEMI), which comprises the EeMaPP and EeDaPP (Energy efficiency Data Protocol and Portal) projects, such a standard could soon become a reality. “We are working on an Energy Efficient Mortgage (EEM) Label to stimulate market development. It will provide access to relevant, transparent and standardised mortgage information for market participants via a consistent reporting template. Ultimately, the Label will enable the securitisation and issuance of green bonds and raise support for and confidence in EEMs,” says project coordinator Luca Bertalot.

Bertalot is the Secretary General of the European Mortgage Federation – European Covered Bond Council (EMF-ECBC), which has a long track record in bond labelling. In 2012 the organisation created the Covered Bond Label – a quality Label responding to market-wide requests for improved standards and increased transparency in the covered bond market. EeDaPP draws on the success of this label for the specific context of energy efficiency.

Bridging the renovation gap

“This is the first time a group of major banks and mortgage lenders, data providers, companies and organisations from the building and energy industries have proactively come together to discuss private financing of energy efficiency,” Bertalot notes.

The idea is to bridge the renovation gap with a private financing initiative acting complementarily to public funds, tax incentives and utility rebates. EEMI thereby supports the EU in meeting its energy savings targets while at the same time bringing the Capital Markets Union on board with the energy efficiency agenda.

“A key innovation in EeDaPP is the design and delivery of a market-led protocol. This protocol enables the large-scale recording of data related to EEM assets (loan-by-loan) via a standardised reporting template. The data is eventually accessed through a centralised portal which continuously tracks the performance of EEM assets. This will facilitate the tagging of such assets for the purposes of energy-efficient bond issuance,” Bertalot explains.

The idea of the future portal is that it will have two main components: the staging area, in which the data is stored and made available for analysis, and the business intelligence tool in which the data is aggregated and prepared for the various analysis objectives of user groups.

Thanks to the technical and financial datasets gathered under the project, stakeholders will be able to link the energy-efficient features of a building with its value and loan performance. This creates a better understanding of the impact of energy efficiency on borrowers' probability of default (PD) and on loss given default (LGD). This will identify and demonstrate that EEM assets can be identified for preferential capital treatment based on large-scale standardised data and correlation analysis.

Another major project achievement is the establishment of a definition of EEM. Under this definition, EEMs are intended to finance the purchase/construction and/or renovation of both residential and commercial buildings. They focus on those buildings where energy performance meets or exceeds relevant market best practice standards in line with current EU legislative requirements and/or efforts to improve energy performance by at least 30 %.

The EEMI currently has 107 pilot scheme participants, 59 pilot banks and 48 other supporting organisations. A follow-up project for EeMaPP and EeDaPP will be kicked off

in September 2020. It will build upon preceding efforts to develop EEMs in Europe and beyond.

NOTE: *This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.*

PROJECT

EeDaPP – Energy efficiency Data Protocol and Portal

COORDINATED BY

Covered Bond & Mortgage Council in Belgium

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/784979

PROJECT WEBSITE

energyefficientmortgages.eu



Country-specific financing mechanisms for viable energy efficiency investments

The diversity of obstacles that prevent the financing of energy efficiency projects across Europe calls for a country-specific approach. The E-FIX project has devised a set of solutions that are already projected to help save a total of 54 GWh of energy per year across six countries in central and eastern Europe and in the Caucasus region.

The nature of barriers to energy efficiency investments tends to vary from one country to another. Some nations simply benefit from low fossil fuel prices, making refits uneconomical,

while others lack the legal and regulatory frameworks, end user awareness, or expertise in energy efficiency financing to make changes happen.



© Africa Studio, Shutterstock

The EU-funded E-FIX project was conceived to respond to these differences. The consortium guided stakeholders in finding suitable, innovative financing mechanisms in Armenia, Austria, Croatia, Czechia, Georgia and Poland. "We identified the most relevant mechanisms – leasing, energy performance contracting or crowdfunding – and conducted pilot projects in each country," says Andreas Karner, team leader energy & environment at ConPlusUltra and coordinator of E-FIX.

In each country, the project consortium pursued three objectives. First, they aimed to have a continued project pipeline beyond 2020. Then, they established Energy Finance Competence Centres, four of which are still in the process of being launched. Those centres have the know-how in energy efficiency financing and will ensure the continuity of the project over the coming

years. Finally, the team has devised national action plans to raise the profile of energy efficiency and the different financing mechanisms available.

In the case of Georgia, for example, the consortium tested energy efficiency leasing. "Our local partner

has developed a comprehensive energy-efficient equipment leasing mechanism. It's an all-in-one package making energy efficiency and renewable equipment accessible to the private sector," Karner explains. Leasing platforms in Georgia are becoming more professional and are starting to provide a larger variety of funding possibilities as a result.

Before E-FIX, leasing had never been considered for energy projects in Georgia. The team identified several types of relevant pilot projects, covering construction machinery and equipment, agriculture machinery, road construction machinery, mobile production lines, transportation machinery and renewable energy technologies. In total, the country has set up 53 pilot projects, with a total investment value of EUR 6 million.

Going beyond project lifetime

In all countries, the project team invited stakeholders to reflect together on the situation of the local energy efficiency market.

Together they identified challenges, gaps, obstacles and opportunities, and produced country-specific reports.

"All in all, I would say that the most important outcomes are the development of training material as well as the training of ambassadors who will ensure that know-how is strengthened at country level," adds Karner. The project's training modules cover didactics, crowdfunding, leasing, energy performance contracting and project finance.

Projects carried out in the six partner countries ranged from a refurbishment at the Vienna International School financed through crowdfunding to the replacement of heating devices in the Pokrzywnica municipality through energy performance contracting in Poland. A total of 78 projects were implemented, totalling an investment of EUR 31 million, and offering energy savings of 54.09 GWh/year.

The team has also devised country-level action plans and a European roadmap on energy efficiency financing. In the long run, Karner hopes that the use of innovative financing for energy efficiency projects will grow in popularity. "Our project enables new policies, prepares the ground for investments, builds capacities and skills, and triggers energy savings and renewable energy production," he concludes.

PROJECT

E-FIX – Developing and transferring an innovative Energy Financing miX in order to activate private sector finance for increased investments in sustainable energy projects

COORDINATED BY

ConPlusUltra in Austria

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/785081

PROJECT WEBSITE

energyfinancing.eu



Reduced risk for SMEs contemplating energy efficiency

The ESI Europe project brings about a turnkey solution for SMEs wary of the risk of investing in energy efficiency. Its approach has been presented to relevant SMEs in Italy, Portugal and Spain. It is already supported by major insurance companies and financial institutions.



© Freedomz, Shutterstock

SMEs may be a motor of innovation, but energy efficiency remains somewhat of a black hole for them. Once the decision to invest is made, there is no turning back – and very little certainty as to what awaits at the end of the process. Will the huge spending eventually pay off? Can the promises of energy service companies (ESCOs) related to savings really be trusted?

So far, the easiest and safest choice in the face of these questions has mostly been status quo. As Daniel Magallon, managing director at the Basel Agency for Sustainable Energy (BASE) explains: "SMEs normally prioritise investments closer to their core business. By doing so, they better control the risks and returns, and avoid squandering already limited resources."

As coordinator of the ESI Europe (Driving Investment in Energy Efficiency through Energy Savings Insurance in Europe) project, Magallon believes in energy savings insurance (ESI) as a solution to providing SMEs with more guarantees of returns on energy efficiency investments. "ESI reduces risk and ensures energy savings. The model has four main components: A customer-provider contract template; an ESI offered by local insurance companies; a technical opinion on the project carried out by an independent technical validator (SGS); and access to different sources of competitive financing from local financial institutions," he adds.

Besides this unique combination of mechanisms, ESI's main innovation lies in its so-called Management Information System (MIS). This web-based platform reports on and monitors the performance of each project. It also uses blockchain technology to guarantee the immutability and security of operations.

The MIS essentially provides a platform to facilitate the exchange of information between stakeholders. "The solution provider elaborates and uploads performance reports to the platform, after which the customer approves or rejects the reports. The validation entity manages and verifies the reports when needed, and the insurance and financial institutions have visibility of the performance of the projects they support," Magallon notes.

Attracting SMEs

The purpose of ESI Europe was to bring this combination of ESI solutions to Europe, with a focus on Italy, Portugal and Spain. Various collaboration agreements have already been reached with the different actors playing an important role in the ESI model.

"We have engaged a total of six reputed insurance companies in the three countries we are operating in. This is an important outcome, since the ESI model is essentially meant to bring end user confidence in energy efficiency. We also enlisted five financial institutions and have been working closely with all these actors on relevant aspects of the ESI model," Magallon says.

Efforts to engage SMEs had started to gain traction before the COVID-19 outbreak and Magallon is confident that the consortium can rebuild momentum later in 2020 and hopes that many of the investments aborted because of the coronavirus will be resumed soon. The team have notably found opportunities in the solar rooftop sector in Spain. "We believe that the ESI Europe model can work even under these difficult circumstances. It reduces the levels of uncertainty in investment," he notes.

The service will be commercialised under the name 'GoSafe with ESI'. If successful, it has the potential to considerably shake up market behaviour by breaking down most of the barriers between SMEs and investment in energy efficiency.

NOTE: This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.



ESI reduces risk and ensures energy savings.

PROJECT

ESI Europe – Driving Investment in Energy Efficiency through Energy Savings Insurance in Europe

COORDINATED BY

Basel Agency for Sustainable Energy in Switzerland

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/785061

PROJECT WEBSITE

esi-europe.org
gosafe-esi.com



Helping homeowners invest in sustainable renovation

An innovative financing model for energy efficiency has been extensively tested by the EuroPACE project, and is now being implemented in different cities across Europe. Its success could be key to achieving the EU's climate goals.

Renovating a home to make it more energy-efficient can be challenging, especially in uncertain times. Owners must obtain a loan, find a reliable architect and contractors, and juggle with

limited budgets. Add to this new sustainability requirements and a mountain of paperwork, and you have enough obstacles to dishearten even the most motivated homeowners.



© Miriam Nieto

But there may be some light at the end of the tunnel. With support from the EU-funded project EuroPACE (Developing, piloting and standardising on-tax financing for residential energy efficiency retrofits in European cities), a consortium of seven companies, energy agencies, cities and non-profits have digitalised the entire renovation process and tested it with a Public-Private Partnership (PPP) in Olot, Spain.

"The idea was to support Olot residents in their home renovation journey. What we created there is the first eco-sustainable home renovation programme to ever combine affordable financing, technical assistance and smart funding," explains Eduard Puig, COO at Spain's GNE Finance, one of the project partners.

EuroPACE delivers three innovations. It provides: a new way to mobilise both private capital and public funds; a simplified and digitalised home renovation process with a one-stop shop providing all the necessary technical advice, support, training, verification and financing services; and a twofold public policy innovation.

With these tools, EuroPACE overcame the main barriers to home renovation. The project team supported local homeowners as they selected contractors, verified the works, and secured financing.

All in all, some EUR 1.87 million of investment was mobilised for smart homes, better accessibility, energy-efficient windows and doors, insulation, heating and cooling, as well as renewable energy solutions.

Even vulnerable groups could benefit from the programme, thanks to a de-risking mechanism that grants affordable financing even in the case of high loan risks.

in Europe, but the consortium eventually found a legal solution to implement it, by allowing municipalities to participate in repayment and collection. "First, we enable public administrations to participate in the debt collection process in case of non-performing loans and defaults to provide security to investors. Then we ensure that the financing is attached to the property, thus converting it into asset financing," says Cannarozzi.

Following a preliminary legal and fiscal analysis conducted across the EU-28, three cities (Lisbon, Mouscron and Valencia) were selected as the best candidates to further test EuroPACE. Partners were found during the project and local one-stop shop frameworks set up.

But that's not all. Since its end, EuroPACE has inspired many other EU projects and become a brand of its own. One such programme is being developed in the Balearic Islands, while Barcelona launched a HolaDomus programme of its own after the end of the project.

"We now have a toolkit that can and will help actors develop scalable and integrated home renovation models," notes Puig. This toolkit is expected to outlive the EuroPACE project. He adds: "Our spin-off legal entity, Fundació EuroPACE, is already operating in eight more towns in the Girona province and is in discussions with the provincial government to reach the whole province."



We now have a toolkit that can and will help actors develop scalable and integrated home renovation models.

Bespoke local strategies for Europe

EuroPACE draws inspiration from the highly successful PACE financing model of the United States. "This model sees local and state governments acknowledging the fact that energy retrofits are a public good. This justifies the use of a tax system to support the collection of loan repayments," David Cannarozzi, CEO of GNE Finance, adds. "Besides, PACE programmes pioneered a new way to engage energy services contractors in the sales process. This resulted in a dramatic stimulation of demand for home renovation."

Emulating the American model wasn't a walk in the park. The idea of changing tax legislation was initially met with scepticism

PROJECT

EuroPACE – Developing, piloting and standardising on-tax financing for residential energy efficiency retrofits in European cities

COORDINATED BY

Center for Social and Economic Research (CASE) in Poland

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/785057

PROJECT WEBSITE

europace2020.eu

More predictable outcomes for energy efficiency projects

ICP Europe brings about a much-needed standardisation of processes realising energy efficiency projects. Developers using its certification have been reporting savings much closer to their initial predictions, reducing investment costs in the process.



© kanphat, Shutterstock

Any individual or company willing to invest in energy efficiency projects has heard about what stakeholders call the 'performance risk'. There is even a saying about it in the United States: 'Meter and pay or deem and pray'.

As Jorge Rodrigues de Almeida, founder and managing director of RdA Climate Solutions, puts it: "That really means we are hoping for a result but lack the standards to actually measure it."



EU countries all have different standards for developing an energy efficiency project. We had to identify all legal requirements, frameworks and standards and map them into our own process.

Almeida knows this problem all too well. He has been advising governments and major industries on sustainable energy projects for years. He also helped shape the Investor Confidence Project (ICP). Its goal? Standardising the way energy efficiency projects are developed, documented and measured.

ICP Europe took shape under two distinct projects: ICPEU and I3CP (Industrial and Infrastructure Investor Confidence Project). While the former focused on buildings, the latter put the spotlight on industry and infrastructure projects. Both still suffered from discrepancies between foreseen energy efficiency improvements and actual performance.

"We've been developing standardised protocols and associated tools such as project development specifications, an index of national resources and templates for energy efficiency projects in buildings, industry and infrastructure. For the latter, we specifically focused on street lighting and industry projects," says Almeida.

When the project was kicked off in May 2017, the idea that the standardisation of development and documentation could reduce performance and transaction costs seemed rather abstract. Yet, by the end of the ICPEU project, global insurance and reinsurance provider Munich Re had accepted it and started offering lower insurance rates for ICP-certified projects.

the heating demand of three ventilation systems – should enable annual energy savings of 635 MWh in natural gas and 135 MWh in electricity. The investment will pay off after 6.3 years.

Achieving such standardisation was the biggest challenge faced by the consortium, as Almeida points out. "EU countries all have different standards for developing an energy efficiency project. We had to identify all legal requirements, frameworks and standards and map them into our own process. Strangely enough, no one had ever done this before."

Another obstacle was the project developers themselves. "They believe that their way of developing a project is unique and sets them apart from the competition. The hard truth is, it often isn't," says Almeida. What the team found was rather an undocumented and often uncontrolled process that involves multiple spreadsheets, models and separate calculations – a recipe for error and performance gap.

"It's the exact same problem faced by the first wind farm projects," adds Almeida. "Every developer had its own way of evaluating projects until industry and financiers got together to work out a standard methodology. We haven't got that far yet with ICP, but it's a great step forward."

Project developers who first saw ICP as added complexity now seem to agree, whilst the financial sector immediately accepted it as the right approach. Although both ICPEU and I3CP are now completed, the project team is working closely with them to incorporate ICP into their various processes.

NOTE: This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.

From common standards to successful projects

Since then, projects with ICP's Investor Ready Energy Efficiency™ certification have been piling up. In Liverpool, a GBP 13 million (EUR 14.5 million) project successfully improved the energy efficiency and decreased the CO₂ emissions of the three local National Health Service (NHS) hospitals. Retrofits include new gas-fired CHP energy centres, new variable speed drives for motors, plant optimisation, and an extensive lighting retrofit programme. "This project delivered guaranteed savings of 14 500 000 kWh per year, resulting in annual savings of GBP 1.85 million. This is an average energy saving of 50 % and an average carbon saving of 33 %," Almeida notes.

Energy conservation measures (ECMs) implemented at GOURMET's production site in Vienna are another example of a fruitful project enabled by ICP. These measures – which include the reuse of waste heat from two fast cooling plants to support

PROJECT

I3CP – Industrial and Infrastructure Investor Confidence Project

COORDINATED BY

EnergyPro Limited in the United Kingdom

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/754056

PROJECT WEBSITE

europe.eepformance.org

A EUR 150 million pipeline bringing liquidity to energy efficiency investments

Innovative, industry-tested tools aim to encourage more investments in energy efficiency initiatives – especially those being led by SMEs.

As the world looks to reduce its carbon emissions, there's an increasing demand for energy-efficient solutions. Unfortunately, much of this demand risks being left unmet due to a lack of financing.

"SMEs and small projects within the energy efficiency sector struggle to secure the affordable third-party financing and investments they need to succeed," says Michael Pachlatko, European director at Joule Assets, a company working to



© pagonici, Shutterstock

expand clean energy development, small customer market access, and energy efficiency marketplaces.

With the support of the EU-funded LAUNCH (Sustainable energy assets as tradable securities) project, Joule Assets is working to close this financing gap. "Our key aim is to standardise the processing of energy efficiency investments through the use of innovative, industry-tested tools," explains Pachlatko. "Together, this portfolio of solutions will allow for the aggregation and securitisation of energy efficiency investments – regardless of a project's size."

Turning on the taps

The LAUNCH consortium brought together hundreds of stakeholders within the energy and financing sectors, including project developers, financial funds, banks and energy service companies (ESCOs). "In order for our solutions to provide real value to users – and to ensure market uptake – we knew they had to be designed by those who stand to benefit from them," adds Pachlatko.

Together, the team produced an array of practical, standardised materials. These include investor-grade energy performance contracts, standardised risk assessment protocols for investors, tools for

project developers to access growth capital, and market-tested value propositions for project developers' end clients.

"Each of these solutions was designed with the goal of bringing money and liquidity into the energy efficiency market and allowing SMEs to take hold of it," notes Pachlatko.

To ensure that these tools meet actual market needs, the project conducted an extensive pilot programme across a dozen European countries. In total, 17 project developers and five financial institutions tested one or more LAUNCH solutions over the course a year.

The results of these pilots informed and added value to a EUR 150 million pipeline of project investments. "This includes EUR 2.1 million in deals closed during the project itself, and

a further EUR 31 million of investments being processed for finance at the end of the project," says Pachlatko.

The project also established the LAUNCH Learning Hub, a collection of free educational resources on key financial and commercial concepts. "With the Hub, users can improve the way they present their company, project, or pipeline of projects to investors and end clients," remarks Pachlatko.

Paying dividends

But LAUNCH is more than just a collection of tools – it's a movement. "All of our solutions can be best framed as a launching pad for further work," says Pachlatko.

Take for example the EU-funded PROPEL project. Launched in June 2021, the project involves many of the LAUNCH project stakeholders. "This project builds on LAUNCH's momentum and looks to create a long-term, institutionalised solution for addressing the challenges of sustainable energy investments," explains Pachlatko.

According to Pachlatko, the project will establish the Sustainable Energy Finance Association (SEFA), which will incorporate and continue the work done by both the LAUNCH and PROPEL projects.



SMEs and small projects within the energy efficiency sector struggle to secure the affordable third-party financing and investments they need to succeed.

PROJECT

LAUNCH – Sustainable energy assets as tradable securities

COORDINATED BY

Joule Assets Europe Group in Italy

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/847048

PROJECT WEBSITE

launch2020.eu

Quality assurance for successful energy efficiency services

Building trust in energy efficiency services is key to increasing investment in sustainable buildings. The QualitEE project has been developing quality assessment criteria and assurance schemes in order to make this happen.



© Olivier Devroede, Shutterstock

Ever heard of energy efficiency services providers? Some companies looking into new technologies and measures to make more efficient use of the energy they consume definitely have. But the fact is, most of them have a hard time trusting these providers, and this may partially be due to a lack of information.

QualitEE (Quality certification frameworks for Energy Efficiency services to scale up responsible investment in the building sector) aims to set the record straight by providing reliable tools for quality assessment and procurement. These comprise guidelines for quality assessment, financial assessment, and a procurement

handbook. "Our toolkit builds trust between consumers, suppliers and financiers. It offers information related to best practices as well as a framework to establish consensus on the definition of good quality services," says Klemens Leutgöb, coordinator of the project and CEO of Austrian consultancy e7 energy innovation and engineering.

The toolkit can be used for self-assessment, from project development to procurement and delivery. It has been developed in close cooperation with stakeholders and tested through 28 pilot projects in 11 European countries. So far, these pilots have led to 33 GWh of energy savings and over 9 200 tonnes of CO₂ savings each year.

In each of these 11 countries, the team initiated the development of national quality assurance schemes. "We used our toolkit's quality assessment criteria to form the backbone of these schemes. In most cases, they are at the early stages of implementation, but the scene is set to see them come to fruition," adds Rodrigo Morell, project lead for quality assurance schemes and managing director at Spanish consultancy CREARA.

Tailored approaches

One of the first things the team identified through their research is the diversity in scope of energy efficiency services projects. QualitEE pilot projects tend to reflect this reality, with investments ranging from EUR 20 000 spent on lighting replacements to EUR 8.5 million invested in deep building retrofits.

Likewise, there are various local nuances in markets across Member States. This called for a flexible approach, as Leutgöb explains. "We have defined quality assessment criteria that can be applied in the assessment of an energy efficiency service of any size or scope or based on any approach. They reveal whether the critical components for success have been addressed in the development of the service rather than forcing a particular approach or standard contract. Besides, we have defined a master set of quality assessment criteria at the European level. It sets a common framework for national adaptations that accommodate local market nuances."

In the end, the project team had to find different institutionalisation approaches to quality assessment depending on the country at

hand. While some countries like Spain were already saturated with certification schemes – calling for enhancements of existing schemes rather than new ones – others had none or required new schemes complementary to existing ones (e.g. the United Kingdom).



We have defined quality assessment criteria that can be applied in the assessment of an energy efficiency service of any size or scope or based on any approach.

Thanks to surveys in 15 European countries, the project could also build an extensive database of energy efficiency services markets – covering both energy performance contracting (EPC) and energy supply contracting (ESC) – that can be explored on its official website. The team compared results collected in 2017 and 2019 with earlier surveys from 2013 and

2015. It notably found that EPC markets are growing, that the EPC concept was generally perceived as too complex, and that pressure to cut energy costs drives the entire market.

Stakeholders are generally very satisfied with the work done under QualitEE. Ultimately, the team hopes that the project will stimulate growth by driving improvements in trust, information and standardisation.

NOTE: This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.

PROJECT

QualitEE – Quality certification frameworks for Energy Efficiency services to scale up responsible investment in the building sector

COORDINATED BY

e7 energy innovation and engineering in Austria

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/754017

PROJECT WEBSITE

qualitee.eu



Putting the cost of energy efficiency renovations on the meter

A new financing mechanism helps homeowners renovate their homes with the support of their utility company, offering a way to deliver much needed retrofits to Europe's housing stock.

Massive renovation of the housing stock is key to achieving the EU climate neutrality target. The potential for energy savings is great, and most technical solutions already exist, needing only to be implemented on a large scale.

So, why isn't everyone doing it? "Renovating a home is often too expensive for many European families," explains Pablo González Reed, a consultant at Creara Energy Experts. "Although such

renovations will save homeowners money in the long run, many lack the means of paying for the work up front."

One possible solution to this is on-bill schemes (OBS). "OBS are a relatively new financing mechanism where the utility company covers the upfront cost of the renovations," says González. "Similar to a loan, the homeowner then repays the utility company via their monthly energy bill."



While OBS have the potential to put energy renovations within reach of nearly every homeowner, to work, they need the backing of both utility companies and financiers. However, according to González, utility companies tend to be sceptical about OBS, and financial institutions approach the idea from a creditor's perspective.

"Financers disregard the renovation's energy savings as being a key factor for measuring the success of these financing mechanisms," he says. "And if OBS are to work, we need the cooperation of both energy utilities and financial institutions."



Much of the initial scepticism that surrounded these financing mechanisms at the beginning of the project has since been overcome.

This is where the EU-funded Ren-on-Bill (Residential Building Energy Renovations with On-Bill Financing) project comes in. Coordinated by Creara Energy

Experts, the project is designing a set of innovative, reliable and replicable OBS business models tailored to the different needs and situations utilities may have when seeking to commercialise these kinds of services.

"We're also accommodating these business models to attract investment from financial institutions and find synergies between the energy and financial sectors," adds González.

A portfolio of effective solutions

At the heart of the project, which won the Citizens' Award at 2021 EU Sustainable Energy Awards, is the creation of a stakeholder network. The network consists of national energy platforms in Germany, Italy, Lithuania and Spain.

"Our stakeholder engagement activities allowed us to identify any potential challenges to implementing OBS in each focus country," notes González. "This was critical to enabling the project to understand each country's unique situation and develop a portfolio of effective solutions."

One such solution is the Energy Renovation Valuation tool. "This tool provides a simple way to understand the energy and economic feasibility of conducting an energy renovation on a selected group of homes," says González.

The tool, which is currently being migrated to an online version, has received considerable praise from utility companies and financiers alike.

Entering new markets

Although still a work in progress, Ren-on-Bill has already pushed the needle towards the large-scale acceptance of OBS. "Much of the initial scepticism that surrounded these financing mechanisms at the beginning of the project has since been overcome," remarks González.

With more utilities and financiers on board, the project is now leveraging its vast network to replicate its initial successes in additional markets. "The results of the project have been designed for easy replicability," concludes González. "As such, we will continue to push for the implementation of OBS as a means of boosting the much-needed energy efficiency renovation rate of the EU's building stock."

PROJECT

Ren-on-Bill – Residential Building Energy Renovations with On-Bill Financing

COORDINATED BY

Creara Consultores in Spain

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/847056

PROJECT WEBSITE

renonbill.eu



Green mortgages to boost the demand for energy-efficient homes

Both homeowners and banks have been reluctant to invest much in energy-efficient buildings. But change is under way. The SMARTER project has been shifting mindsets with holistic green criteria and an ambitious framework for mortgages.



Greening homes is not so much a technical challenge as it is a financial one. Without getting financial institutions on board, energy-efficient buildings will never reach their full potential to support Europe's climate goals.

"It's time to borrow responsibly and build wisely," says Steven Borncamp, project director at the Romania Green Building Council and coordinator of the SMARTER project. "Buying a green home is often thought to have financial benefits in the long term.

But the truth is, it provides immediate benefits from the first month of ownership.”

SMARTER wants us to favour greener homes when making investment decisions. To reach this goal, the project shed light on benefits of sustainability measures and helped families understand how to sign up. It also helped investors and developers understand energy performance criteria and demonstrate this performance to homebuyers.

Green Building Councils in the project have developed holistic green certifications that can give banks a ready-made and reliable answer to the question 'Is the home we are financing green and climate resilient?' “We've created a credible, ambitious yet achievable framework to define green mortgages consistent with the environmental performance our planet and citizens require,” Borncamp explains.

SMARTER assembled research on the relationship of financial risk to green versus non-green homes, and delivered a substantial number of projects which are following the holistic green criteria required by their certifications. “We have made a very compelling argument that banks should demand very ambitious energy performance and other environmental criteria to qualify their green financial projects,” Borncamp adds.

Two platforms, one purpose

The project built two main platforms: the Green Home Investment Platform and the Green Homes Solution Providers ecosystem.

In the first, stakeholders can follow developments in residential green finance. “The platform includes timely research on how ‘green’ affects financial risk and performance, key developments of interest to the banking and investment communities, and even information on ongoing residential projects,” Borncamp notes.

The second, Green Homes Solution Providers, is an ecosystem of companies providing services, materials, technologies and other products necessary to bring a green residential project to life. Not only is this great for homeowners, it also helps companies to increase the number of project opportunities ahead.

Since its launch in 2019, SMARTER has helped banks move from seeing green finance as an area to watch to an area needing an urgent response. Despite hesitancy and uncertainty linked to the pandemic, 74 projects worth a total of EUR 3.35 billion are either already certified or in the process of certification. According to Borncamp, this shows green homes are not a niche market as often claimed.

The project was initially focused on 12 European countries, but recently extended to Brazil, Colombia, Indonesia, Moldova and Morocco. Colombia and Moldova were the first to launch their green mortgage programmes using SMARTER tools, while the other countries followed at the end of 2021.



Buying a green home is often thought to have financial benefits in the long term. But the truth is, it provides immediate benefits from the first month of ownership.

PROJECT

SMARTER – SMARTER Finance for Families – Improving Citizens' Health, Comfort and Financial Well-Being by Supporting Banks, Residential Investors and Solution Providers with Green Homes and Green Mortgage programs

COORDINATED BY

Green Building Council in Romania

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/847141

PROJECT WEBSITE

c2e2.unepdtu.org/smarter



Innovative financial instrument can accelerate the deep renovation of Latvia's Soviet-era buildings

By creating an entirely new financial instrument that enables long-term financing with affordable conditions and terms, the SUNShINE project has overcome the main barriers to energy-efficient renovations. Ongoing renovation projects aim at a reduction in energy consumption of up to 60 %.

The Soviet era didn't exactly shine through its residential architecture. From the 1950s to the late 1980s, low-cost residential buildings commonly known as Khrushchyovka sprouted up across Eastern Europe. And time didn't do them any favour. In

Latvia for instance, most buildings keep deteriorating at a worrying pace in spite of subsidies. "Without a significant acceleration in the pace of renovations, most of the multifamily buildings will become uninhabitable," says Marika Rošā from Riga Technical University.



When these buildings were constructed, energy efficiency wasn't a concern either. But things have changed. They usually consume 50 to 60 % more energy than necessary, whilst the EU aims to reduce buildings' energy consumption by at least 32.5 % before 2030. So why not tackle both issues simultaneously?

"Renovating an existing building costs less than a quarter of the cost of building a new one. It can bring high energy efficiency standards for at least the next 30 years, and residents can remain in their home during the works," Rošā explains. This is precisely what the project SUNShINE (Save your bUildiNg by SavINg Energy – towards 2020m2 of deeply renovated multifamily residential buildings), which brings together Latvian stakeholders, proposes.

A new financial instrument

By creating an entirely new financial instrument that enables long-term financing with affordable conditions and terms, the project overcomes the main barriers to energy-efficient renovations. These include the fact that such renovations would normally cost more than what owners are willing to pay, that energy cost savings do not fully cover the investment, and that renovating is not necessarily a priority for families.

SUNShINE provides a standardised, long-term energy performance contract for deep renovation. Energy service companies (ESCOs) are directly in talks with apartment owners and understand exactly what they are paying for. "Transparency of the fee structure in the standardised energy performance contracting (EPC) was a key issue we worked out. The contract also provides clear guarantees related to energy efficiency, indoor climate and performance, along with new maintenance practices. Instead of acting upon complaints, ESCOs now proceed to a previously scheduled maintenance," Rošā adds. In addition, the project tackled a significant barrier preventing ESCOs from engaging in energy retrofitting projects: improve ESCOs' balance sheet capacity to take on more projects. SUNShINE set up the Latvian Building Energy Efficiency Facility (LABEEF) with the aim of forfeiting receivables from EPCs and therefore reducing the debts on ESCOs' balance sheets.

The project successfully enabled 31 projects across Latvia, totalling EUR 25.5 million of investments, to be scheduled for implementation. Nine of them are already at an advanced stage

of development and the remaining ones should be completed within the next 2 years. LABEEF has for instance forfeited a portfolio of six buildings from project partner RenEsco. As Rošā points out, each EPC is equivalent to a 20-year project. "Every year the project must deliver a measurement and verification (M&V) report," she notes.

A website has also been developed to help ESCOs and owners of multifamily buildings to develop their project in compliance with a standardised process.

This reduces transaction costs, boosts market development, and provides tools and guidelines to ESCOs interested in the deep renovation of residential buildings.

Beyond these achievements, SUNShINE has delivered high standards of renovation quality, jobs and stable work opportunities for the construction sector, and a solution attracting private finance. It will help preserve existing housing over the next 30 years as well as support the EU's Green Deal objectives, in particular its renovation wave. "The road ahead is long and difficult," says Rošā. "But even if it is, our team certainly made a point and demonstrated the scalability of our solution."

NOTE: This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.

PROJECT

SUNShINE – Save your bUildiNg by SavINg Energy – towards 2020m2 of deeply renovated multifamily residential buildings

COORDINATED BY

Riga Technical University in Latvia

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/649689

PROJECT WEBSITE

sharex.lv



Innovative financing solution for mid-scale energy efficiency / renewable energy investments in industry

SMEs cut off from access to investors now have a chance to bring their energy efficiency and renewable energy projects to fruition, thanks to a new solution developed under the TrustEE project. The platform provides access to technologies, technical assessment and financing. It considerably reduces risk for all stakeholders involved.



© Oleksy Mark, Shutterstock

If you're an SME owner and want to invest in low-carbon or energy-efficient production processes, chances are you've struggled to get support from investors. The truth is, you're not alone. Even though the technology is there to save up to 10% in energy and provide 50% of the remaining needs

from renewables (depending on the technology), third-party investments are far from easy to obtain.

There are numerous reasons for this lack of enthusiasm. Banks and investors lack the technical know-how, the transaction

costs are high, and the projects often lack necessary credit and performance guarantees. To make things worse, there are neither standardised procedures, nor industrial standards available.

"Renewable energy (RE) and energy efficiency (EE) are not realised despite a well-done design. The risk is generally assessed as too high due to a lack of technical expertise in RE/EE," says Christoph Brunner, CEO of AEE INTEC and coordinator of the TrustEE (Innovative market based Trust for Energy Efficiency investments in industry) project.

From assessment to investment

TrustEE gets around these problems with a new, tailor-made solution to support investors. Instead of leaving them with information they don't understand, TrustEE handles the whole process. It screens industrial efficiency and renewable projects, optimises them through a technical assessment, and offers flexible refinancing. Its platform is specifically built for what Brunner calls 'mid-range' projects. These cover projects with almost no access to external financing, low EE/RE capacity and a lack of specific know-how, but committed to industrial decarbonisation.

"Should the project assessment be positive, TrustEE will add it to its portfolio. The platform already includes thermal EE, solar process heat, biomass and biogas. Heat pump projects are ready

to be implemented, and PV, optimised control systems and other technologies will follow shortly," adds Brunner.

It is the first time in this sector that a single tool handles project development, assessment and financing. The process results in significantly decreased risk for all involved stakeholders: the industrial end user gets access to low-risk EE/RE

solutions with low impact on their balance sheet; technology suppliers can push their solutions and get their capital ready for new projects; and investors trusting the 'TrustEE stamp' can finally integrate bankable EE/RE projects into their portfolio.

The three groups of stakeholders were involved across all project phases to ensure the platform's commercial success. "Their feedback led to the constant improvement of the TrustEE concept and handling of submitted projects. Additionally, they were involved in continuous testing and further development of the TrustEE platform," explains Brunner. "The final solutions and project results address their needs and we are convinced that our approach will contribute significantly to industrial decarbonisation."

The consortium is now busy commercialising their solutions. The TrustEE securitisation vehicle (which purchases the receivables and converts them to green bonds and tranches offered to investors on capital markets) is ready to be implemented, whilst the assessment solution has been transferred to a commercial platform with an investment volume of more than EUR 10 million. "Overall, TrustEE is a two-way approach, standardised project assessment as a basis for innovative financing. The EE/RE technologies implemented will be steadily extended in the coming months outside the project," Brunner concludes.

Specifically, commercial plans will first focus on Austria, Germany and Sweden, before being extended to other European and third countries.

NOTE: This article is reprinted from the 2020 edition of the Results Pack on private finance for energy efficiency.



Overall, TrustEE is a two-way approach, standardised project assessment as a basis for innovative financing. The EE/RE technologies implemented will be steadily extended in the coming months outside the project.

PROJECT

TrustEE – Innovative market based Trust for Energy Efficiency investments in industry

COORDINATED BY

AEE INTEC in Austria

FUNDED UNDER

Horizon 2020-ENERGY

CORDIS FACTSHEET

cordis.europa.eu/project/id/696140

PROJECT WEBSITE

trust-ee.eu





Since its launch in 2016, the Sustainable Energy Investment Forums (SEI Forums) initiative has worked with national stakeholders to enhance access to finance for sustainable energy investments.

SEI Forums organises events across the EU to showcase best practices in developing investment projects and programmes in sustainable energy, and engage in dialogue with the financial sector, public authorities and all stakeholders involved in delivering investments in sustainable energy. More than 40 events have been organised so far by the European Commission (DG Energy and CINEA), in partnership with national representatives.

SEI Forums events focus on energy efficiency investments in public and residential buildings, as well as in the SME and industry segments. The approaches discussed include setting up financial instruments blending public and private finance, project development assistance, and the integration of energy efficiency in the financial sector. The initiative supports the implementation of several EU-driven policies, including National Energy and Climate Plans, Long-term Renovation Strategies, Recovery and Resilience Plans, and the implementation of new EU funding programmes and financing initiatives.

The current SEI Forums contract runs until December 2023.

For more information, please see:

- Sustainable Energy Investment Forums initiative: bit.ly/EU_SEIF
- National Energy and Climate Plans: bit.ly/EU_NEACP
- Long-term Renovation Strategies: bit.ly/EU_LTRST
- National Recovery and Resilience Plans: bit.ly/EU_NRARP

EEFIG

The Energy Efficiency Financial Institutions Group

EEFIG was established in 2013 by the European Commission Directorate-General for Energy and the United Nations Environment Programme Finance Initiative. EEFIG provides a significant contribution to accelerating private finance for energy efficiency. Through policy design and market-based solutions, EEFIG works to increase the scale of energy efficiency investments across Europe. Composed of over 300 representatives from more than 200 organisations, EEFIG's strength is its members – spanning public and private financial institutions, industry representatives and sector experts.

bit.ly/EU_EEFIG

CORDIS Results Pack

Available online in six language versions: cordis.europa.eu/article/id/422225



Published

on behalf of the European Commission by CORDIS at the
Publications Office of the European Union
2, rue Mercier
L-2985 Luxembourg
LUXEMBOURG

cordis@publications.europa.eu

Editorial coordination

Birgit BEN YEDDER, Staffan VOWLES

Disclaimer

Online project information and links published in the current issue of the CORDIS Results Pack are correct when the publication goes to press. The Publications Office cannot be held responsible for information which is out of date or websites that are no longer live. Neither the Publications Office nor any person acting on its behalf is responsible for the use that may be made of the information contained in this publication or for any errors that may remain in the texts, despite the care taken in preparing them.

The technologies presented in this publication may be covered by intellectual property rights.

This Results Pack is a collaboration between CORDIS and the European Climate, Infrastructure and Environment Executive Agency.

Print	ISBN 978-92-78-42726-9	ISSN 2599-8285	doi:10.2830/76977	ZZ-AK-21-014-EN-C
HTML	ISBN 978-92-78-42718-4	ISSN 2599-8293	doi:10.2830/553083	ZZ-AK-21-014-EN-Q
PDF	ISBN 978-92-78-42720-7	ISSN 2599-8293	doi:10.2830/923062	ZZ-AK-21-014-EN-N

Luxembourg: Publications Office of the European Union, 2022

© European Union, 2022

Reuse is authorised provided the source is acknowledged.

The reuse policy of European Commission documents is regulated

by Decision 2011/833/EU (OJ L 330, 14.12.2011, p. 39).

For any use or reproduction of photos or other material that is not under the EU copyright, permission must be sought directly from the copyright holders.

Cover photo © European Union, 2022

Delivering on the Green Deal – CINEA

All projects featured in this Results Pack are managed by CINEA, the European Climate, Infrastructure and Environment Executive Agency, established by the European Commission under the motto 'Funding a Green Future for Europe'. CINEA contributes to the European Green Deal by implementing parts of EU funding programmes for transport, energy, climate action, environment and maritime fisheries and aquaculture. CINEA now manages the Connecting Europe Facility 2 (Transport and Energy), the Climate, Energy and Mobility Cluster of Horizon Europe, the LIFE programme, the Innovation Fund, the European Maritime, Fisheries and Aquaculture Fund, the Renewable Energy Financing Mechanism and the Public Sector Loan Facility under the Just Transition Mechanism and seeks to promote synergies between the programmes in order to benefit EU citizens and promote economic growth.

CINEA implements two societal challenges of the Horizon 2020 programme: Secure, clean and efficient energy, and Smart, green and integrated transport. CINEA provides technical and financial management services at all stages of the programme and project life cycle – from the calls for proposals, evaluation of projects and award of financial support, to the follow-up of project implementation and control of the use of funds allocated.

CINEA provides visibility for EU funding opportunities and project results – and supports potential applicants and beneficiaries, allowing them to benefit from the Agency's long-standing experience of programme implementation with a high level of performance.

More details can be found on CINEA's website at: cinea.ec.europa.eu/index_en

Follow us on social media too!



@CINEA_EU
@CleanEnergy_EU



@CINEA



@CINEATube

RESULTS PACK ON CLIMATE NEUTRALITY – SECOND EDITION

The EU is committed to becoming climate-neutral by 2050. The 14 research projects featured in this CORDIS Results Pack support policymakers, business and society to make informed choices about ending reliance on fossil fuels and building a greener and more equitable future for Europe.



Check out the Pack here:
cordis.europa.eu/article/id/418144



Publications Office
of the European Union



Follow us on social media too!
facebook.com/EUresearchResults
twitter.com/CORDIS_EU
youtube.com/CORDISdotEU
instagram.com/eu_science

EN