

## Final Publishable Report

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## Innovation4Renovation: EuroPACE Impact in a Nutshell

- 1 commercial home-renovation program (HolaDomus) that as of today has triggered EUR 1.8M in sustainable home renovation projects despite the pandemic, saving 169 total carbon dioxide (tCO2) and creating of 34 jobs;
- 2 integrated home renovation programs in development in Spain during the lifetime of the project with a pipeline of more than EUR 100M in renovation projects;
- O Designed a replicable public-private partnership model;
- ⊘ 7 leader Cities participated in the replication of the EuroPACE model;
- ⊗ 8 partners from 4 European countries joined together for the EuroPACE project;
- Ø 70 letters of support from 15 countries and 30 European cities;



### About the EuroPACE project

EuroPACE¹ was a three and a half year European Commission-funded project, started in March 2018 and ending in August 2021. Since its inception, the EuroPACE project has been at the forefront of the innovation in sustainable home renovation. As a result of this EU-funded project, partners developed a commercially viable home renovation program model. The model is rooted in the concept of public-private partnership, where both sectors join forces to set up a customer-centric renovation service to boost the renovation wave across Europe. Such public-private partnership is realized by setting up program entities able to channel public and private funds, proactively seek renovation projects, verify contractors and ensure high quality of work. The innovation lies in setting up a scalable and economically self- sustainable home renovation service that is attractive and affordable to all European citizens.

Originally launched and tested in Olot, Spain, the program was adopted in the Basque Country, with the involvement of the Basque Country Energy Agency and its regional government. Subsequently, it is being developed on the Balearic Islands (Menorca, Ibiza and Mallorca) as part of the Horizon 2020-funded REGENERATE project. Furthermore, the program model served as an inspiration for the HolaDomus Barcelona, a sustainable building renovation program in the capital of Catalonia.

The EuroPACE project has inspired many replicator EU projects, such as Save the Homes<sup>1</sup>, FITHOME<sup>1</sup>, HIROSS4all<sup>1</sup> and others. Moreover, EuroPACE became a brand at the EU level and extends beyond the project itself, denoting the commitment to innovative financing, home renovation program design and focus on the needs of cities and regions.





## The origins of EuroPACE

### The Context

- Buildings also emit 40% of energy and are responsible for 36% of all carbon dioxide (CO<sub>2</sub>) emissions in the EU.<sup>4</sup> This makes effective, eco-sustainable renovation indispensable for a healthy future.
- EUR 200 billion a year<sup>5</sup> is needed for the next 30 years. In order to undertake the necessary EU-wide deep energy renovation, substantial funds need to be unlocked.

Sustainable building renovation plays a key role in the clean energy transition. According to the European Commission, ¾ of all buildings are not energy efficient and require a renovation <sup>6</sup>. With that in mind, the European Renovation Wave initiative intends to double the renovation rates across the EU over the course of the next decade. However, sustainable home renovation is a complex, stressful, expensive and often a multi-stakeholder process. Thus, homeowners are hesitant to initiate renovation projects due to concerns about the cost, lack of time, expertise and the need to coordinate with multiple contractors. This lack of trust is often a big factor in their decision making as well. The EuroPACE project was designed to make sustainable home and apartment building renovation simpler, faster and easier to pay for. Project partners recognized that the time was ripe to develop a radically different way to engage with homeowners that need support and technical assistance.

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<sup>1</sup> Citizen support for climate action – 2021 Survey, European Commission, available at https://ec.europa.eu/clima/citizens/support\_en.

<sup>&</sup>lt;sup>2</sup> Latest Climate Emergency Declaration statistic, CEDAMIA, June 17, 2019, available at <a href="https://www.cedamia.org/news/latest-climate-emergency-declaration-statistics/">https://www.cedamia.org/news/latest-climate-emergency-declaration-statistics/</a>.

<sup>&</sup>lt;sup>3</sup> 97% of buildings in the EU need to be upgraded, Building Performance Institute Europe, available at <a href="https://bpie.eu/wp-content/uploads/2017/12/State-of-the-building-stock-briefing\_Dic6.pdf">https://bpie.eu/wp-content/uploads/2017/12/State-of-the-building-stock-briefing\_Dic6.pdf</a>.

<sup>&</sup>lt;sup>4</sup> In focus: Energy efficiency in buildings, European Commission, February 17, 2020, available at <a href="https://ec.europa.eu/info/news/focus-energy-efficiency-buildings-2020-feb-17\_en">https://ec.europa.eu/info/news/focus-energy-efficiency-buildings-2020-feb-17\_en</a>.

<sup>&</sup>lt;sup>5</sup> A. Esser, et al. Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU. Navigant, report for the European Commission, November 2019, available at <a href="https://ec.europa.eu/energy/sites/ener/files/documents/1.final\_report.pdf">https://ec.europa.eu/energy/sites/ener/files/documents/1.final\_report.pdf</a>. <sup>6</sup> Renovation wave, European Commission, available at <a href="https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/renovation-wave\_en">https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/renovation-wave\_en</a>.



### **EUROPACE** Partners

The EuroPACE Consortium consists of 9 partners from 4 countries. Below is a list of all EuroPACE partners.



## Global New Energy Finance Barcelona, Spain & Amsterdam, The Netherlands

GNE Finance is leading the development of EuroPACE platform. GNE Finance is a high impact investment company that aims to stimulate building renovation across Europe by making it accessible for all Europeans. GNE Finance is working with cities and regions to build effective home renovation programs creating vibrant and resilient communities.

### Fundació EuroPACE

### Fundació EuroPACE is a non-for-profit organization that managed the design and deployment of HolaDomus pilot program. Fundació

EuroPACE is specialised in promoting energy efficiency and renewable energy projects for citizens through Integrated Home Renovation programs in cities, as well as promoting Energy Communities that enable citizens, consumers and businesses to participate in the clean energy revolution.



### Ajuntament d'Olot Olot, Spain

Ajuntament d'Olot is the local government of the city of Olot, the city of 34.000 inhabitants. Olot is located in the province of Girona, in the region of Catalonia in Spain. The City Council has 21 council members and elect the city mayor, who chooses some of the city councilors to set up the executive governing body that rules for a maximum period of 4 years..



### Center for Social and Economic Research Warsaw, Poland

CASE is an independent, non-profit research institute founded on the idea that research-based policy-making is vital for the economic welfare of societies. Established in Warsaw in 1991, CASE today is recognized as the top think tank in Central and Eastern Europe and is one of the most highly regarded think tanks internationally.





## Joule Assets Europe and Joule Assets Europe Group Brussels, Belgium and Modena, Italy

Joule Assets Europe provides financing solutions and strategic support for energy reduction assets, including energy efficiency, distributed renewables, storage, and building control measures. Joule's online platform, eQuad, provides third-party project valuation, performance insurance, project certification, due diligence, and introductions to prequalified capital sources in the form of off-balance sheet financing.



### Up Social Barcelona, Spain

UpSocial promotes social innovation to contribute to solve social challenges. We seek to facilitate and accelerate the implementation of effective responses that improve the lives of people significantly and can get a significant scope for the dimension of the problem.



### Ente Vasco de la Energía (EVE) Bilbao, Spain

EVE is the Basque Government's energy agency, whose mission is to propose energy strategies for the Basque Country, based on criteria of supply security, cost competitiveness, sustainability and technological development, and to participate in developing these strategies and contribute to meeting the targets established therein



### Climate Bonds Initiative London, UK

Climate Bonds Initiative is the only organisation in the world working solely to mobilize the largest capital market of all, the USD 100 trillion bond market, for climate change solutions. We promote investment in projects and assets necessary for a rapid transition to a low-carbon and climate resilient economy.



### Energy Agency of Extremadura (AGENEX)Badajoz, Spain

AGENEX is a public entity, set up by regional and local entities of governmental and training nature, created in 2001 in order to promote the energy source diversification and the energy efficiency in Extremadura.



### Inspired by PACE

#### PACE in the US

The EuroPACE project was inspired by an innovative financing mechanism, PACE, pioneered in the US in 2008. The PACE mechanism is rooted in the notion of public-private partnership, where each sector brings its expertise and resources to enable the growth of energy efficient renovations. Subsidies and grants comprise a very small part of what is needed to implement the required building improvements and reach 2030 policy goals, thus the EuroPACE project is focused on mobilizing private capital to deliver affordable and accessible financing to all Europeans.

PACE financing was originally pioneered in Berkeley, California in 2007; today it is available in nearly 40 states and more than USD 7billion (EUR 6.1 billion) worth of energy efficiency and renewable energy improvements to homes and commercial building were financed using this novel approach. From a public policy perspective, the innovation lies in local and state governments recognizing that energy retrofits are a public good, thus justifying the use of a tax system to support the collection of loan repayments. Nearly 40 states have passed PACE enabling laws; these laws share common features such as establishing a valid public purpose, defining a collection mechanism via property taxes, and articulating the non-payment scenarios to facilitating private capital. In the US, PACE financing is repaid via a special charge added to a property tax bill over a term of up to 20 years. The secure repayment and collection mechanism created by PACE financing provides confidence to private investors, thus resulting in long-term, up-front financing, attractive to homeowners and commercial building owners.



In the US, PACE can be used to pay for energy efficiency, renewable energy, and water conservation upgrades to homes and commercial buildings. In some states, PACE laws allow for hurricane hardening and seismic measures to be covered as well. All improvements must be permanently affixed to the property; thus home appliances are not eligible.

Aside from financing, PACE programs pioneered a way to engage energy services contractors as salesforce, thus dramatically stimulating the demand for home renovation. In fact, contractors often are the first contact point with a homeowner, triggered by broken equipment and deferred maintenance concerns. Contractors are trained and adhere to consumer protection policies to ensure consistent customer experience. A number of program models have proliferated in the US, each adapted to the local circumstances.

After a period of development, residential PACE grew exponentially in several states, mobilizing nearly \$4billion (EUR 3.4 billion) in four years. The EuroPACE project was inspired by the success of the PACE market, especially its ability to generate bottom-up demand in a short period of time. EuroPACE adopts best practices from the US PACE market and intends to further enhance its reach, scope, and overall impact well beyond the American experience.

The EuroPACE project faced a number of challenges germane to any innovative Horizon 2020 project. The EuroPACE concept is quite complex as it brings together novel financing and requires a legal review of the existing fiscal and non-fiscal legislation to find a way to secure the financing by a property and allow municipalities to participate in the collection. While in the US, the PACE mechanism relies on the property tax system, in Europe a full analysis of the existing legal and fiscal laws was conducted to better understand the possibilities for attaching the loan to a property.

The challenge was finding a suitable legal solution that is

- (2) not burdening a public authority (by avoiding any consolidating with the public budget) while enabling municipalities to participate in the collection,
- (3) realistic to implement. After several detours, such a solution in Spain was found and, which is elaborated further below.



## EU-28 Legal and Fiscal Analysis to Assess Adaptation of PACE to Europe



The EuroPACE Consortium conducted a preliminary legal and fiscal analysis of the European Union Member States (EU28) to identify the most suitable legal/fiscal set up and the highest potential demand for EuroPACE implementation. As a result, two reports have been produced comparing the countries with respect to their property-related taxes and charges, possibility to introduce an on-tax/home-based7 financing mechanism and legislative capacity of the local and/or national governments to put in place new legislation to enable this financing tool. Seven EU countries (Austria, Belgium, Italy, the Netherlands, Poland, Portugal, and Romania) were selected for further analysis. Spain was already pre-selected as a suitable country, on the basis of previous analysis. Following this selection, social and economic conditions of households, social preferences and environmental awareness of homeowners, as well as the prevalent level and type of energy used, existing retrofit programs and incentives were examined for each of the countries. This has led to the selection of four countries, namely Belgium, The Netherlands, Portugal and Spain, where the implementation of EuroPACE has been deemed to be the most feasible. The EuroPACE pilot program was developed in Olot, Spain. The reports on EuroPACE readiness for all EU countries can be found on <a href="https://www.gnesolutions.com">www.gnesolutions.com</a>

<sup>&</sup>lt;sup>7</sup> Note that the initial focus of the EuroPACE project was the implementation of an on-tax mechanism akin to the PACE mechanism deployed in the US. As the project's activites progressed and legal and administrative possibilities in European cities and regions became clearer, this focus shifted towards the concept of home-based financing, due to its better viability within the aforementioned frameworks.



### The EuroPACE Innovation

The EuroPACE model developed in Spain throughout the project relies on the repayment collection mechanism as 'safe conduit', so that municipalities can have an active role remitting the loan repayments for retrofitting homes from homeowners to private investors. Such safe conduit mechanism decreases the risk of payment default, thus attracting cheaper private funding. Municipality is there to enforce its tax collection system and therefore bestow security to the investor. In Spain, a replication of PACE financing is based on the "Prestaciones Patrimoniales Públicas de carácter no Tributario" (PPPnT), which is a municipal levy enforced by the Law 9/2017, which is the Spanish transposition that resulted from EU Directive on Public Procurement 2014/24/UE. PPPnT is a non-fiscal right of public revenue/income. Being non-fiscal makes its implementation much easier. As a public right of public revenue, it allows municipalities to enforce legal proceedings for tax collection in case of payment delinquency. Currently the new Climate Change and Energy Transition Law is being discussed in the Spanish Parliament. It is foreseen that this Law will legitimate the active involvement of municipalities and therefore the enactment of the municipal ordinances and the retrofitting covenants will be based on such new law.

The key innovation on the public policy side is twofold:

- The EuroPACE mechanism intends to enable a public administration to participate/intervene in the debt collection process in case of non-performing loans and defaults to provide security to the investors. This is the key element in attracting private funding.
- The project intends to ensure that the financing is attached to the property, thus converting it in asset financing. The lien would be pari-passu or junior to existing mortgages but never a senior one to avoid conflicts with existing lenders.

Sustainable home renovation in Europe is a key element for an economically strong, green and resilient Europe and as such, it must be scaled up significantly. It is therefore necessary that home renovation becomes a public priority. Effective public-private partnerships have the potential to deliver optimal home renovation offers to European citizens.



## Understanding the market: A public authority perspective

Sustainable home and multi-family building renovation is not just private business but a public priority, thus cities, regions, and local public administrations play a key role in enabling and supporting home upgrades. During the project, the Consortium partners engaged with a number of public authorities (cities, regions and energy agencies) to better understand their needs and existing resources. The following takeaways have informed the design of the EuroPACE model and the first pilot program in Spain:

- Public authorities (cities, regions, or energy agencies) often lack the resources to design, launch and run home and building renovation programs.
- Public authorities also often lack the knowledge and expertise in financing tools and how to design a financing solution attractive to homeowners and investors.
- Public authorities are looking for solutions that encompass the full building sector (in some cases even infrastructure and industry). Home renovation programs are part of a broader plan and need to align well with other key objectives.
- Public authorities' internal processes result in protracted timelines and uncertain internal decision-making processes. EuroPACE is a multidisciplinary mechanism that requires participation of various stakeholders.
- A strong political support and pressure is key in pioneering new renovation initiatives.
- ✓ In many cases, public authorities are often looking for a consulting type relationship and are not familiar with a public-private partnership (PPP) model. In other cases, public authorities are weary of starting a multi-year engagement with a private company. These issues can be mitigated by building trust and educating public authorities on the benefits of the PPP structures

Cities and regions need a strong support to galvanize the Renovation Wave. While the public sector can provide leadership, trust, subsidies, fiscal incentives and set key policies, the private sector has more experience and a proven track record in generating demand from the bottom-up, making sales, and building economically self-sustainable initiatives.

PPPs have a tremendous potential tapping into the existing eco-system of professionals and generating new business opportunities for them, thus creating jobs and paving the road for economic recovery. The EuroPACE project combined the expertise of both public and private parties to develop a scalable integrated home renovation model.



## The EuroPACE Renovation Formula: Focused on Supporting Citizens

Learning from the market, the project developed the renovation formula aimed to support the public authorities to reach their climate goals, while meeting the needs of homeowners. Three key elements to create Trust to Renovate:

With help from EuroPACE, municipalities are able to achieve their energy and climate policy goals and sustainable recovery post-COVID-19.



Technical Assistance co-designed with Olot City Council and Fundació EuroPACE brings all elements of an integrated home renovation program together, including contractor training, customer service, outreach, technical advice, etc. It is designed to optimally stimulate homeowners by effectively supporting them in the decision-making process throughout the whole customer journey, and bringing them into contact with trusted contractors



Affordable Financing addresses the shortcomings of the supply side. GNE's financing platform enables 100% up-front, affordable and long-term financing for all homeowners, including those in conditions of vulnerability or energy poverty. All transactions are handled online via one financing platform.



Smart Funding developed in order to ensure that no one is left behind in the clean energy transition. De-risking solutions are set up to provide broader access to financing, leveraging on public funds and attracting impact investors.



## An Innovation in Home Renovation: An Integrated Approach

Building on the EuroPACE renovation formula, the project proceeded with practical implementation by designing and setting up a renovation program serving citizens.

Historically, the home renovation process has been time-consuming and involved a lot of paperwork that had to be produced by contractors, lenders, homeowners, local compliance agencies and architects. This was a deterring factor for homeowners, who felt unsupported throughout their renovation journey and intimidated by the many technical and administrative tasks that come into play in a renovation project. The EuroPACE project, via its pilot program, designed and deployed respectively by Olot City Council "Ajuntament d'Olot" and EuroPACE Foundation "Fundació EuroPACE", simplifies and digitalizes the entire process. On the financing side, GNE Finance is the trusted lender and the company handles the underwriting and loan servicing. The process is digitized; it relies on the new technologies and is aligned with consumer behaviour.

As such, the program design encompasses targeted technical assistance to homeowners aimed at generating bottom-up demand. This involves technical advice in project design, homeowner support in selecting contractors, verification of the works, and financing – all services are delivered by one entity, referred to as an integrated home renovation program<sup>8</sup>. The program is also responsible for training and verifying energy services contractors to ensure the high quality of works and service. Contractors pay a fee to participate in the program, thus providing revenue to the program. In the nutshell, the following services are key in operating a successful program and the focus lies with ensuring that these components are state-of-the-art in the EuroPACE project and its replication efforts:

- Communication and marketing;
- Proactive online and off-line sales;
- Technical advice and simple audit;
- Project design and advice on energy measures;
- Ontractor training and verification, support in contractor selection;
- Affordable financing;
- Quality assurance and follow up;
- O Digital tools for back office and front office to ensure that the process is smooth.

An integrated home renovation program is a practical solution to centralize the decision making, marketing, and technical advice components that are needed to ensure that a citizen feels fully supported and enjoys a frictionless home renovation process.

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<sup>&</sup>lt;sup>8</sup> An integrated home renovation program is a term chosen by the EuroPACE project as opposed to the One-Stop-Shop (OSS), which is commonly used across Europe. The term OSS has become too broad and it does not hold its original meaning.



## HolaDomus: EuroPACE Pilot Program in Olot, Spain



EuroPACE project led to the development and execution of the HolaDomus pilot programme in Olot, Catalonia. Given the participation of Olot in the EuroPACE project, partners were able to set up an effective public-private partnership to support Olot citizens on their home renovation journey during the duration of the EuroPACE project.

In order to overcome the main renovation barriers, the HolaDomus program was launched in Olot, Spain in October 2019. The program design encompasses targeted technical assistance to homeowners aimed at generating bottom-up demand. This involves technical advice in project design, support in selecting contractors, verification of the works, and financing – all services are delivered by an integrated renovation program. HolaDomus is the first eco-sustainable home renovation program combining affordable financing, technical assistance and smart funding.

### Fundació EuroPACE

After extensive research to identify the most suitable legal form for the program's Managing entity, the most effective set-up was identified: a non-for-profit Foundation. The underlying rationales behind this selection are the following: The Managing entity does not consolidate with the municipality's balance sheet thus limiting city's exposure

- O Preferential fiscal treatment due to the non-profit status
- O Positive social perception and community engagement
- Eligible to receive subsidies and donations
- Ability to act as a social platform to raise awareness, tackle energy poverty, and support vulnerable groups.



The EuroPACE Foundation (Fundació EuroPACE)<sup>9</sup> is a non-profit body that is jointly governed by the City of Olot and GNE Finance. Public authorities and private companies tend to have a different approach to costs and revenues; thus it is key to constantly monitor the costs to then design an economically self-sustainable model.

The role of the Fundació EuroPACE Managing Entity is as follows:

- Opploy the marketing strategy plan to generate customer leads and boost demand for home renovation in the region;
- Opploy all the activities related to customer technical and administrative assistance;
- Carry out all activities related to contractor engagement and contractor validation processes;
- Ontrol of services provided by external companies or agencies;
- Monitor program progress, including lead and project generation performance and customer satisfaction to ensure homeowners' satisfaction and contractor's compliance during the entire home renovation process.

The city of Olot plays an important role not only in the set-up of the Foundation, but also when leading key activities such as communications and marketing, contractor verification, project design and monitoring of the works. The typical steps involved in the renovation are as follows:



<sup>9</sup> www.fundacioeuropace.org



The program's office is conveniently located in the City Hall building, attracting citizens and building trust.





HolaDomus also supports vulnerable groups by offering homeowners the option to combine grants, subsidies and affordable financing, and launching initiatives such as an "Energy Poverty Prototype", an action geared towards supporting energy poor citizens in Olot and measuring the benefits of a sustainable renovation on their health, wellbeing and budget. Even if COVID-19 seriously impacted the programme, it did not prevent it from mobilising nearly EUR 2 million in projects and validating 52 contractors.

Through the program, homeowners are offered logistical and technical support throughout the process and access to trained and qualified contractors. Thus, EuroPACE overcomes the main barriers to home renovation - lack of financing, technical knowledge and complexity of the works - which provides trust to renovate.

The HolaDomus program offers the following renovation measures to citizens:







Accessibility



Windows & Doors



Incubation



Heat & Cooling



Renewable Energy Solution

The HolaDomus program resulting in the following impact:

- ✓ Total investment of EUR 1.87 M mobilized;

- The majority of projects are single measure (61%) in single unit homes (67%); followed by apartments (21%);
- ✓ Users rate the program 8.6/10;



The HolaDomus program served as a testing ground and a number of hypotheses were validated during the three years of the project. Based on the learning experience with HolaDomus, GNE put together a toolkit aimed at replicating the program in other cities and regions. The commercial efforts are described in the following section.

- ✓ Legal Set-up: An effective legal set up ensures that the program structure can help mitigate risks for public authorities and investors. Additionally, it allows to design programs that address the local needs. The necessary legal framework involves the documents and the composition of the program entity and the financing vehicle.
- Program Procedures: This is a guide for the program staff, including procedures for engaging with customers and contractors, code of conduct, flow charts and administrative processes.
- Financing: One of the key goals of the program is to offer affordable financing to homeowners. This can be done by combining loans with public funds, incentives, subsidies and rebates. GNE's loans are specifically designed for eco-sustainable home renovation. Homeowners can finance up to 100% of investments in a project. Long terms and attractive interest rates result in affordable monthly repayments, motivating homeowners to take action.
- Communication, Marketing and Sales: Proactive communication efforts and trusted sales experts that focus on generating projects are key. Marketing tools and campaigns focused on delivering projects are part of the toolkit.

Contractor training and verification: Contractors follow a verification process and sign consumer protection policies.

- HR and Staffing Guide: in order to streamline the program staffing, several key competencies were identified, including energy efficiency expertise, communications and marketing, and administrative experience.
- IT Tools and Data Management: Secure and user-friendly digital tools to facilitate the customer journey form application to project completion. This includes both front- and back-office tools.

The toolkit is used by GNE to set up programs in the Basque Country, Catalonia, and on Balearic islands. GNE supports cities and regions in designing programs that addresses the needs of each city. Subsequently, GNE set up the programs and manages the service delivery to citizens.



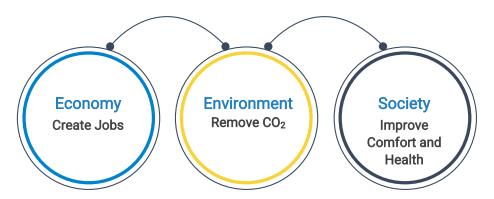
## EuroPACE's Impact and Replication Efforts

### **Impact**

The EuroPACE project created real and measurable impact across Europe by developing an innovative:

- Renovation formula
- Public-private partnership model

EuroPACE is aligned with several Sustainable Development Goals, such as: 3, 7, 8, 11, 12, 13, 15, and 17. By promoting energy efficient and renovated buildings EuroPACE contributes to community regeneration and improving the living conditions of all the Europeans that live in energy poverty.



### **Replicator Projects**

The EuroPACE project is well positioned across Europe and it inspired several EU projects focusing on developing integrated home renovation programs:







FITHOME in the Netherlands is currently one of the most successful examples of implementing the on-tax financing mechanism within a European legal framework. As such, it is fully in line with the originally foreseen on-tax approach of the EuroPACE project, making use of an innovative mechanism in Dutch law

www.fithomeproject.eu

REGENERATE on the Balearic Islands intends to replicate the citizen-oriented integrated home renovation services developed under the EuroPACE auspices, to ensure that Balearic homeowners have climate-proof, sustainable homes.

www.regeneratebalears.com

HIROSS4All in the Basque Country, with its Opengela program, provides technical assistance to homeowners and affordable financial solutions to offer vulnerable homeowners the possibility to finance their sustainable home renovation

www.opengela.eus



### **EuroPACE Leader Cities**

The following Leader Cities participated in the project: Mouscron in Belgium, Valencia, Barcelona, Ibiza, Palma, Menorca, Bilbao, and Lisbon in Portugal. Each leader city would benefit greatly from increasing the energy efficiency of their building stock to decrease energy poverty, preserve citizens' homes, reduce local emissions, and tackle area specific issues that have evolved over time due to inaction in the sector. As such, each of the aforementioned cities had an opportunity to explore the EuroPACE model and the innovative financing mechanism in order to decrease the negative effects that their aging building stocks are having on their communities. The interactions with these 8 regions resulted in the following:



- O Two workshops were held in Lisbon which were centred on discussing the application of legal and fiscal mechanisms used within EuroPACE as well as the possibility of creating a one-stop-shop in the city. In partnership with a local law firm, a brief was created to identify legal alternatives to implementing EuroPACE's home-based financing model in Portugal, and informed further conversations about legal barriers to moving forward with the model in the city. Opportunities, recommendations and next steps to adopt the EuroPACE framework were identified and include but are not limited to increasing consumer literacy, trust, and participation in energy efficiency via engagement through a local, citizen-centric one-stop-shop; assessing and pursuing a course of action to allow for the collection of payments for home-based financing; creating public-private partnerships (PPPs); establishing a social guarantee fund (SGF) to enable affordable financing for renovations to all citizens in Lisbon.
- With EVE being the energy agency for the Basque government, the existing relationship was leveraged to encourage the use of the EuroPACE model in Bilbao. The model was adapted to enable low-income populations in the Basque country's vulnerable districts to undertake home renovations, and resulted in the HIROSS4all project. This project sets up OSSs in the Basque Country and makes use of an SGF, modelled after the one used within EuroPACE and managed by the EuroPACE foundation, to lend to vulnerable groups for energy efficient renovations. Further development of these programs will take place under the HIROSS4all project.
- ✓ In Valencia, two workshops were carried out which were similar in structure to those having taken place in Lisbon, and focused on the practical and technical requirements as well as legal and administrative implications of setting up an effective home renovation service for Valencian homeowners. After these sessions, it was agreed that a PPP and SGF should be created to attract private investments for scaling and de-risk the home-based financing process. In order to allow for EuroPACE to be adapted in the city, an amendment was therefore proposed to the Climate Change and Energy Transition Law in Spain to establish a municipal levy for fund collection and a guarantee mechanism for programmes aimed at improving energy efficiency of old homes.



- ⊙ GNE Finance developed a good working relationship with the three Balearic Islands, and with Menorca in particular. Due to their commitment to establishing collaborations to mobilize financing, technical support and regulatory changes in the region, Menorca included EuroPACE implementation as a goal in their Menorca 2030 Strategy. In addition, based on Ibiza and Palma's interest to replicate the EuroPACE framework as a means of decarbonising their building stock, all three regions joined GNE to assemble a consortium to provide technical assistance and affordable financing to residents via one-stop-shop on each of the islands under the REGENERATE project, based off of EuroPACE. Next steps for implementation of home-based financing are being taken under the REGENERATE project.
- ⊘ No workshops were held in Barcelona, but rather a practical and operational collaboration was set up based in EuroPACE's roots in Catalonia in which the city of Barcelona and GNE Finance collaborated through the city's MES Barcelona initiative, or Barcelona Sustainable Energy Mechanism. The MES Barcelona framework aims to attract private investors to stimulate the energy transition in the city through the promotion of solar energy. Moving forward, GNE Finance and the city of Barcelona will fine-tune and improve the program by exploring the possibility of an SGF and a physical OSS.



Programa de rehabilitació energètica d'edificis



### HolaDomus Barcelona



As the Spanish city of Barcelona is particularly active in terms of implementing policy tools and initiatives geared towards a more sustainable city, diving into potential EuroPACE replication was a logical next step. <u>HolaDomus Barcelona</u> was launched in the early 2021 providing renovation services in the city.

# The EuroPACE Community: Building Momentum

Having a strong community following the development of the project was key in ensuring the continuity and replication of the work. The dissemination activities included: organisation of inperson and online events, forums, newsletters, social networks, but also through the help of the press and the EuroPACE website.

### **Events and Webinars**



The EuroPACE project was presented at 24 events, including 18 webinars, since the start. During 2020-2021, during COVID-19 lockdown, 430 people attended the live broadcast of the events, the recordings of these events have 1087 views on YouTube, 46 partner speakers were enabled to address relevant topics and present their projects and 28 different organisations participated in these virtual events. Additionally, 11 Forums were organized to discuss specific topics, share the findings of the work of the pilot with external stakeholders, especially potential Leader and Follower Cities, and collect feedback



The dissemination efforts made through the events attracted a wide and diverse audience of regional and national governments, financial consultants, energy consultants, think tanks, energy infrastructure companies, performance monitoring companies, energy companies, educational institutions, finance institutions, energy associations, etc. In terms of the geographical presence, the events brought together a wide array of countries, not limited within Europe's borders. The EuroPACE events gathered people from 26 different countries (Belgium, Italy, Hungary, the Netherlands, Switzerland, United Kingdom, Germany, France, Ireland, Spain, Slovenia, Finland, Slovenia, Slovakia, Romania, Canada, Poland, Chile, Sweden, Portugal, Turkey, Nigeria, Bulgaria, Croatia, Greece, Luxembourg). Thus, demonstrating the success of these events and the interest shown by the range of countries, which can get inspired and in turn implement similar initiatives in their cities and regions. You can see below a map representing the countries listed above.



Annual Summits were organized from 2018 to 2021, addressing the audience of more than 500 people, with participants from the public (energy agencies, local and regional authorities, other) and private sectors (financial institutions, ESCOs, project developers, etc.).

The first Summit took place in October 2018 during the EU Week of Regions and Cities 2018, a four-day event during which cities and regions showcase the importance of the local and regional level for good European governance. The second event Summit, entitled "Investing 4 People", took place in-person on June 19, 2019 in Brussels in person and attracted nearly 100 participants. The third Summit took place during the EU Sustainable Energy Week 2020 (EUSEW), the biggest event dedicated to renewables and efficient energy use in Europe. The fourth online summit took place over three different days (May 28, June 2 and June 8 of 2021), allowing to address 3 distinctive topics related to sustainable home renovation.



The last summit was organized in Spain, "Cumbre Madrid 2021", in July 2021 by GNE Finance, Repsol Foundation, Green Building Council Spain and AUNA, included 20 speakers from different companies.

This summit offered cities and regional entities the unique opportunity to learn and interact with experts from the renovation and housing finance sectors. This event brought together policy, financing, construction professionals and renovation programs. The summit showcased the best practices and lessons learned from the EuroPACE flagship project and also focused on the successful initiatives of the Basque Country and Balearic Islands.



### Newsletter

With regards to the newsletters, EuroPACE has generated 976 subscribers. 293 of whom open the newsletter within the first month of receiving it. On average, one newsletter is sent out every month to maintain a regular dissemination effort and to keep the audience engaged.

### Social Networks

The EuroPACE project is present on social networks through its Twitter account and its LinkedIn page. On Twitter, the account has 843 followers and lists 1029 tweets.

#### **EuroPACE** in the Press

The EuroPACE project was featured in 2020, an Op-ed by Davide Cannarozzi entitled "<u>Building energy efficient</u>, sustainable homes for all" was published in the Foresight Magazine. Davide argued, in line with the EuroPACE project, that sustainable home renovation should be a key priority for public administrations not only because of climate and energy goals, but also because of its impact on people's health, wellbeing and comfort.

The Inmodiario, a Spanish newspaper publishing real estate market news and updates, published in September 2020, an article entitled "<u>6 características clave de un hogar saludable, confortable y resiliente</u>" highlighting that energy efficient renovation should also focus on air quality, adequate temperatures, lighting, and noise to ensure that our homes are ready for the future.

In June 2021, Energy Cities, a network of 1,000 local governments in 30 countries published the article "The rehabilitation of building stock will be public-private, or not at all", which argues that public-private partnerships are essential to address the required structural change in terms of accessibility, safety, and eco-efficiency of the building stock. It presents the EuroPACE project, sponsored by the European Commission, as a program "promoting eco-efficient rehabilitation through public-private partnerships with affordable financing, while taking into account social circumstances (economic vulnerability)."

Furthermore, the EuroPACE initiative was highlighted by the International Energy Agency in its report "Energy Efficiency 2019" showing how a range of digital technologies accompanied by the right policies could improve energy efficiency in industry, buildings and transport.

In addition, in a recent paper written by Christophe Milin and Adrien Bullier entitled "Towards large-scale roll out of "integrated home renovation services" in Europe", the EuroPACE project, inspired by the US-based Property Assessed Clean Energy (PACE) model, was mentioned and recognized as an initiative "overcoming the aversion of households to take financial commitments with a longer term than they expect to stay in the dwelling". The home-based financing solution provided by EuroPACE has multiple advantages enabling homeowners to access financing without burdening them.

Finally, the EuroPACE project has been mentioned in several other articles, publications, reports or interviews from the <u>Green Finance Institute</u>, <u>Foresight Magazine</u>, the European Commission Renovation Wave communication, <u>Cordis</u>, <u>Covenant of Mayors Investment Forum</u>, and so on.

The project's outcomes will be shared on www.qnesolutions.com/europace



GNE Solutions is the leader at designing and managing eco-sustainable home renovation programs in Europe. GNE Solutions offers advisory and consulting services to European cities and regions with a focus on the design, set up and management of eco-sustainable home renovation programs. In the following years, GNE Solutions intends to support cities and regions in deploying the NextGenerationEU funds towards energy efficient renovation.

#### GNE Solutions services include:

- Market analysis and program co-design: GNE Solutions works closely with public authorities and conducts market & gap analyses. This allows us to co-design programs that address local needs.
- Set up of effective program structure: Setting up the necessary legal framework to put in place the program managing entity, as well as the financing vehicle.
- Affordable smart financing: Unlocking private capital and combining it with public funds, incentives, subsidies and rebates ensures affordable loan repayments for citizens
- Sales and marketing: Trained and trusted sales experts to focus on proactively generating projects and creating connections with citizens that lead to home renovations.
- O Digital tools: We set up secure and user-friendly digital tools to facilitate the customer journey from application to project completion.

Above all, GNE Solutions is focused on delivering a frictionless and stress-free experience to all Europeans when it comes to home renovation.

## **EuroPACE**

### **CONTACT DETAILS**

About GNE Finance: GNE Finance is a high-impact investment company, focused on designing & managing eco-sustainable home renovation programs in Europe. GNE Solutions, an advisory and consulting business unit is focused on designing, setting up and managing home renovation programs.

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For more info about Fundació EuroPACE, please visit: <a href="www.fundacioeuropace.com">www.fundacioeuropace.com</a> or write to <a href="mailto:info@fundacioeuropace.com">info@fundacioeuropace.com</a>

EuroPACE project materials are accessible via the projects' page on the GNE Solutions webpage at <a href="https://www.gnesolutions.com/europace">www.gnesolutions.com/europace</a>