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Deliverable 6.3 – EuroPACE in a Box Toolkits

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Executive Summary

This Deliverable provides guidelines for the replication of the EuroPACE home renovation model. The document offers insights into the processes for designing and operating an integrated home renovation program, with the example of the HolaDomus program in Olot.

The guidelines present general principles and considerations for how to approach each step in designing and setting up a program. The guidelines laid out in this Deliverable cover the replicable legal, administrative and staffing components related to setting up and running the HolaDomus pilot, as well as financing, contractor training, marketing and sales practices. The 'toolkit' is composed of the documents, contracts, and manuals developed during HolaDomus implementation. The 'toolkit' aspect of this Deliverable lies within its annex.

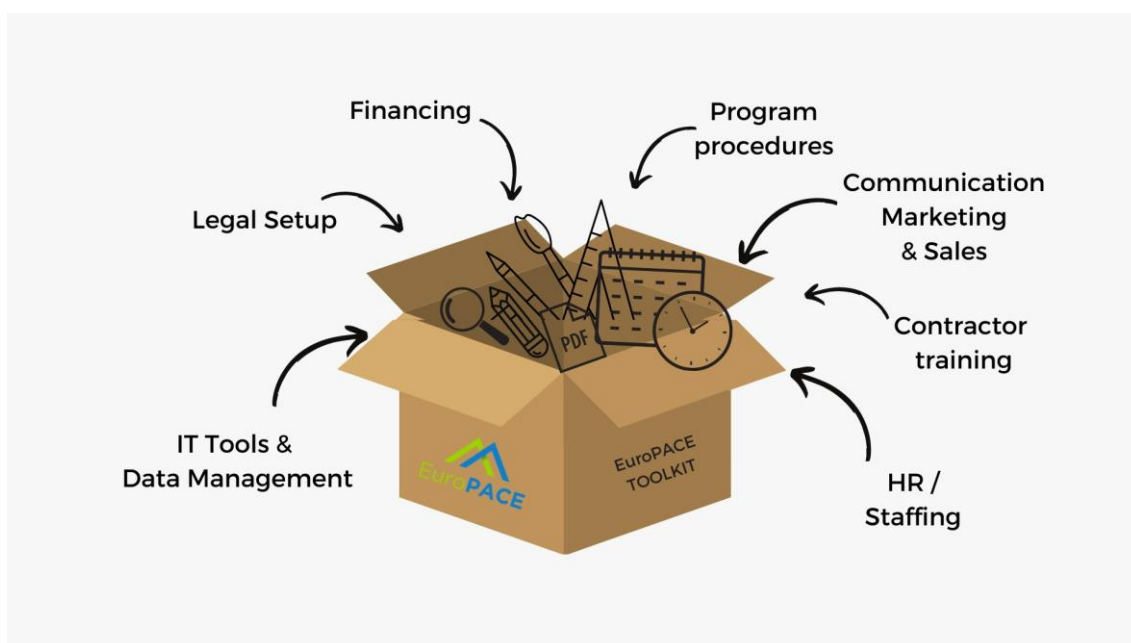


Figure 1 The EuroPACE "Toolkit"

The HolaDomus program served as a testing ground and a number of hypotheses were validated during the three-and-a-half years of the EuroPACE project. Based on the learning experience acquired through HolaDomus, as the EuroPACE project comes to a close, GNE has summarized the following guidelines together with the toolkit aimed at replicating the program in other cities and regions in Europe.

The toolkit has furthermore been used by GNE to set up programs in the Basque Country, Catalonia, and on the Balearic islands. With it, GNE supports cities and regions in designing programs that addresses the needs of each city. Subsequently, GNE sets up the programs and manages a high-quality service delivery to citizens.

Legal Set-up

The key actors in setting up an integrated home renovation service based on a one-stop-shop model are local or regional public authorities, a home renovation program entity (or managing entity), and a financing provider. The graphic in this section provides a visual representation of how this ecosystem is intrinsically linked together in order to provide the homeowner – who is always at the heart of the program – with a holistic technical and financial service provision.

To establish an effective set-up of the EuroPACE integrated home renovation service and a solid collaboration between these public and private actors within the program, a sound legal framework must be put in place (see *Annex 1*). Furthermore, this framework serves to mitigate risks for public authorities and investors and can be tailored to address local needs. The necessary legal framework involves a set of documents that structure the composition of the home renovation program entity and the financing vehicle. The relevant framework and procedures will be described in more detail in the subsections below, and specific documents referred to can be found in the annex.

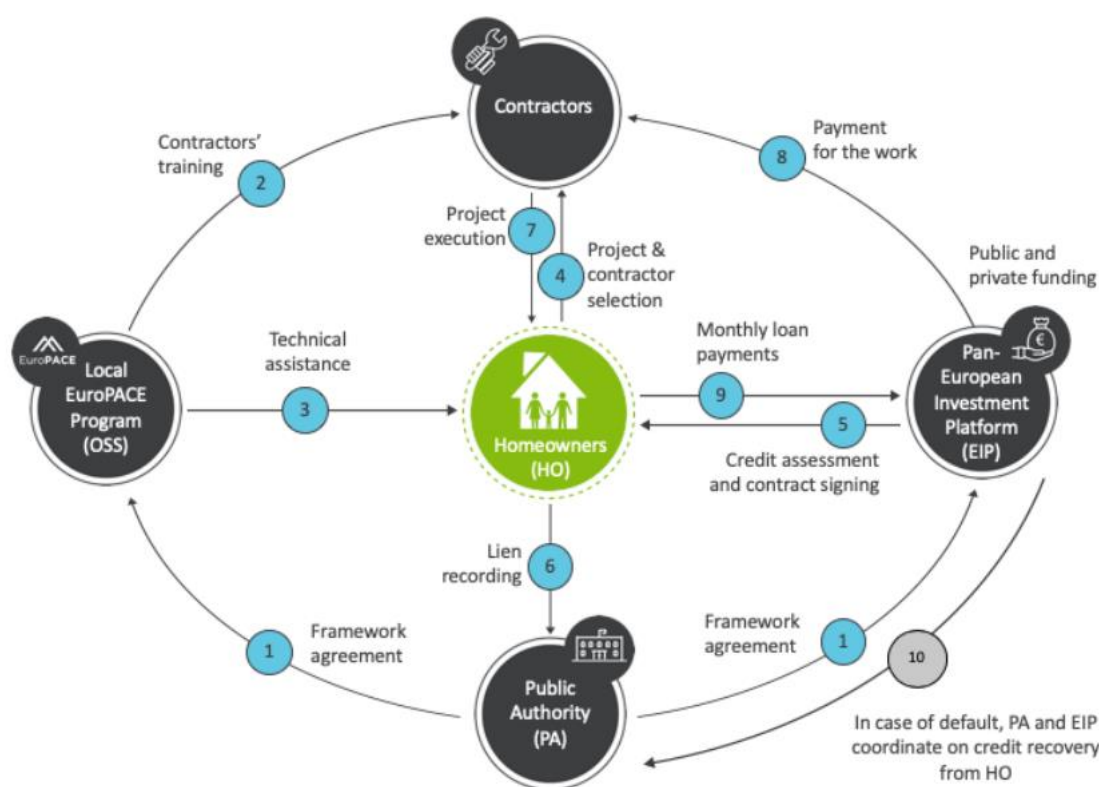


Figure 2 Visualization of stakeholder relationships in a EuroPACE program, with the homeowner always being the center figure

Managing Entity

It is useful to create a Managing Entity to oversee the integrated home renovation service, as it is prudent to create a legal separation between the participating public authority, city or region, and the services provided, differentiating the public budget from that of the program and lowering risks for the public authority. Furthermore, this

separation insulates the integrated home renovation service from any political changes within the participating public authority and as such, ensures the stability and longevity of the program. Within an integrated home renovation service, the Managing Entity provides oversight and management in terms of practical and operational matters relating to the local program. Furthermore, the Managing Entity can be the service provider for the technical assistance component of the program, or alternatively the Managing Entity can be in charge of contracting a third-party service provider.

The EuroPACE Managing Entity oversees the practical management of the HolaDomus pilot program in Olot, and provides materials such as standardized documentation, marketing materials, contractor training guidelines, criteria on eligible measures in home renovation projects, etc. It is this Managing Entity that enters in a public-private partnership with the local authority looking to roll-out EuroPACE, and which supports the latter by deploying a market-driven and agile approach whilst safeguarding the public budget by nesting the public funds dedicated to the integrated home renovation service under an independently managed entity.

For the Olot pilot program under the EuroPACE project, the right legal structure for the Managing Entity was investigated and assessed by partners GNE and the Municipality of Olot in Catalunya, so as to enable an agile collaboration between all partners involved.

As a result of this extensive research, it was decided that the HolaDomus pilot would make use

of a private not-for-profit foundation for their Managing Entity body. Whether such a foundation is the right tool for setting up a EuroPACE program Managing Entity in other locations, as well as the administrative and legal requirements and timeframes for doing so, is heavily dependent on the national and legal context in which the partners operate in each individual case; **it is thus**

prudent to do an analysis of the most suitable legal set-up for the Managing Entity on a case-by-case basis. In the Olot example the rationale for opting for the private not-for-profit foundation – the Fundació EuroPACE – jointly managed by the Municipality of Olot and GNE Finance, was the following:

- The economic activity of the Managing Entity does not consolidate with the municipality's balance sheet, thus not limiting the city's budget
- As a non-for-profit, it can be a trusted entity to receive and manage funds to alleviate energy poverty, thus serving as a de-risking mechanism
- Preferential fiscal treatment due to the non-profit status
- Positive social perception and community engagement
- Eligible to receive subsidies and donations



Figure 3 The Fundació EuroPACE, the not-for-profit foundation acting as a Managing Entity in the Olot pilot program

Fundació
EuroPACE

- Ability to act as a social platform to raise awareness, tackle energy poverty, and support vulnerable groups.

The role of the Fundació EuroPACE Managing Entity has been established as follows:

- Oversight of all activities undertaken in the program to ensure that they comply with the quality standards
- Control of services provided by external companies or agencies
- Monitor contractors' work to ensure homeowners' satisfaction and contract's compliance during the home renovation process
- Pursue commercial endeavours to boost demand for home renovation in the region

Participation of Public Authorities

Home renovation is not just a private business of homeowners, but rather it is a public priority, considering the importance of ensuring that the European building stock transforms into a sustainable and efficient one, supporting climate goals through increased energy efficiency. For integrated home renovation programs to be successful, **strong collaborations with ambitious local authorities are required**, as the strength of the program lies with the public-private partnership that underpins it, which combines the agility and market knowledge of the private sector with the trusted image and robust service provision of public authorities. As such, this can create a situation in which both sectors gain from the partnership. Within this context, it is important to note that there exists a fundamental difference between a simple collaboration between the public and the private sector and a proper public-private partnership. The former tends to imply tender procedures and leads to a client-contractor type of relationship between the public authority and the private company, whereas the public-private integrated home renovation service model envisioned by the EuroPACE project seeks a true partnership where both parties contribute fully in terms of their strengths and fields of expertise.

There are various ways to operationalize a public-private partnership that seeks to scale up residential home renovation, and given the heterogeneous European legal and fiscal landscape, **it is important to adapt public-private partnerships to local needs and frameworks**. The EuroPACE approach to designing these public-private partnerships relies heavily on the integrated home renovation service (also commonly referred to as 'one-stop-shop' model), as it is deemed to be the most effective way to adequately support homeowners and citizens – who are the main focus in EuroPACE. However, other public-private partnerships such as co-investing ventures, co-training ventures to ensure a skilled workforce that can support the growing need for renovation, or other collaborations can also be a successful catalyzer for home and building renovation, depending on specific needs different regions in Europe have.

The participation of public authorities in a EuroPACE program is structured contractually, through a **framework agreement** signed between the local EuroPACE program Managing Entity and the public authority, taking care to clearly establish roles and responsibilities of both the public and the private parties. This agreement offers the

public authority an active role in the promotion and operational aspects of the program, whilst ensuring that the public budget is not consolidated with that of the program.

Financing Provider

In the HolaDomus pilot program, GNE Finance has been a dedicated financing provider, offering affordable home renovation loans characterized by long terms and low monthly installments (see *Annex 2*).¹ However, in general, it is not necessary for integrated home renovation service providers to develop financing offers; existing financing providers can – and should – be integrated into the service offering in order to be able to provide homeowners with a complete catalogue of available financing options (e.g. loans with local banks, private financiers). As such, as is the case for the technical assistance offer, the **Managing Entity can also act as clearing house for many financing providers, mediate on behalf of other financing providers, or have an exclusive contract with a specific financing provider.**

When the provision of financing is developed within the integrated home renovation service program, in order to pool financing from impact and other investors for EuroPACE financing, the creation of a **Special Purpose Financing Vehicle** may serve to funnel these investments towards EuroPACE loans. In such cases, said financing vehicle is a standalone legal entity with the sole goal to raise and manage financing from private investors, managing the EuroPACE loans and ultimately refinancing the loans when sufficient volume is achieved. To this end, fundraising activities are undertaken by the private partner in the EuroPACE program, in this case GNE Finance. The Financing Vehicle is thus also the entity that uses a set of eligibility criteria to assess homeowners applying for a loan, and ensure that applications by economically vulnerable homeowners are redirected to the De-risking Mechanism (see next section). The set up and management of the dedicated financing vehicle must be well-justified by the high volumes of financing. In most cases, it is more prudent to work with an existing financing provider able to pull projects from multiple jurisdictions.

De-risking Mechanism

The inclusion of a so-called **Social Guarantee Fund, or other similar de-risking mechanisms, is not a *conditio sine qua non* for EuroPACE programs to be successful.** However, in those cases where partners of the program in question decide that providing affordable **financing to vulnerable groups** is a key element to be included in the service provision, such a mechanism is ideal to safeguard the inclusion of economically vulnerable homeowners.

Under the Olot pilot program, the de-risking mechanism developed was the so-called Social Guarantee Fund ('SGF'). Although implied in the name, it is not a separate legal entity (i.e., "*fund*"), but rather its status comes forth from the legal agreement depicting that the involved partners pledge to provide funds to de-risk the provision of financing

¹ <https://olot.holadomus.com/financament>.

by providing a financial buffer for the non-payment risk that is traditionally associated with economically vulnerable homeowners looking to renovate their home. As such, the SGF is set up using public funds, allowing the public authority involved to decide on a budget it wishes to dedicate to supporting home renovation for vulnerable groups.

A similar approach was taken in the Opengela program in the Basque Country, where a Social Guarantee Fund was set up to provide affordable home renovation financing to vulnerable groups, the target audience of the program. The Opengela program, developed under the H2020-funded HIROSS4all project, has strong ties with and draws inspiration from the EuroPACE project.²

HR and Staffing Guide

Having legally established a solid EuroPACE home renovation program, the next step is to identify the right people to ensure a smooth and clear service offering to the homeowner, building a **solid base of competent program staff that brings together identified key competences**. Such competences relate to energy efficiency expertise, communications and marketing, and administrative know-how (see *Annex 5*).

An integrated home renovation program requires several competencies in order to serve the market. These competencies include, but are not limited to:

- Technical expertise in energy efficiency, renewable energies
- Renovation project design and coordination with energy services contractors
- Communications and marketing
- Customer service
- Home renovation financing expertise



Figure 4 Pictured: the HolaDomus team, providing technical assistance and support to Olot homeowners

Three core profiles that are indispensable for the provision of a high-quality service provision within a EuroPACE program are described in the following sections. These profiles are considered necessary to be able to achieve the integrated home renovation service's main goal of fully accompanying homeowners on their home renovation journey and uniting the technical, social and economic-administrative knowledge needed to provide adequate support from start to finish. These three core profiles will always closely collaborate and their specific qualities may be adapted to the socio-economic profile of the population where the integrated home renovation service is offered.

Technical Profile

One **technical profile will be in charge of the accompaniment and technical advice to the users of the program** throughout all phases of the renovation process.

² <https://opengela.eus/en>.

Furthermore, the technical profile will establish relationships with contractors, communities of homeowners and property managers in order to promote the services of the local EuroPACE program, and increase the number of projects achieved through the program.

The main tasks of the technical profile are:

- Conduct technical diagnoses to determine the current status of buildings and homes in terms of their structural health, energy efficiency, accessibility and compliance with relevant regulations.
- Establish and coordinate the technical team drafting the renovation project and accompaniment in the elaboration of the measures proposed.
- Provide advice to homeowners in terms of the search, bidding and contracting of works.
- Provide advice in the search for renewable energy solutions and suppliers.
- Participate, where necessary, in meetings of communities of neighbors and homeowner associations in order to inform about and promote sustainable renovation activities.
- Supervision of the execution of the works to ensure a smooth service and homeowner satisfaction.
- Collection of "as-built" project information for the elaboration of "best practices" documents for the local EuroPACE program.

Minimum requirements for the technical profile are:

- Education: Architecture, Technical Architecture, Technical Engineering or similar.
- Experience in drafting and management of energy renovation projects.
- Experience in project management and dealing with public administrations.
- Knowledge of compliance with current technical regulations (CTE).
- Experience in customer service.
- Availability to travel to the other offices of the program (located in nearby municipalities).

Valuable qualities:

- Specific training in energy renovations and renewable energies, knowledge of LEED, BREAM, Passivhaus certifications.
- Management in administrative procedures linked to housing rehabilitation.

Personal skills:

- Ability to coordinate several projects at the same time.
- Client oriented.
- Excellent communication and interlocution skills at different levels.
- Great ability to work as part of a team.

Administrative Assistant

As a second core profile, the integrated home renovation service's **administrative assistant will be in charge of ensuring a smooth and pleasant service to the homeowners and users of the service**. She or he will also be in charge of providing administrative support for back office tasks arising from the opening and closing of projects, and ensure that sales and marketing processes are of a high quality.

The main tasks of the administrative profile are:

- Front-office, sales-oriented attention to the homeowner.
- Administrative support in public procedures such as petitions for grants or subsidies.
- Support in administrative tasks related to the smooth management of renovation projects.
- Administrative management of all the additional elements necessary for a frictionless management of the integrated home renovation service, such as office material orders, e-mail management, etc.

Minimum requirements for the administrative profile are:

- Training: Intermediate Level Training Cycle in Administration.
- Mastery of the Office package (Excel, Word, Power Point).
- Languages: local languages (and dialects), based on location of the EuroPACE program.
- Experience in customer service.

Valuable qualities:

- Previous experience in administrative work in projects related to home and building renovation, licenses, and other public administration procedures related to home and building renovation.
- Marketing experience.

Personal skills:

- Good social skills.
- Organized and decisive person.
- Great capacity for teamwork.

Social Worker Social Engagement Officer (Optional)

The last, optional profile consists in a **social engagement officer, who will be in charge of community engagement and supporting vulnerable homeowners throughout their home renovation process**. Social competencies are important for all program staff to embody, but especially with regards to integrated home renovation services that target vulnerable populations, a separate social engagement officer is a valuable profile to integrate. The social engagement officer will establish relationships

with local communities of neighbors and homeowners, neighborhood associations and other relevant local entities in order to gather deep knowledge of citizens' needs and desires in terms of home renovation and urban regeneration topics (safety, domestic violence, immigration issues).

The main tasks of the social engagement officer are:

- Promotion of citizen participation in order to inform about and disseminate the characteristics and advantages of the EuroPACE program.
- Visits to the program areas and preparation of reports on users' needs.
- Advising and informing users regarding actions and procedures of social resources they may need and be of interest to them.
- Participation in the meetings of communities of neighbors in order to negotiate and mediate conflicts that may hinder the decision-making process.

Minimum requirements for the social engagement officer are:

- Training and experience in Citizen Participation or Conflict Mediation, certified by an official center or entity.
- Previous experience in management of Neighborhood Communities and negotiation with owners.
- Knowledge of Horizontal Property Law.
- Availability to travel to the other offices of the program (located in nearby municipalities).
- Languages: local languages (and dialects), based on location of the EuroPACE program.

Valuable qualities:

- Training in Gender Equality, certified by an official center or entity.
- Interest in urban regeneration as a mechanism that promotes social cohesion and inclusion.

Personal skills:

- Empathy/people skills to attend to citizens and homeowners.
- Negotiation and conflict resolution skills.
- Great ability to work as part of a team.

Considerations with regards to Staffing

In addition to the importance of incorporating the right profiles into the integrated home renovation service, as described above, it is also highly valuable to consider the importance of **hiring said staff locally**: this creates an additional local economic impact, as well as fosters homeowner trust in the program staff. Local staff is also more intimately aware of demographic specificities and the qualities and necessities of the local built environment. Furthermore, the staff and program should have fluid **connections with the local public authorities' existing services and relevant**

departments, to ensure that processes such as permit requests can be channeled adequately and in a timely manner.

Furthermore, the descriptions for various program staff outlined above do not preclude the possibility that one person fulfills several functions at the same time, depending on the workload and maturity of the local EuroPACE program. For a smooth service offering, **it is crucial that every person on staff is able to adequately market a home renovation project to homeowners and citizens** that are interested, and provide a good customer service and a pleasant experience.

Program Procedures

To fully inform and align staff working within the EuroPACE integrated home renovation service program, a guide is provided which supports their day-to-day activities by outlining eligible measures, procedures for engaging with customers and contractors, flowcharts, explaining administrative processes, and establishing a code of conduct.

Eligible Measures

Given that the integrated home renovation services offered within a EuroPACE program are focused on promoting a more sustainable residential built environment, in the Olot HolaDomus pilot criteria were developed to standardize and recommend the adequate solutions for energy efficiency renovations (see *Annex 4*). **Defining such a list of eligible measures helps determine the scope of the program, and can thus be adjusted to local needs.** Defining the eligible measures furthermore provides the foundation for verifying professionals according to their relevant expertise, as well as pinpointing the projects that can be admitted as part of the program. In some cases, the measures chosen also lead to said renovation project being eligible for a specific financing product or subsidies, which constitutes another element that is integrated in the program's service offering.

The criteria for selecting the eligible measures must be elaborated with the competent public authority partaking in each specific EuroPACE program. The outcome of this joint effort is a specific list of eligible measures, focused on energy efficiency and renewable energy. It is also recommended to include accessibility and structural safety measures among the eligible measures, as these often coincide with energy efficient interventions in renovation projects and tend to be highly requested by homeowners, who are in turn more receptive to the implementation of energy efficiency and renewable energy measures in conjunction with accessibility measures.

The final list of eligible measures has to be designed with at least the following topics in mind:

- Current state of the local building stock
- Impact of the renovation measures in respect of energy consumption
- Relevant local regulations

Further, when defining the eligible set of measures, different approaches can be taken when evaluating said measures:

- Cost/benefit ratio
- Multiple benefits
 - Comfort improvement
 - Health improvement
 - Lower electricity bill
- Popular demand
- Individual or package measures
- Passive measures
- Active measures
- Energy certification improvement³

All in all, the methodology selected between partners when defining the list of eligible **measures should facilitate the measurement of the local EuroPACE program's impact**, i.e.: energy saved, renewable energy produced, CO2 emission reduced, etc. To foster the highest impact, it is also crucial that eligible measures are reevaluated regularly to ensure that state-of-the-art measures and new construction materials, practices and developments are included in the program offering. Lastly, safeguarding that there is **a clear value proposition towards homeowners and their true needs and desires can be met by the selected measures remains crucial at every step in the selection process**.

For its HolaDomus pilot in Olot, the EuroPACE project partners conducted a top-down analysis in order to define the eligible set of measures (or investments). This methodology was composed by 6 steps⁴:

1. Analyzed the energy consumption of the residential sector and key barriers to the penetration of more efficient technologies
2. EU policies assessments related to energy efficiency and renewable energy in buildings regulations, and the EU Taxonomy, which all integrated home renovation service programs should comply with in order to seek an adequate reduction in energy expenditure when conducting renovation projects (for this, a strong coordination with a financing provider will be necessary)
3. Case studies for inspiration: KfW in Germany, The Green Deal in the UK, The Jessica Fund in Lithuania and US PACE
4. Developed a methodology to define eligible investments in EuroPACE
5. Definition of eligible energy investments for Spain
6. Definition of eligible investments in Olot

³ Many subsidies for home renovation measures are connected to acquiring an “A” or “B” in the energy label qualifications or changing 2 letters in the label scale.

⁴ See also: D3.3 “Methodology to define eligible investments to EuroPACE”.



Figure 5 The HolaDomus pilot website provides an oversight of eligible measures: from left to right: (first row) heating and cooling, insulation, windows and door, renewable energies and batteries, smart homes (second row) accessibility, repairs and reforms

Customer Journey

It is crucial that homeowners feel supported from start to finish when coming into contact with a EuroPACE program, as **trust to renovate is the cornerstone of the EuroPACE project and the integrated home renovation services it has inspired** (see Annex 9).

When a homeowner reaches out to the EuroPACE program, be it by giving their local EuroPACE one-stop-shop a phone call or simply walking into the office to talk to a representative, they are freely offered information about technical and financial options to

sustainably renovate their home in an accessible manner.



Figure 6 Step-by-step presentation of HolaDomus customer journey

In the case that the homeowner expresses her or his interest, the EuroPACE program representatives schedule a **home visit** with her or him to be able to adequately assess potential measures to be implemented. To ensure that the best possible advice is given to the homeowner, this home visit is conducted by an energy expert. The homeowner is also presented with a comprehensive case file that outlines the possibilities in terms of energy efficiency and sustainable renovation, as well as subsidy and affordable financing offers, amongst which GNE Finance's affordable renovation loan.

When the homeowner decides to proceed with a home renovation project, **she or he signs a service contract with her or his local EuroPACE provider**, after which she or he is offered a list of verified EuroPACE contractors to request quotes from and select, based on the various measures that she or he wishes to implement in her/his home. Throughout this process, the **homeowner is supported by a EuroPACE**

program representative that helps assessing quotes and can offer more advice when requested. After being fully informed and confident in their decision thanks to the high quality of the technical assistance offered by the EuroPACE program, the homeowner can subsequently finalize the offer with the selected contractors via email or a phone call, who will then start implementing the selected energy efficiency and renovation measures. The contractual steps that crystalize this understanding that the contractor will carry out home renovation works are digitized as much as possible; in the HolaDomus pilot, DocuSign is used as an IT tool to enable digital signing of the necessary documents.⁵ The service contract between the homeowner and the local EuroPACE provider is free of charge at this moment.

2- Use of 3 project quality control levels:

- Basic level “Compulsory Eligibility checks”. Mandatory controls for all investments done by internal experts/staff of the pilot:
Technical & financial eligibility checks and check on the plausibility of financial calculations done by internal experts (staff)
- Intermediate level “Mandatory review of an energy expert”. For some individual insulation investments above 10.000 € or 15.000 €, done by internal experts (staff) of the pilot:
Review of project documents, in-depth checks on the financial and technical calculations plausibility, but not an audit. If the work came for legal reasons with an already existing “internal” audit, it would be reviewed by the internal expert (staff) working for the pilot in Olot, but it wouldn’t be redone.
- Advanced level “Mandatory energy audit”. Only to be used in the case of “comprehensive rehabilitations” and “Packages”, done by external EE certifiers (called “building rehabilitation experts” in the pilot):
Mandatory, external and complete audit, covering all technical and energy aspects. In order to avoid conflict of interest, external lists of EE certifiers in the province of Girona will be used, some degree of experience will be asked (minimum turnover of X € during X years in similar works).

Figure 7 Excerpt of 'project quality control levels' developed for the HolaDomus pilot to ensure contractor quality controls (see Annex and see below)

To maintain a high standard for works conducted and ensure that measures are implemented according to what was agreed between the homeowner and the contractor, after the project is finished, EuroPACE will ensure the quality of the works carried out by conducting a **post-project validation of the works**, before the contractor responsible for the works is paid. This serves as an additional incentive for the contractor to diligently carry out the works she/he was contracted for. After the contractor has been paid, the repayment obligation is transferred to the homeowner. In parallel, in cases where homeowners opt to apply for financing through the program, they are offered a menu of financing options and in case they opt for a EuroPACE loan, which is provided by GNE Finance, they are assessed by the program and in case of a positive assessment, will sign a financing contract with the program. In the case that an economically vulnerable homeowner wishes to apply for a EuroPACE loan, their case may be referred to the Social Guarantee Fund (see above).

⁵ <https://www.docusign.com/>.

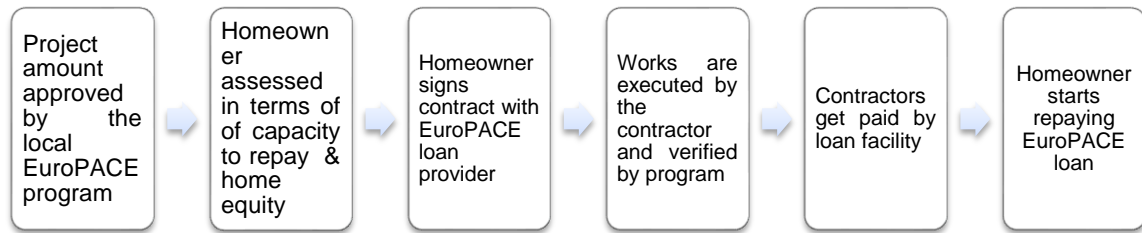


Figure 8 Specific customer journey with regards to obtaining EuroPACE loans, offered by GNE Finance

Furthermore, homeowners are contacted again one year after the finalization of their home renovation project, to **ensure that they are fully satisfied with the service they have been offered by their EuroPACE program**, whilst also collecting feedback and suggestions for improvement so as to continuously adapt the program to citizens' needs.

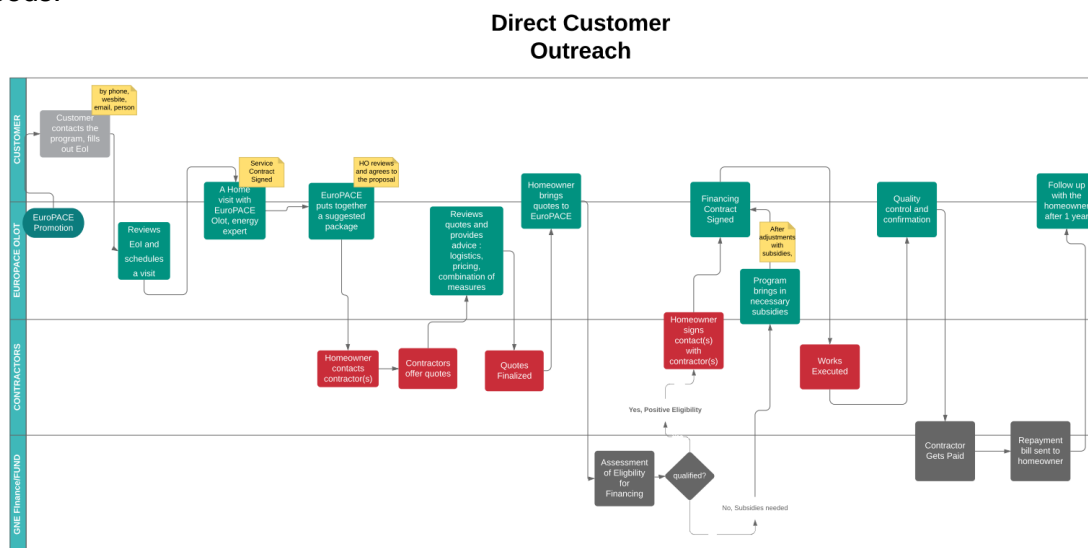


Figure 9 A detailed full customer journey visualization, developed for the HolaDomus pilot in Olot

When setting up a local EuroPACE program, the customer journey will be relatively similar in all cases (see Annex 6). However, given the importance of putting the homeowner at the center of these integrated home renovation services, every program must be mindful of potential local particularities that may affect the customer journey.

IT Tools for Program Management

IT tools that allow for a **close follow-up on potential leads, transaction management, selling propositions, deal-closing and aggregating data related to the achieved impacts from home renovation projects** are a crucial backbone of an integrated home renovation service such as EuroPACE. For its HolaDomus pilot program, an IT platform was sought out that would support these goals, and automate lead and data collection processes as much as possible to be able to scale up the program efficiently. The decision for this IT platform fell with



Figure 10 For the HolaDomus pilot, Smartsheet was the program management IT tool selected

Smartsheet⁶. Smartsheet is a customizable software-as-a-service package that allows for the collaboration between organizations, work management, tracking of project progress, document sharing, calendar sharing, etc. It must be noted however that there are many options available on the market today, and other potential IT tools such as eQuad and HubSpot were assessed as well.



Figure 11 An example of data visualization in the Smartsheet platform: homeowner satisfaction scores for completed projects under the HolaDomus program

In any case, core functions of the selected platform for an integrated home renovation service must be able to support municipal administrative information streams related to client outreach and information provision, contractor approval, project pipelines, and the management of client feedback or complaints, as well as

enable the smooth management of documents to serve as an archive of participating homeowners and potential, ongoing and finished projects. Furthermore, the active participation of contractors in some of these project management processes and digital tools may be desirable, although this was not achieved with Smartsheet in the HolaDomus pilot.

When setting up an integrated home renovation service, crucial evaluation aspects for IT tools are the following, which should be weighed against the costs of the tool being evaluated to ensure that the right choice is made for the program’s needs and budget:

- **User friendliness:** as actors involved in the program will be using the tools on a daily basis, it is very important that relevant information is easy to find, the interface is logical and intuitive
- **Sufficient functionalities:** available software on the market ranges from basic to very complicated. For actors within an integrated home renovation service it is crucial that IT tool functionalities allow for a visualization of data (projects in pipeline, active leads, etc.) and the storage of this data over a long period of time, as this is necessary for impact measurement
- **Platform ‘smartness’:** reducing the manual actions necessary for comprehensive reports and data visualization significantly increases the speed with which software can be used for an agile integrated home renovation service and as such, software that automates certain core processes should be positively valued

Financing

Although financing is only part of the solution when it comes to an integrated home renovation program, one of the main goals of the EuroPACE project is incorporating an

⁶ See Deliverable 4.4 “Evaluation and Pipeline Report”.

affordable financing offer to homeowners into the full service offering. This can be achieved through the **combination of loans, public funds, incentives, subsidies and rebates**.

Subsidies and grants comprise only 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. **The home renovation sector in Europe currently remains underserved by banks**, for the following reasons:

- In most cases, investable assets are not easily separated from properties thus making it difficult for investors to consider such investable assets as collaterals for the loan. Therefore, the financing offered is a personal (unsecured) loan: short-term and high interest.
- Basel III & IV banking regulations require higher capital allocation for unsecured long-term loans, making them unprofitable for banks who, consequently, require higher interests from the borrowers.
- Energy efficiency renovation market lacks the critical mass for banks to develop products and/or dedicated lines. Banks and other stakeholders are not set up to stimulate and aggregate project demand.
- Lack of technical knowledge to evaluate projects' risk and impact on savings, emissions, other benefits, and externalities.

In the Olot pilot, **thanks to GNE's financing, homeowners are able to finance up to 100% of their home renovation project** (see Annex 2), and long terms and low interest rates resulting in affordable monthly payments are motivators for homeowners to make the decision to embark on their home renovation journey. This financing can be provided by GNE Finance in any EuroPACE program set up in Spain.

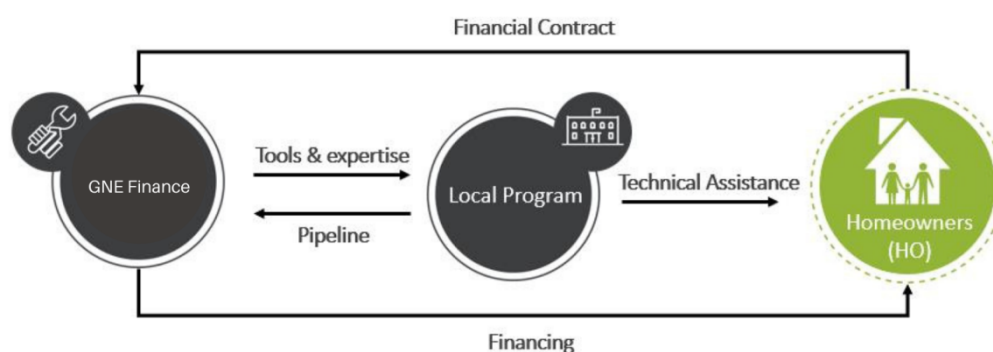


Figure 12 GNE Finance's home renovation loan offering visualized

TYPE OF LOAN	OF CONSUMER LOAN COLLATERALIZED BY A LIEN ON THE PROPERTY (JUNIOR TO MORTGAGE)
LOAN AMOUNT	[5] – [100] k€ per dwelling; up to [100] % of the financing needs of the borrowers

AVERAGE SIZE	Around [20] k€ per loan.	
LTV & CLTV	Loan-To-Value capped at max. [20] %; Cumulative-Loan-To-Value capped at max. [80] %	
DURATION	From 5 to [25] years. Average should range around [12-15] years	
PAYMENT TERMS	Affordable financing, depending on credit assessment, duration and potential energy savings	
MONTHLY INSTALLMENT	Typically, [40-500] €, depending on loan amount, interest rate and duration	
ELIGIBLE MEASURES	5 measures are eligible where minimal savings and impact thresholds must be met to be eligible.	
	Energy related measures	Non-energy related measures
	I. active (highly efficient HVAC, heat pumps, smart thermostats, etc.) and passive (windows, roofs, insulation, etc.) energy efficiency & climate resilience measures;	IV. accessibility systems and solutions (ramps, elevators, platforms) to guarantee universal access to premises (elderly and less-able people);
	II. distributed power systems (micro-windmills, Solar PV, biomass, geothermia, etc.);	V. integrated measures to ensure constructive safety for HO and tenants (especially for homes and buildings older than 50 years).
	III. energy storage units (Li-on batteries, etc.);	

Figure 13 Table outlining attributes of GNE Finance's home renovation loan offered within EuroPACE's integrated home renovation service

The GNE Finance loan origination process goes as follows (*see also above, the Customer Journey*):

- Homeowner defines a project, measures and eligibility with her or his local EuroPACE provider
- Homeowner provides all relevant data related to financing to GNE Finance
- The GNE Finance credit officer conducts a review the request based on the underwriting criteria to define financing conditions.
- The local program provides technical assistance to the homeowner to select a contractor and the right mix of measures.
- Once the installation is completed and after homeowner's acceptance of works, GNE Finance issues the payment to the contractor.
- Starting from the next month to the end of works, invoicing and collection are administrated by the Managing Entity or a third party service provider.
- Every quarter, a performance report is shared with investors and financiers.

Each home renovation project involves several stakeholders (HOs, contractors, financiers, and local municipalities), thus is prone to a range of risks. GNE and its financial partners will be exposed to certain risks related to HOs' capacity to repay,

performance of renovation measures and financial markets related uncertainties, for which risk mitigation measures are in place.

Risks	Mitigations
HO misses a monthly payment	Payments are scheduled on a monthly base with the goal to detect in an early stage (and in low amounts) potential delinquencies and default. GNE Finance will manage missed payments and their recovery in coordination with the EuroPACE program (following a pre-defined collection process), the local authorities and, only if necessary, with third party providers.
HO default	Thorough analysis of a HO's credit score. Coordinated recovery procedure between the local program and a municipality/region. Defaulted amounts are covered by a guarantee fund to a certain level.
Non-performance of equipment	In case the equipment installed does not work as planned, HO might increase their willingness to default on payments, damaging the quality of the overall portfolio. To prevent this, technological solutions and equipment eligible to the program will be carefully screened by the program and GNE Finance, relying on the best suppliers. Extended equipment guarantees will be a relevant plus and GNE Finance will also work with insurance companies to offer performance risk coverage to HOs that matches the duration of the loan.
Default of contractor	Any contractor willing to participate into the programme will have to satisfy minimum technical and economic requirements, set in the program. Also contractors will participate in a training program to offer continuous services of program compliance. By contract, GNE Finance will have the possibility to substitute the contractor in case the existing one defaults on its works. Furthermore, contractors that are object of review due to non-performing equipment, will not receive further works as long as the incident is not resolved.
Market interest rates	Financial offerings will be paired with the funding conditions. As such, if funding is at fixed term and fixed interest rate, similar conditions will be applied to the financing.
Prepayment of loan by HO	Scenario and sensitivity analysis are performed in order to evaluate the potential impact of prepayments by HO
Regional concentration	Initially, the origination of loans is focused on specific regions. Over time, more regions will be included in the program, ie reducing the over-exposure to a specific region
Multi-family housing associations: failure of payment of one party	Multi-family community law includes specific provisions in case of the default on payments and investment authorised by the community.

Figure 14 Risk mitigation table for EuroPACE home renovation loans provided by GNE Finance

Contractor Training and Verification

The Role of Contractors

Homeowner trust in contractors is crucial to make their home renovation process as frictionless as possible. To ensure that contractors tasked with carrying out EuroPACE home renovation projects respect the highest standards of quality of works and interactions with customers, a verification process has been established. Furthermore, EuroPACE-validated contractors sign consumer protection policies. The crucial role of contractors in integrated home renovation programs should not be underestimated, and their scope of work and involvement is highly dependent on how the program is designed. Contractors must be **verified by the program, trusted and able to deliver the best-in-class renovation projects**. In order to achieve such a task, several procedures and guidelines must be put in place and these will be covered in the next paragraphs (see *Annex 9* and *Annex 10*).

A first step consists in defining the **role of contractors** in the program. EuroPACE defines contractors as a key stakeholder, as they are ultimately responsible for performing the renovation works and are in direct contact with the homeowner. Therefore, all contractor verification and training procedures are an important avenue to influence the quality of works delivered and of interactions with citizens. In turn, the program should define a clear value proposition to trigger contractors' interest in being part of the program.

EuroPACE defines the following value proposition for contractors:

- Bigger project pipeline and value through aggregation
- Using IT tools to streamline the project management
- Simplifying administrative procedures, leading to the faster closing of projects
- Knowledge improvement via trainings

During the EuroPACE project, it was determined that in exchange for this value proposition, charging contractors **a success fee is one of the best practices for integrated home renovation programs to channel funds to the program whilst ensuring that the contractors applying to be part of the program are motivated and dedicated to the EuroPACE framework**. Such success fees are calculated on the basis of the total cost of the renovation project procured through the program.

Types of Contractors

Once the role of contractors and the value proposition are well defined, it is also important to consider the various types of contractors that need to adhere to the integrated home renovation service to be able to offer the needed services, ensuring that the selected Eligible Measures for the EuroPACE program (see *above*) can be provided to homeowners.

Classic types of contractors needed for this service provision are:

1. **Energy services contractors:** Professionals with a high-level of expertise on energy efficiency and renewable energy measures. In most cases, this type of expertise will be found with companies rather than with individual contractors.
2. **Installers:** This refers to the group of professionals that excel at installing specific equipment as well as recommending which measure or equipment is the best fit for the unique building characteristics in a specific renovation project. Typically, complex projects demand a group of more installers (3-5).
3. **Technical experts:** Highly specialized professionals with a blend of technical expertise plus on-site experience. In most cases, technical experts are rather senior and are capable of performing audits or works verification as well.

It's recommended to properly map the different types of contractors at the inception of setting up a local EuroPACE program, so as to have a complete overview of the construction sector in the area in question. The same was done for the HolaDomus pilot in Olot. Figure below showcases some of the HolaDomus' validated professionals.

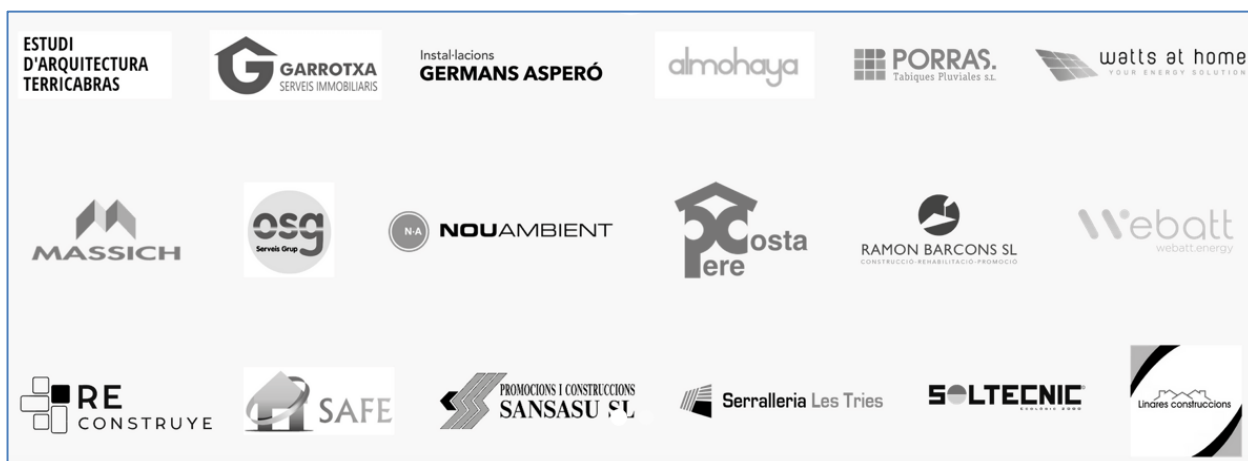


Figure 15 A showcase of some of HolaDomus Olot's validated professionals, as displayed on the HolaDomus Olot website

Once the role, value proposition and types of contractors have been successfully defined, a next stage consists on designing the **activities related to the actual contractor engagement and inclusion in their local EuroPACE program**. In other words, establishing all procedures that solidify contractors' enrollment and long-term participation in the program. This effort is considered crucial to the integrated home renovation service's success, and must be well thought-out before the official start of the program. This has been done for the HolaDomus Olot pilot, in which the following sequence of steps was taken⁷:

1. Design and establish a **validation procedure** for the different types of contractors
2. Design an **on-boarding training program** for all type of contractors

⁷ See Deliverable 3.4 "Final business plan".

3. Develop **contractors' outreach guidelines**
4. Define and establish a validation procedure for contractors performing complex works
5. Define the **eligible set of measures, equipment and materials**

Proper care must be dedicated to each step in this process in order to design a best-in-class renovation program that on the one hand generates trust with homeowners and on the other hand, is capable of sustaining a constant flow of sustainable renovation projects. The next paragraphs will take a deep-dive into each one of these activities. Then, key activities during project application and verification of works will be presented. Last, the procedure on how to engage with contractors for payments will be showcased.

Contractor Outreach Guidelines

To ensure that contractors come into contact with the integrated home renovation service and are encouraged to join, **outreach activities must be carried out to actively to create and grow the pool of local contractors and experts and over time scale up the EuroPACE program's capacity**. To this end, specific communication efforts are put in place. Guidelines and practices for this contractor outreach can be developed based on the program structure, budget available and local needs.

Some of the recommended efforts are the following:

- Radio advertisements
- Mailing, leveraging available public data on local contractors and construction companies
- Local newspaper ads
- In-person and online workshops and training sessions
- Make the validated list of professionals as public as possible, encouraging more contractors to participate in the program by creating a 'fear of missing out'

Design and Execution of the Validation Procedure

Once contractors are introduced to the EuroPACE and are actively seeking to participate, a first step is to set the protocol to validate contractors. The validation process serves as the first filter for attracting the right contractors to participate in the local EuroPACE program. Specific parameters may be tweaked depending on local building stock status and needs; however, the following three criteria provide a good baseline to base an initial inventory upon:

- Competitive landscape, such as: number of contractors, types of contractors and market share
- Level of expertise and experience of the contractor sector
- Desire of the local program partners: empowering independent contractors and SMEs versus including mid-size and large companies

Subsequently, validation protocols must address at least the following criteria:

- **Eligible measures for which the contractor wishes to be validated:** Contractors tend to have a defined expertise. Therefore, it's key that the program has a well-designed set of eligible measures (see above).
- **Contractor's demonstrated expertise:** Refers to the specific area of competence of the contractor as well as their experience, in years, in performing renovation works.
- **Administrative requirements:** Ability to present official documentation that contractors must have to be eligible for inclusion in the program, such as payment compliance certificates, health surveillance service, tax compliance documents, VAT number, etc.
- **Technical requirements:** Refers to documentation that reflects that the contractor has proven technical expertise in the area of competence. For instance, a list of technical certifications or datasheets on the last 15 projects carried on during the last 3 years.
- **Quality certificates (optional):** All types of certificates that prove that the contractor has expertise and is certificated by an official certification body. For example: ISO 14001, ISO 9001, etc. In all cases, the certificate must mention the Certification Body, Date and Validity.

Taking into account these guiding principles, under the auspices of the HolaDomus pilot a form was developed which all contractors must complete, and with which they are requested to provide the necessary additional documentation. This is mandatory for a contractor who wishes to participate in HolaDomus. Evidently, not all contractors will comply with the minimum-set requirement.

Contractor Training

Once vetted and validated, the on-boarding training program is the next step for contractors. **The on-boarding consists in developing a specific program, tailor-made for contractors, to learn about the ins and out of the program and the values and goals that underpin the EuroPACE concept.** It is recommended to design online training modules in such a way that contractors can access them at all times, as has been done for the HolaDomus pilot.

The methodology to design this training program consisted of:

- Selecting example cases where contractor training was integrated in home renovation programs
- Analyzing best practices in those example cases
- Creating a breakdown of the lessons learnt and the struggles
- Analyze which practice can be integrated into the local context
- Define the strategy for setting up and running the training modules

The EuroPACE approach to this methodology was exhaustive, and it involved significant effort from project partners. The following is the list of analyzed schemes that served as potential inspiration for the contractor training program:

1. KREDEX Fund (Estonia)
2. Jessica Fund (Lithuania)
3. Picardie Pass (France)
4. Energie Positif (France)
5. KfW Loans (Germany)
6. Green Deal (UK)
7. PACE – Ygrene (USA)

Out of this list of analyzed schemes, the KfW, Green Deal and PACE – Ygrene cases were selected for a full deep-dive analysis.⁸

The result of the aforementioned benchmarking exercise ultimately led to the development of the **HolaDomus on-boarding training program**. This program consists of 5 modules, which are in turn divided into different chapters. From beginning to the end, the HolaDomus training program covers all areas that are of interest of contractors. The modules and their respective URLs are the following:

1. **Module 0: Adhesion to the program** (*see here*)
 - 1.1 Accession Agreement
 - 1.2 Consumer Protection Policy
 - 1.3 Code of conduct
 - 1.4 Business Model

2. **Module 1 - HolaDomus basics** (*see here*)
 - 2.1 Introduction to HolaDomus
 - 2.2 How does a HolaDomus program work?
 - 2.3 HolaDomus service
 - 2.4 HolaDomus Projects

3. **Module 2 - HolaDomus procedures for contractors** (*see here*)
 - 3.1 Job generation
 - 3.2 Professional selection phase
Work definition phase
 - 3.3 Signing of the contract
 - 3.4 Execution of works
 - 3.5 Certification
 - 3.6 Incidents
 - 3.7 Receipt of work



Figure 16 Screenshot from the "Module 2 - HolaDomus procedures for contractors" training video

⁸ The full analysis can be found in Deliverable 3.8 "Toolkit for Contractors".

4. **Module 3 - Contractor Platform Procedures and Utilities** (*see here*)

- 4.1 Contractor workspace
- 4.2 Archived works
- 4.3 Certifications
- 4.4 Contractor portal
- 4.5 Sending offers
- 4.6 Incidents
- 4.7 Professional profile
- 4.8 Works
- 4.9 Opportunities
- 4.10 Make an offer
- 4.11 End of work report
- 4.12 Request for disbursement
- 4.13 Other functions

5. **Module 4 - Recruitment of vulnerable groups** (*see here*)

- 5.1 Introduction
- 5.2 DinàmiG and its role for companies in La Garrotxa
- 5.3 What is the current public offer of aid for the hiring of vulnerable groups?
- 5.4 What is the job offer that exists in the Garrotxa job exchange, with experience in the construction sector, to take advantage of these incentives?
- 5.5 How to contact DinàmiG?

When completing all the Modules, each chapter covers an essential part of what contractors should know when participating in the program. Some of the Modules are based on documentation that is shared with entering the program, such as the Code of Conduct, Consumer Protection Policy and Complaint System Management, described below.

It is strongly recommended to make the EuroPACE on-boarding program mandatory for contractors adhering to a new local program. Furthermore, the option of designing a simple test to assess whether the contractor grasps contents of the trainings and their obligations towards homeowners should be explored.

Administrative Enrolment of Contractors

The enrolment of contractors within a EuroPACE program must be formalized by a **legal contract or agreement that clearly states the responsibilities, faculties and limitations of all parties involved.** In most cases, the contract is signed by a representative of the program and the contractor. It's strongly suggested that all programs develop a standard contract to optimize contractors' enrolment and enable the smooth scaling up of the program's contractor database whilst defining common conditions for all contractor types. The signing of such a contract may also include additional documentation to ensure that contractors understand agree upon specific program conditions and particularities. In fact, EuroPACE programs can put together a "Welcome Package" that includes all pertinent information such as a Code of Conduct, Consumer Protection Policies and project eligibility criteria. Ensuring that the contractor

has access at all times, either digital or physical, to these guidelines and documents, is crucial.

For the documentation developed to formalize contractor's enrolment in the HolaDomus program, a contract is signed between the contractor and the program. This documentation serves to explicitly manifest contractors' interest in participating in the program, acknowledging that by signing it they will respect certain responsibilities, obligations and restrictions put in place to ensure that homeowners enjoy a good experience and works conducted within projects are of a high qualitative standard. Amongst these documents are **Consumer Protection Policies (CPPs)**, with the purpose of protecting the homeowner against any sort of adverse event that may occur when dealing with contractors throughout their home renovation project. Thus HolaDomus' CPPs addresses four areas: (1) Communication, Marketing and Data Privacy, (2) Validated Professionals, (3) Eligible Measures and Reforms and (4) Financing. In order to ensure that professionals are acknowledge of their responsibilities and limitations, HolaDomus' CPPs incorporate three Annexes. These are:

- Validation of professionals
- Complaint system (see *Annex 13*)
- Lists of documents needed for credit assessment

Furthermore, participating contractors sign a **Code of Conduct** which outlines the principles and standards that validated contractors are required to follow when working for EuroPACE. Commitment and fulfillment of the common rules exposed in the Code of Conduct is crucial to achieve Programs' objectives and core values. It's applicable for all professionals as well as their employees. The full document can be found in *Annex 12*.

It's also recommended that **the local EuroPACE program provides guidance and help to professionals to process the municipal permits for starting the works**. In most cases this process can be done online, and the application must state that the project forms part of the integrated home renovation service. For the HolaDomus pilot, the most common permits were identified, which are the following⁹:

- Major works permit
- Minor works permit
- Works under the advance notification regime
- Notification of the works

Verification of Works and Complaints

Successful integrated home renovation services generate trust amongst homeowners by providing excellent technical assistance and delivering high-quality projects. Although the contractor is ultimately responsible for performing the works, **the local program can put in place specific guidelines, practices and tools to monitor and**

⁹ See also D4.3 "Technical Assistance Methodology and Pipeline".

certify that the project is being executed as accorded. Enabling this process of feedback is a crux of the idea of keeping the homeowner at the center of EuroPACE: she or he must always feel supported by the program and its staff. Whenever a homeowner submits a complaint, the following steps should be following:

- **Intake/report of incident**, recording the complaint that was made in the program’s IT platform
- **Incident triage**: initially, the program staff will intend to resolve the issue on the phone with the homeowner at that very instance. However, should this not be an option, the complaint will be elevated to an identified compliance team within the program
- **Investigation of the incident**: this compliance team will then review the information provided and contact involved parties that same day
- **Remedial action** can be proposed through an agreement with the involved parties, or dictated by the compliance team, where a breaching party will be given a specific timeframe within which she or he must rectify the breach
- After this remedial action is implemented, the **compliance team will do a final review and archive all documents** related to the incident into the program’s IT platform

Depending on the severity of the complaint, professionals can lose their EuroPACE verification. Circumstances that lead to such a decision must be clearly communicated to contractors when they enter the program. Specific HolaDomus template documents for complaint submission and resolution procedures are attached as *Annex 13*.¹⁰ It is advantageous to integrate this complaint management system into the IT tools used for program management (*see above*) to ensure a smooth and integrated process.

Communication, Marketing and Sales

In order to ensure that the integrated home renovation services offered by the EuroPACE program are fully homeowner-oriented and presented to the public in an understandable way, proactive communication campaigns and trusted sales experts with a focus on lead generation are a key component of the program. This section lays out the marketing tools and campaigns that were developed for the EuroPACE HolaDomus pilot in Olot, to provide guidance on how to set up such a campaign.

Renovation Program Actors and Stakeholders

The table below represents a general classification of EuroPACE program stakeholders.

Category	Description
Users	Homeowners of single and multi-family properties Building owners Communities of owners (comunidades de propietarios)

¹⁰ See also D3.5 “Operational Master Document”.

Clients	Energy services contractors Installers Auditors Architects
Enablers	European cities, energy agencies and national and regional public authorities partnering with GNE to enable a program under a form of a public-private partnership Influential local groups and individuals: chambers of commerce, communication departments of cities, energy agencies, homeowner's associations, contractor associations and more.
Communication aggregators	
Media	Specialised (trade) media focusing on renovation, energy efficiency, renewable energy and financing. Other local media reporting on the new in the city/region.
Other	Multinational equipment providers and manufacturers such as Philips, Honeywell, Rockwool, Velux, Saint-Gobain, etc. Energy efficiency experts Certification bodies (e.g. LEED, BREEAM, WELL, etc.)

Renovation Program Marketing Strategy

Supporting lead generation and increasing the conversation rate are the key goals of the communication and marketing activities. All actions must be evaluated from this lens. Furthermore, awareness-building and information sharing in terms of the benefits of sustainable home renovation are passive strategies that can also be carried out by public authorities and other relevant actors.

Key assumptions when building an effective marketing strategy are¹¹:

- Renovation is complex, time-consuming and stressful. People are looking for ways to simplify their renovation journey.
- People are often motivated by emotionally charged benefits such as comfort, health, wellbeing of their families, not just energy bills.
- Energy bills are an important consideration among the vulnerable and low-income groups.
- There is a lack of expertise in energy efficiency. People have little understanding about energy efficiency and how the various measures interact. Thus, they require technical assistance in choosing the right mixture of measures.
- Contractors often cannot be trusted, thus the program must work to build trust in contractors, auditors and other building sector professionals.
- Individuals do not “consume” energy. Rather, energy provides useful services that enable normal and socially acceptable activities to be carried out as part of domestic life.

¹¹ Based on practical experience, interviews with practitioners in the field and academic research (see Behavioral Research Summary document, *Annex 7*).

- Renovation decisions have a tendency to be rationalised after the fact. Financial incentives tend to be attractive to homeowners only once they are already committed to renovating.

Some assumptions may be more relevant to certain geographic and socio-economic groups than others. Program managers should adjust the assumptions for the local audiences and bring in special considerations.

Type of Activity	Purpose
Inspire	Inspire by creating stories that people can emotionally connect with. Renovation won't start from a technical standpoint, it will start from an inspiring idea/concept/solution to current issues a homeowner and communities are facing. GOAL: get engaged
Inform and educate	Explain the essence of the program, its services and the benefits. Simple information should be shared on the website and relevant social media. GOAL: understand the product/offer and unique benefits
Spur Action	Interactive tools like online questionnaires, calculators, surveys can help spur action. In-person contact may involve a walk-through audit of a home (online or in person), a meeting in the office, or a conversation about the renovation service by phone. These conversations should be handled by sales-oriented staff with some experience in renovation. GOAL: renovation contract signed.

Several guiding principles when building an effective marketing strategy are:

- **Focus on the product/service and the benefit it brings to people:** the communication should focus more on the 'service' rather than on the need to renovate.
- **Adjust to new knowledge and market experience:** Each program's communication plan remains a living document. Plans should be agile and easily altered to respond to market needs and lessons learned.
- **Establish brand identity early on:** As with any new initiative, it is key to develop a brand and consistent presence for the program in the city and region.
- **Leverage multipliers/ aggregators:** It is important to engage with knowledge multipliers in each area: chambers of commerce, communication departments of cities, energy agencies, homeowner's association, contractor associations and more.

Online and Offline Tools

On the basis of the aforementioned assumptions and guiding principles, several online and offline marketing and communications tools were developed for the HolaDomus pilot in Olot. This section provides an oversight of these tools, and more specific

examples and documents can be found in the *Annex 14*. The key home renovation narrative that was actively tested in Olot focused on the following messages:

- Home renovation results in energy cost savings (reduced electricity, gas, water bills).
- Building renovation improves the image of a neighbourhood and will attract more economic activity
- Building and home renovation will increase the value of the property. Rehabilitation of a building means investing in the future.
- Home renovation improves health and wellbeing by reducing humidity, normalizing thermal comfort, reducing noise and improving air quality and/or light.

With regards to the **branding strategy** used in the HolaDomus pilot and its various online and offline tools, special care was taken to be consistent and develop standard aspects of the branding *a priori*, such as:

- Logo: color and grayscale; simplified logos to be used for all communication materials
- Typography: several fonts and sizes were selected for promotional materials
- Standard colors that can be used in a website, social media, and brochures
- Business cards
- Templates for external documents

Digital platforms leveraged for the program:

The following tools were put in place as part of the HolaDomus program in Olot, to lower the barriers for citizens to come into contact with the program and get the information flow with regards to home renovation going:

1. An attractive program website, developed using the Strikingly platform
2. Facebook
3. Twitter
4. Youtube channel with promo videos¹²

Materials developed for the program:

1. On-site works facade poster: logo, contact information and a message encouraging renovation
2. HolaDomus office customization: wall logo, furniture in brand colors
3. Roll-ups for the office
4. Brochures for various audiences
5. Radio ad
6. Tv ad
7. Ads in local magazines



Figure 17 HolaDomus facade poster on construction site

Continuous promotion of the HolaDomus pilot was secured through participation in

¹² <https://www.youtube.com/channel/UCroeo7-1zx9cA087bb0AWNw>.

local events and influencers, although the COVID-19 pandemic interfered with the possibility to hold many in-person events such as the participation in local fairs, markets, and city-wide events. Where possible and relevant, press conferences and townhalls were organized to drive the promotion to homeowners and local contractors. It must be noted that in the case of Olot, the experience was that radio and tv ads only led to limited success. It is advisable to take an **adaptive approach to the different marketing and communication tools when setting up an integrated home renovation service in a new location**, as different populations are susceptible to different forms of marketing and as such there is no 'one-size-fits-all' approach.

Concluding summary

This Deliverable's goal was to provide the reader with global insights in best practices for setting up a local EuroPACE integrated home renovation service. Certainly, the program design and set up will vary depending on local socio-economic, demographic and political situations. These guidelines were intended to serve as a base for a typical integrated home renovation program and not as a prescriptive set of rules.

The EuroPACE project's HolaDomus pilot program has provided a crucial testing ground for developing the guidelines and advise laid out in this document, and the annex contains an additional 'toolbox' with examples of documents and tools that were used throughout the project. Several replication efforts have already made use of these best practices and guidelines, such as the Opengela program in the Basque Country, and the REGENERATE project on the Balearic Islands, both EuroPACE replicator programs.

However, it is also important to keep in mind that one of the cruxes of the EuroPACE set-up lies with its unwavering focus on the homeowner, which intrinsically means that the standard practices and information provided in this Deliverables must always be adapted to local realities and needs, both with regards to the building stock, local citizens, and the professional ecosystem. This combination of best practices and adaptability is what makes EuroPACE-based integrated home renovation services a success.

The Future of EuroPACE and the Role of GNE Solutions

GNE is the leader at designing and managing eco-sustainable home renovation programs in Europe. Putting into practice core lessons learned from the EuroPACE project, GNE 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 intends to support cities and regions in deploying the NextGenerationEU funds towards energy efficient renovation.

As such, crucial tools and lessons learned from the EuroPACE project will be carried over by GNE to other integrated home renovation services in Europe, most notably:

- Market analysis and program co-design: GNE works closely with public authorities and conducts market & gap analyses. This allows for co-designing 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.
- Impact tracking: GNE seeks to provide a state-of-the-art social, economic and environmental impact dashboard for each integrated home renovation service it sets up in Europe.
- Sales and marketing: Deploying trained and trusted sales experts to focus on proactively generating projects and creating connections with citizens that lead to home renovations.
- Digital tools: GNE sets up secure and user-friendly digital tools to facilitate the customer journey from application to project completion.

Above all, GNE is focused on delivering a frictionless and stress-free experience to all Europeans when it comes to home renovation and is continuously seeking to put the guidelines laid out in this document into practice.

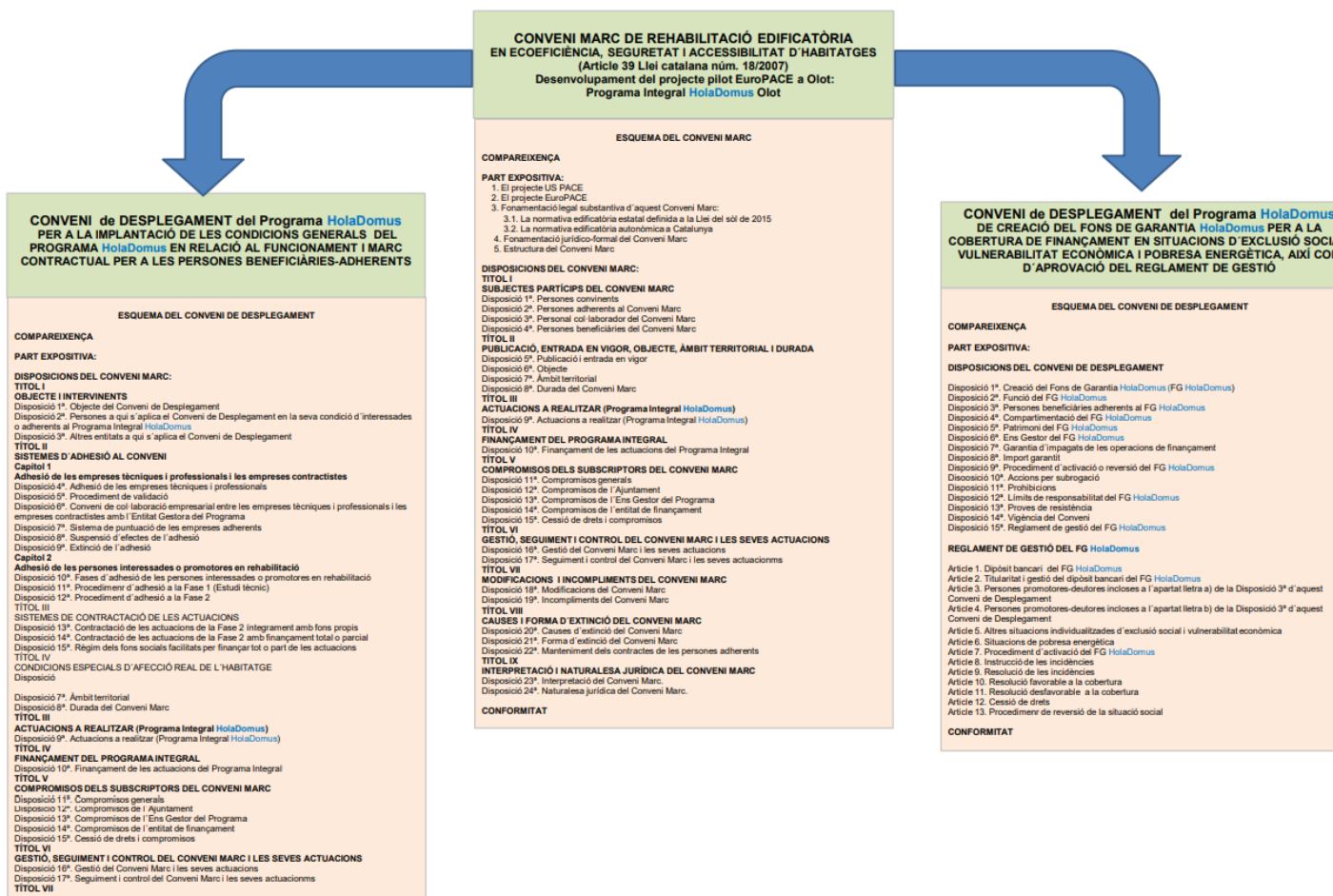
For more info, see: www.gnesolutions.com

Annex

The annex contains the 'toolkit' for EuroPACE replication, i.e. all relevant documents that have been used in the EuroPACE project to design, set up and manage the HolaDomus pilot program.



Annex 1. – HolaDomus Pilot Framework Overview



Annex 2. – HolaDomus Financing Info Chart

Finançament HolaDomus

*HolaDomus té l'objectiu de fer la reforma de la llar més fàcil, simple i de qualitat.
Ofereix suport durant tot el procés i finançament assequible.*

El finançament d'HolaDomus ha estat dissenyat específicament per a una renovació sostenible i d'alt impacte.
Hem unit una àmplia experiència en impacte social, finançament, eficiència energètica, energies renovables, conservació de l'aigua, sostenibilitat i ciències de l'edificació per crear una oferta atractiva i viable per a tots els propietaris.

Beneficis del finançament d'HolaDomus:

SOL·LICITUD MÉS RÀPIDA I SENZILLA QUE LA D'UN BANC	<i>Utilitzem eines digitals de gestió de dades per simplificar el procés.</i>
PROCEDIMENT DE PAGAMENT SEGUR: EL PROPIETARI NO ESTÀ EXPOSAT AL RISC DEL CONTRACTISTA	<i>Els pagaments als contractistes els fa HolaDomus només un cop s'han validat els treballs.</i>
ELS PRÉSTECES DE MILLORA S'OFEREIXEN PER UN LLARG TERMINI DE 5 A 15 ANYS	<i>Durada més llarga que qualsevol préstec bancari personal.</i>
MENSUALITATS INFERIORS	<i>Terminis més llargs es tradueixen en menors pagaments mensuals i menys càrrega en el pressupost familiar.</i>
IMPORT DEL PRÉSTEC FLEXIBLE: 5.000,00€ – 100.000,00€	<i>Per respondre a les necessitats del vostre projecte i proporcionar suport a les mesures de rehabilitació més ambicioses.</i>
SENSE COST PER CANCEL·LACIÓ O RE-FINANÇAMENT	<i>Més flexibilitat en comparació amb el finançament bancari.</i>
EL FINANÇAMENT NO ES REGISTRA A LA	<i>El finançament HolaDomus no s'adhereix al vostre deute pendent i no afecta la capacitat d'assumir deutes</i>

Annex 3. – Renovation Project Eligibility Criteria

MESURES INDIVIDUALS PASSIVES		
Aïllament de façana	Aïllament de façana per l'exterior	<ul style="list-style-type: none"> La transmissió dels murs exterior després de la millora no han de superar els valors establerts en la taula D.2.15 del CTE 2017, és a dir 0.66 W/m² K. Fitxa tècnica, marcatge CE, certificat EUROVENT o similar, detallant conductivitat tèrmica segons norma UNE-EN.
	Aïllament de façana per càmera d'aire	<ul style="list-style-type: none"> Igual que l'anterior
	Aïllament de façana per l'interior	<ul style="list-style-type: none"> Igual que l'anterior
Aïllament de cobert	Aïllament de coberta per l'exterior	<ul style="list-style-type: none"> La transmissió de la coberta no han de superar els valors establerts en la taula D.2.15 del CTE 2017, és a dir 0.38 W/m² K. Fitxa tècnica, marcatge CE, certificat EUROVENT o similar, detallant conductivitat tèrmica segons norma UNE-EN.
	Aïllament de coberta per l'interior	Igual que l'anterior
Aïllament de terres	Aïllament de terres	<ul style="list-style-type: none"> La transmissió dels terres no han de superar els valors establerts en la taula D.2.15 del CTE 2017, és a dir 0.49 W/m² K. Fitxa tècnica, marcatge CE, certificat EUROVENT o similar, detallant conductivitat tèrmica segons norma UNE-EN.
Substitució de finestres	Substitució de finestres	<ul style="list-style-type: none"> La transmissió dels tancament no han de superar els valors establerts en la taula D.2.15 del CTE 2017, és a dir 2,5 W/m² K. Fitxa tècnica, marcatge CE, certificat EUROVENT o similar, detallant conductivitat tèrmica segons norma UNE-EN, del marc i del vidres. Tancaments cara nord sense vidres baix emissius.
Protecció solar exterior	Tendals, Lames i gelosies, Persianes, Cortines, Films i lames de protecció	<ul style="list-style-type: none"> Tots els tancament sobre els que es faci intervenció hauran de formar part dels tancaments exteriors de l'habitatge.

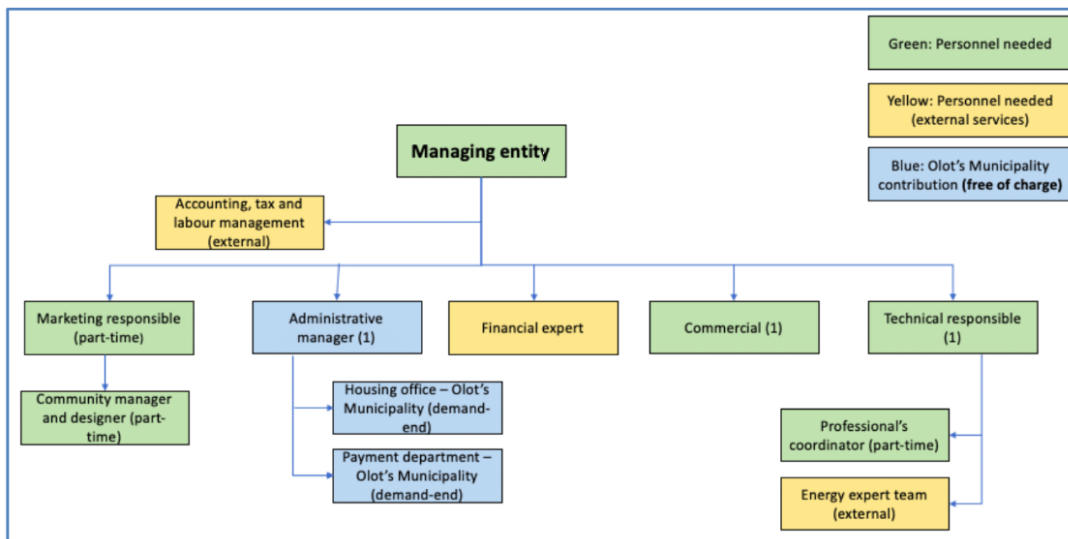
MESURES INDIVIDUALS ACTIVES		
Sistemes tèrmics no renovables	Caldera de condensació de gas natural individual	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" Compliment de la directiva de Ecodiseny ErP i ELD.
	Caldera de condensació de gas natural col·lectiva	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" Compliment de la directiva de Ecodiseny ErP i ELD.
	Bombes de calor	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" Compliment de la directiva de Ecodiseny ErP i ELD.
	Intercanviadors de calor	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" Compliment de la directiva de Ecodiseny ErP i ELD.
Sistemes tèrmics renovables	Aerotèrmia en substitució d'una caldera mixta	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" SFP>2,5 i compliment del DB-HE del CTE. Compliment de la directiva de Ecodiseny ErP i ELD. Certificat del fabricant segons la norma UNE-14825:2016 per Calefacció i EN-16147:2017 per ACS o càlcul segons el procediment de l'IDAE
	Caldera de biomassa	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE"
	Solar tèrmica per unifamiliar: termosifó	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" Compliment dels requeriments de contribució solar mínima d'aigua calenta sanitària segons CTE – HE4
	Solar tèrmica per plurifamiliar	<ul style="list-style-type: none"> Igual que l'anterior.
Sistemes elèctrics renovables	Instal·lació d'energia geotèrmica per unifamiliar	<ul style="list-style-type: none"> Compliment dels requeriments mínims vigents en el "Reglamento de Instalaciones Térmicas en los Edificios – RITE" Compliment de la directiva de Ecodiseny ErP i ELD.
	Instal·lació de plaques fotovoltaïques Acumuladors d'energia (bateries)	<ul style="list-style-type: none"> Anàlisi de rentabilitat, basat en la radiació solar específica de la zona.

	Punts de recàrrega cotxe elèctric	<ul style="list-style-type: none"> Instal·lació elèctrica específica per a la recàrrega de vehicles elèctrics, executada d'acord amb el que estableix la Instrucció Tècnica ITC-BT-52, en els aparcaments o estacionament col·lectius en edificis de règim de propietat horitzontal. Documentació tècnica on es defineixin les característiques de la instal·lació, realitzat per un tècnic competent. Certificat de la instal·lació amb conformitat amb lo que estableix el REBT i la documentació tècnica.
Milliores en il·luminació	Milliores en il·luminació de l'habitatge	<ul style="list-style-type: none"> Compliment dels requeriments de eficiència energètica de les instal·lacions d'il·luminació segons CTE – HE3 Compliment de la directiva de Ecodiseny ErP i ELD.
	Milliores en il·luminació en zones comuns Milliores del control de la il·luminació en zones comunes	<ul style="list-style-type: none"> Igual que l'anterior Igual que l'anterior
Milliores en reducció de consum d'aigua	Airejadors i reductors de cabal d'ACS	<ul style="list-style-type: none"> Compliment de la directiva de Ecodiseny ErP i ELD.
	Sistemes de millora qualitat de l'aigua – Descalcificadors, Osmosis	<ul style="list-style-type: none"> Compliment de la directiva de Ecodiseny ErP i ELD..
Milliores en equips	Electrodomèstics d'elevada eficiència	<ul style="list-style-type: none"> Compliment de la directiva de Ecodiseny ErP i ELD.
Milliores de gestió energètica	Sistema domòtic	<ul style="list-style-type: none"> Característiques tècniques sistema domòtic. Fitxa tècnica, marcatge CE, segons Real Decreto 187/2016 marcatge CE en material elèctric. Compliment guia ITC-BT-51 del REBT.
	Vàlvules termostàtiques als radiadors	<ul style="list-style-type: none"> Fitxa tècnica, marcatge CE.
Milliores en la accessibilitat i/o seguretat	Instal·lació de ascensor	<ul style="list-style-type: none"> Certificació eficiència energètica de l'ascensor seguint estàndard VDI 4707, amb qualificació A en totes les categories. Incorporació de il·luminació d'alta eficiència, amb maniobra col·lectiva de baixada i en edifici molt alts de baixada i pujada Incorporació de mode "stand by".
	Rehabilitació interior per millora accessibilitat banys, accessos de bloc o habitatge. Reforma interna habitatge	<ul style="list-style-type: none"> Compliment del CTE en matèria de accessibilitat.
	Millora del sistema elèctric	<ul style="list-style-type: none"> Compliment del Reial Decret 842/2002, de 2 d'agost pel qual s'aprova el Reglament Electrotècnic per Baixa Tensió i la Instrucció 1/2014, de 19 de març, de la Direcció General d'Energia, Mines i Seguretat Industrial

CRITERIS GLOBAIS PROJECTES

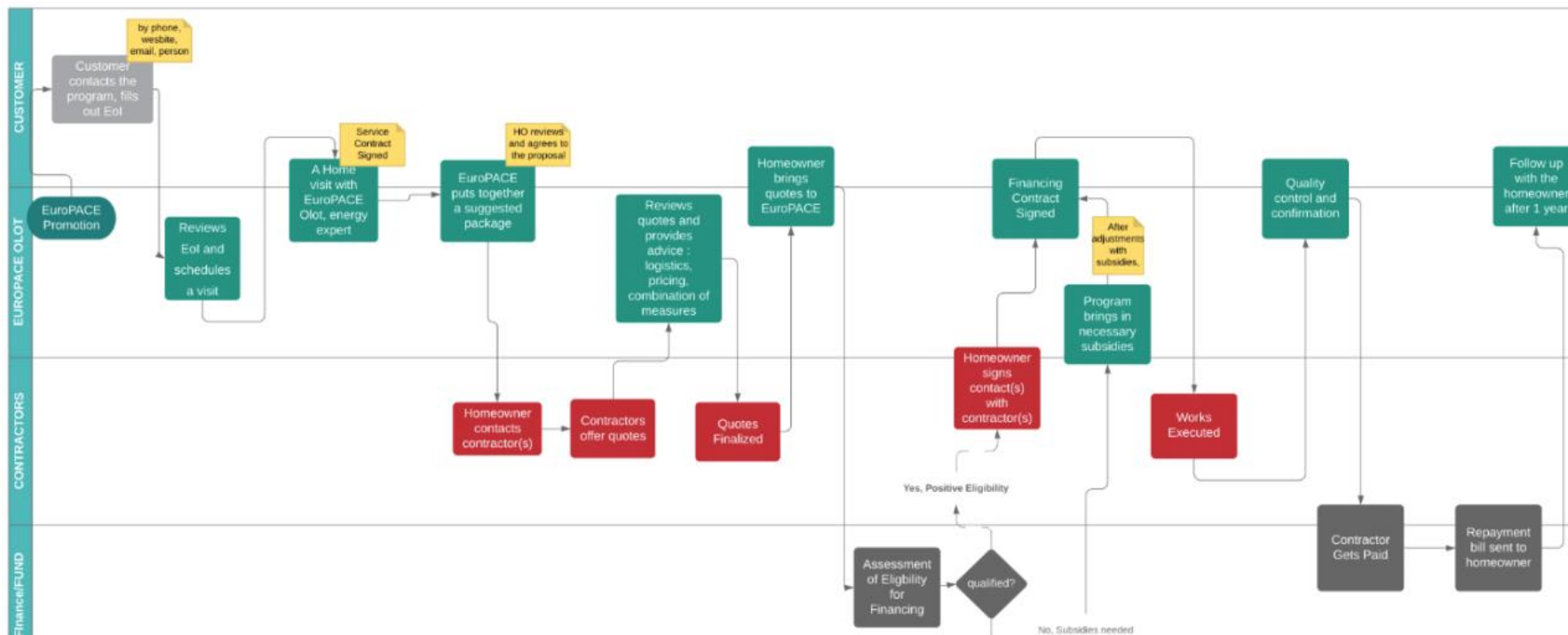
CRITERIS GLOBAIS	<p>Els projectes perquè siguin validats pel programa hauran de complir els següents requeriments mínims en millores d'eficiència energètica i energies renovables:</p> <ul style="list-style-type: none"> Certificació de eficiència energètica de l'edifici objecte de la intervenció (segons Real Decret 235/2013 de 5 de abril), abans i després de la actuació, firmat pel tècnic certificador habilitat. Si l'habitatge té una qualificació energètica més baixa de "D" ha d'arribar a una "D", en cas que tingui una qualificació energètica actual de "D" o superior, haurà de millorar una lletra el certificat energètic. Que un 30% del pressupost de la rehabilitació estigui destinada íntegrament a mesures per la eficiència energètica i/o energies renovables. Cada inversió per separat han de complir, com a mínim, els criteris enumerats en les mesures individuals.
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Annex 4. – HolaDomus Pilot Staffing Scheme



Annex 5. – EuroPACE Customer Journey

Customer Journey 1 - Direct Customer Outreach



Annex 6. - Major Takeaways from Academic and Market expert Papers and Reports

Major takeaways from academic and market expert papers and reports

Summary: There is a variety of literature examining people’s behavior when it comes to undertaking energy efficiency improvements. Reports and papers coming from the market stakeholders tend to be more normative and focus on specific geographic areas. Market stakeholders are solving a problem and looking for ways to motivate people to act. While the academic literature has more general interest in the subject; scholars from sociology, anthropology, economics and other disciplines examine models of human behavior to learn more about how people make decisions. More than 50 papers and reports were analyzed as part of this project, some of the key papers are summarized below.

The EuroPACE project has a clear applied interest in the aforementioned literature – to devise a successful customer engagement strategy to maximize the uptake of energy efficiency projects in Olot, Spain. Subsequently, the model used in Olot, Spain, after necessary modifications and adaptations, is intended to be used to scale the EuroPACE model across Europe.

EuroPACE related takeaways:

Takeaways	Recommendation for EuroPACE
<u>Understanding human behavior is crucial to scaling energy efficiency:</u> Energy efficiency begins and ends with human need for services derived from energy. Humans use technology to fulfil social functions, thus the rational actor model is not always applicable. There are several theoretical frameworks for changing people’s behavior, some prioritize opportunities (by removing barriers to action), other focus on motivation for change (incentives and disincentives) and some highlight the capability to change (improving access to information, services, etc.).	Following the behavior wheel, design a program that addresses capability, motivation and opportunity elements. Specifically, marketing and communication campaign should communicate clear incentives and persuade people to act. Training of contractors would provide motivation and increase their capabilities. Lastly, local fiscal incentives and subsidies can increase residents’ capabilities to act.
<u>People do not consume energy directly; they consume the services provided by energy, for example, comfort; energy consumption is an indirect effect of every-day life</u>	EuroPACE should not sell energy efficiency, but improvements to people’s lives. Each communication material should be designed from a people-centric perspective.
<u>Use trusted messengers and explore</u>	EuroPACE should identify local trusted

<u>intersections with other issues to exploit energy efficiency's "multiple benefits"</u>	messengers (local government, influencers) and appeal to the emotional side of consumers by highlighting health, wellbeing and comfort, among other benefits. Based on the group segmentation, specific benefits germane to that group should be elevated.
<u>Digitalization provides an opportunity to facilitate behavior change:</u> Digitalization is energy efficiency means a simpler and faster process. For the next generation of consumers, digital is more than a channel—it has become a way of life. They expect anytime, anywhere interaction—and a seamless, easy and convenient experience.	EuroPACE should offer consumers and contractors an easy way to apply for EuroPACE financing online, via the website or a smart phone.
<u>Major barriers to energy efficient renovations in owner-occupied homes relate to finances, information and decision making.</u>	EuroPACE should clearly communicate about financing, instill trust and simplify decision making.

Notes on key publications:

Why do homeowners renovate energy efficiently? Contrasting perspectives and implications for policy C. Wilsona,*, L. Cranea, G. Chryssochoidis b

https://ac.els-cdn.com/S2214629615000298/1-s2.0-S2214629615000298-main.pdf?_tid=28370597-7d60-4c72-9381-76bc6f4301cd&acdnat=1540372450_37a577dfd9856f942338cd35eca312c7

This paper contrasts two perspectives on energy efficient home renovations from applied behavioural research on energy efficiency and from sociological research on homes and domestic life. The aim of this paper is to show how situating applied behavioural research on energy efficiency within a broader conceptualisation of renovating, homes and households can enrich and strengthen an instrumental understanding of why homeowners decide to renovate energy efficiently.

Commonly identified barriers to energy efficient renovations in owner-occupied homes relate to finances, information and decision making. Financial barriers include capital availability and strong aversion to delayed gains [31]. Information barriers include a perceived lack of credible and available information on efficiency measures [32], low salience or misperceptions of energy costs [33], and uncertainties about contractor reliability and cost-saving outcomes [34]. Decision-making barriers include the cognitive burden (or transaction costs) of making complex and irreversible decisions [35], and the anticipated 'hassle factor' of having home life disrupted while the renovations take place [36]. These barriers are repeatedly emphasised in applied

behavioural research on energy efficiency in the UK [24,25], in Europe [37], in the US [38], and globally [4].

Variables describing contextual influences can be grouped into four main types: household characteristics (size, lifecycle, socio-demographics), home tenure (ownership, duration), property characteristics (size, age, type), and policy inducements to improve the financial outcomes of renovating (incentives, subsidies). A fifth type of contextual influence on renovation decisions emphasised more recently in applied behavioural research on energy efficiency relates to salient events (e.g., a boiler breaking down) or periods of transition in the household lifecycle (e.g., moving house, retiring, having a child) [57,58,41]. Salient events can serve as ‘trigger points’ for energy efficient renovations [28] or home improvements more generally.

A common observation relevant to both fields is that individuals do not consume energy. Rather, energy provides useful services that enable normal and socially acceptable activities to be carried out as part of domestic life.

Renovation decisions have a tendency to be rationalised after the fact. Financial incentives tend to be attractive to homeowners only once they are already committed to renovating.

Energy assessments or audits do not necessarily lead to renovation decisions. Audit recommendations are often ignored as they mainly confirm what households already know, and homeowners consider their homes to be adequately efficient already.

Efficiency measures in one part of the home often went hand-in-hand with expansions or intensifications of other parts of the home (e.g., additional bathrooms). Mainstream marketing messages on home renovations promote amenity not efficiency measures.

Homes are both a physical space and an imaginary place which is not a static construct or representation but a dynamic expression of household members’ feeling towards it

Applied EE research	Sociological concept to be incorporated
Renovation decision	Renovation process and event preceding it
Financial Drivers and Barriers	A broad range of contextual drivers and salient events
Household as a unit	Diverse decision makers
House as a physical structure	Home as a space with meaning and emotional significance
Renovation as a physical change	Renovation and renovating as improving the way of living

Understanding Homeowners’ Renovation Decisions: Findings of the VERD Project, UK Energy Research Center

https://tyndall.ac.uk/sites/default/files/verd_summary_report_oct13.pdf

Households with a clear vision for their home tend to be more open to outside ideas, and more likely to consider renovation because of social influences

Households are more likely to be considering renovations if: they face competing commitments in using available space at homes they face or expect to face physical issues with home life s they see their home as a project for self-expression s they find ideas and inspiration for the home from external sources they are aware of a need to adapt how space at home is

External ‘triggers’, which are out of the ordinary events, can also give rise to renovation decisions. The most common trigger is when something breaks.

Intentions to renovate take time to strengthen. Renovation decisions are lengthy processes. Almost 1 in 2 households currently considering renovations had first started thinking about them as a possibility more than a year ago.

Financial constraints do not act as a barrier to renovation decisions or strengthening intentions. They may, however, lengthen the time spent deciding.

In published studies we reviewed, the most widely-cited barriers to efficiency renovations are upfront costs and lack of capital. However, our analysis shows that neither lower annual incomes nor current financial difficulties prevent households from considering renovations. 67% of the households in our sample earning less than £25,000 a year were considering renovations. Our survey also asked households how they were managing financially: 17% reported severe or some financial difficulties, but of these almost 2 in 3 were still thinking about, planning or finalising renovations. However, more households with financial difficulties had spent over a year thinking about renovations compared to households that were managing financially (52% compared to 27%).

The characteristics of a home (e.g., age, size) and a household (e.g., size, composition, income) are often thought to explain renovations. But this is not the case if underlying causal mechanisms relating to background conditions of domestic life, triggers and intentional decision making are taken into account.

Windows and doors were the efficiency measure most likely to be done without accompanying amenity measures, but even this was only in a quarter of cases. Conversely, heating systems and cavity wall insulation were the efficiency measures most likely to be bundled with amenity measures.

Efficiency renovations are perceived as less salient or urgent.

There is lower awareness among low income households about the connection between EE and energy bills.

Overall, our modelling analysis of renovation decisions did not suggest that efficiency renovators were strongly motivated by the potential for energy cost savings.

Value Proposition – Or HOW TO SELL EE?

A value proposition is a bundle of product and service attributes including, for example, core products (e.g., cavity wall insulation), additional services (e.g., quality assurance), and delivery mechanisms (e.g., marketing). Renovating households prefer personal recommendations, small local companies (particularly for amenity renovations) and face-to-face customer support. Households' preferred source of advice and recommendations is from friends (58%), followed by experts (21%), their own research (12%), and the media (6%).

The most important features of an attractive value proposition for both efficiency and amenity renovations were (in order): lower upfront cost, more reliable contractors, less disruption to domestic life and less 'hassle factor'

Key recommendations:

- Deliver efficiency measures through locally-known renovation contractors
- Emphasise the potential for efficiency measures to help address the challenges of everyday domestic life (and rely less on potential cost savings).

The New Energy Consumer Architecting for the Future by Accenture

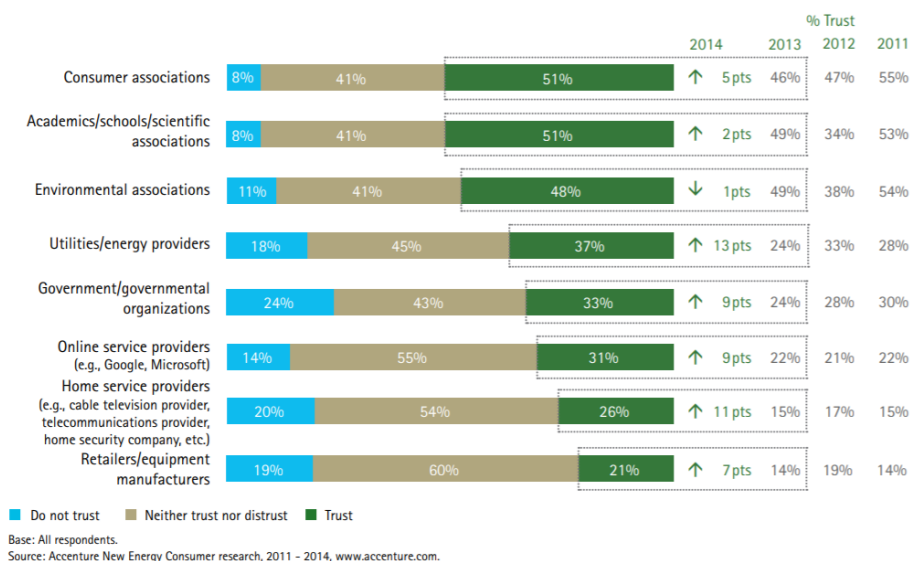
https://www.accenture.com/t20170225T000140_w_us-en_acnmedia/PDF-3/Accenture-New-Energy-Consumer-Architecting-Future.pdf

Key takeaways for EuroPACE:

For the next generation of consumers, digital is more than a channel—it has become a way of life with consumers. They expect anytime, anywhere interaction—and a seamless, easy and convenient experience.

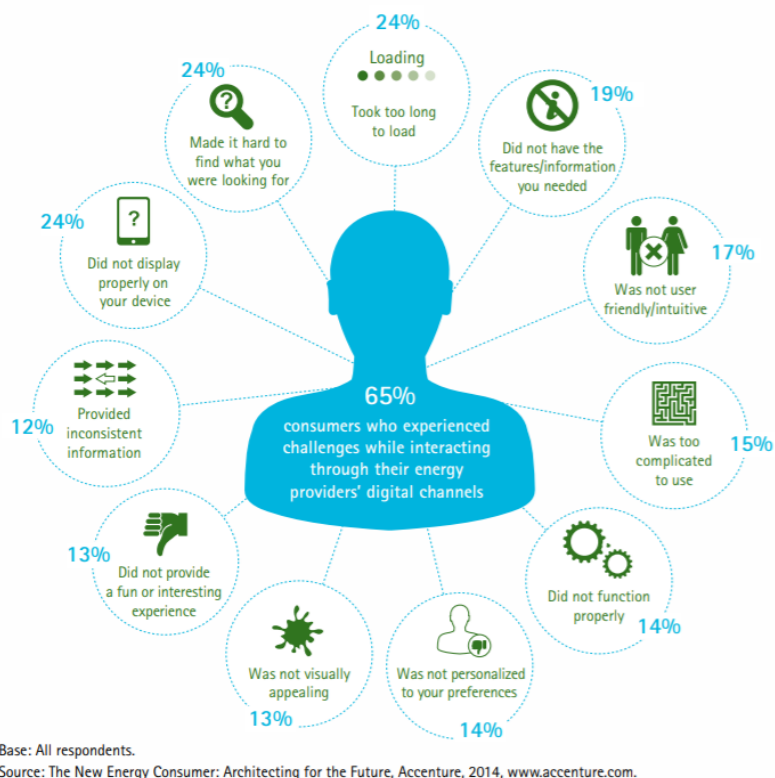
Consumer trust in utilities is growing:

Figure 1. Consumers' trust in utilities has increased, while trust of third parties is also gaining momentum.



Main areas with digital service dissatisfaction:

Figure 9. There is a wide range of digital dissatisfiers that needs to be addressed.



UNDERSTANDING ENERGY EFFICIENT REFURBISHMENT DECISIONS: A PROCESS MODEL FROM THE HOUSE OWNER'S PERSPECTIVE

Katrin Arning¹*, Barbara Sophie Zaunbrecher¹ and Martina Ziefle¹

A process model with five subsequent stages of the EE-refurbishment process was derived, which encompassed the following stages: 1) perception of refurbishment needs, 2) information searching stage, 3) advice / planning stage of the EE-measure, 4) decision for a specific EE-measure, 5) implementation stage

House owners are typically overwhelmed by the complexity of information about EE-measures and have difficulties in assessing the adequacy and effectiveness of EE-measures for their individual situation.

In stage 4, the actual decision for a specific EE-measure is being made. Here, intermediaries can play an important role, especially for investors with a low EE-measure knowledge level, since their recommendations strongly influence or even determine the decision for a specific EE-measure

Modelling decisions on energy efficient renovations: A review

Jonas Friege, Emile J. L. Chappin, Wuppertal Institute.

We analysed a set of 449 peer-reviewed articles and conference proceedings on energy-efficient renovations (EER) as well as their ~7,000 references in order to identify the obstacles involved in increasing the adoption of EER measures and what has been done to address the problem so far.

The research on understanding the decisions regarding EERs is just emerging, which is, in our analysis, illustrated by the way in which the research is grounded.

Table 6 Recommendations of identified key papers and references regarding incentive instruments, obtained by bibliographic and co-citation coupling in the core area 'Incentive Instruments'

Approach	Recommendation
Enforcement of existing instruments	<ul style="list-style-type: none"> • Introduce random audits to improve the implementation and enforcement of existing regulatory standards and to make better use of refurbishment opportunities [66]; • Better communicate the benefits of financial aid mechanisms for improving energy efficiency [67]
Increase of economic viability	<ul style="list-style-type: none"> • Increase energy prices and provide subsidies for renovating aging residential buildings (in China) [69]; • Expand financial support instruments targeted at home-owners willing to achieve a high standard of energy efficiency as well as those meeting lower standards [66]; • Governments need to create more favourable conditions for energy efficiency investments [65]
Introduction of new approaches	<ul style="list-style-type: none"> • Emphasise on reasons for EERs measures other than economic viability [70]; • Take into account other reasons for low levels of renovation activity (e.g. costs) and individual-based explanations of behaviour (e.g. no motivation) and carry out in-depth analyses into social practises of households [71]; • Increase awareness of co-benefits and cost dynamics of energy efficiency investments of decision makers in the real estate sector, politics and administrations [72]; • Consider social criteria [66]; • Introduce Public-Private-People Partnership (4P) into redevelopment processes. 4P can lead to a situation where EER is affordable and people can choose between several renovation and finance options [73]

Working Paper to scope the feasibility of research into how consumer behaviours influence the impacts of the Green Deal and ECO programme

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/414990/feasibility_study_on_green_deal_eco_customer_behaviour.pdf

“Energy consumption is “the tangible result of a combination of user behaviours” (Gill et al 2010), including the interaction of attitudes, behaviours and the material and social context (McMichael and Shipworth 2013, Huebner et al 2013a, Dolan and Metcalfe 2013). People do not consume energy directly: they consume the services provided by energy, for example, comfort; energy consumption is an indirect effect of every-day life (Brook Lyndhurst/DECC 2012a). The idea of household energy ‘practices’ (Guy and Shove 2000) captures the idea of the human-social-technological-material interaction and the limitations of considering rational decision-making by individuals as central to energy outcomes.”

Presentation by David Shipworth

Mr David Shipworth is the Professor of Energy and the Built Environment at the UCL Energy Institute. He is a member of the Strategic Advisory Group of the UK 'Smart Systems and Heat' programme run by the Energy Technology Institute and the Energy System Catapult on behalf of BEIS and the ETI's commercial partners. Based on David's presentation at the IEA workshop:

- Humans use technology to fulfil social functions. We shape and are shaped by the technologies we use.

- The rational actor model of human behaviour is not always applicable in real life. We need to move away from a restrictive pattern of thinking about people acting in rational ways to have an effective energy policy.
- **It is better to redesign technology to fit with how people think than the to expect people to change and adapt.** Businesses need to incorporate consumer perspective in their models from the get-go. For a more effective market uptake businesses should focus on the service delivery.
- **Energy efficiency begins and ends with human need for services derived from energy (warmth, comfort, entertainment, mobility, hygiene, safety, etc.).**
- There are many models of human behaviour that are wrong. **Models are at fault not people.**
- When do we have enough evidence to say something works? We have been applying standards of research and evidence gathering that are too rigorous. Using qualitative research can be useful and lower research confidence requirements.
- Focusing on individual behaviour can produce quick wins, focusing on the societal structure can help reach scale.

Changing energy behaviour – what works? By Sustainable Energy Authority of Ireland.

<https://www.seai.ie/resources/publications/Behavioural-insights-on-energy-efficiency-in-the-residential-sector.pdf>

The report focused on strategies to increase energy savings as opposed to strategies to motivate people to undertake home renovations.

- Providing households and businesses with free independent energy audits may spur investment in energy efficiency measures and this approach should be further investigated.
- Providing Irish households with feedback on their energy use through in-home displays and enhanced billing is likely to lead to savings of up to 3% of electricity use
- Encouraging households to set realistic energy saving goals, and asking them to publicly commit to these goals, could reduce electricity use by approximately 10% in the short term
- Providing free home energy audits that supply homeowners with energy saving technologies (such as LEDs) and a summary report of energy saving measures appears to spur energy savings and investment in energy efficiency measures

Behavioural insights on energy efficiency in the residential sector.

http://www.idae.es/uploads/documentos/documentos_10457_BEHAVE_changing_energy_behaviour_09_c5724555.pdf

This report brings together research findings and knowledge gathered by SEAI over the last six years on how to best stimulate home energy efficiency upgrades. The focus of the report centres on consumer behaviour and decision making in the context of energy

50



efficiency in the home. Research is gathered from consumer surveys, focus groups, design thinking exercises, pilots and trials and data analysis.

SEAI is establishing a Behavioural Economics Unit in 2017 whose overarching ambition is to better understanding the context in which people make decisions; use the latest research in behavioural science; and to design and test interventions, through for example pilots, using rigorous and evidence based methodologies to determine the effectiveness of interventions before they are scaled.

Takeaways:

Trusted source matters: Increasing the awareness of homeowners to the benefit of completing retrofits, and highlighting local opportunities and initiatives to complete retrofits are important to stimulating householder interest. As retrofits are elective, and measures may be unfamiliar to the householder, their engagement is improved where information / initial contact comes from a trusted source, a source perceived as likely to act in their best interests and to provide impartial advice.³

Trigger point	Channel of communication
Anticipated home improvement	Architects, supply chain, contractors, banks, obligated energy suppliers
Buying a new house	Mortgage broker, BER assessor, estate agent
Retirement	Pension provider, employer
Illness or extending your family	Hospitals, community-based services

Trusted sources identified as:

- nationally recognised expert groups, e.g. BER assessors, energy suppliers, or qualified local contractors
- Independent government bodies (such as SEAI)
- local community groups that the householder has a particular trust in or affinity with, e.g. the local credit union or a community organisation such as an SEC
- their employer

Many repeat improvements can be leveraged: The decision making frequency is greater for minor home improvements such as refurbishing a room. Adding an extension, and/or installing external wall insulation and new windows, for example, will be considered less often. It is important that householders considering any level of retrofit are supported – we know that some consumers like to make a small improvement first in order to be convinced that a deeper upgrade will have the anticipated benefits.

Financing barrier is real: Although clearly not the only barrier, lack of sufficient funds is one of the key reasons why consumers in the residential sector are not willing to invest in various energy efficiency measures and packages. Research shows that targeted grant support coupled with low cost finance is the strongest formula for

51

promoting greater numbers and more comprehensive home energy efficiency improvements. In research, consumers have identified lack of finance as one of the main barriers to energy efficiency investment.

Grouping consumers may help in the uptake:



Figure 4: Consumer segments in the residential sector¹⁵

Research shows that initially the most important factors given by homeowners in evaluating whether to consider an energy efficiency package are:

- comfort of the home
- the level of energy savings that can be realised
- the cost of achieving these savings
- the ease at which the various elements of the overall process could be arranged
- the evidence of health benefits for the household resulting from improving the energy efficiency

Major trigger points:

Trigger point	Channel of communication
Anticipated home improvement	Architect, supply chain, contractors, banks, energy suppliers
Buying a new house	Mortgage broker, BER assessor, estate agent
Retirement	Pension provider, employer
Extending family or illness	Community-based services or doctors/hospitals
Community initiative	Sustainable Energy Communities

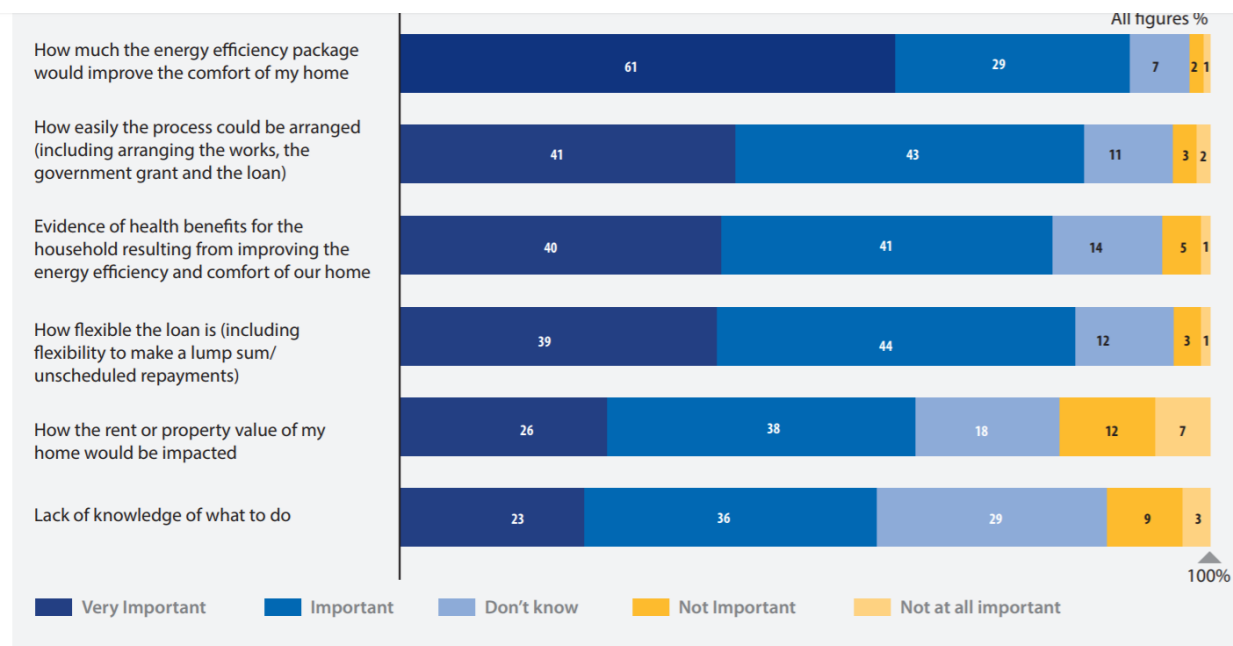


Figure 14: Factors determining whether respondents would invest in energy efficiency ²⁹

Lessons learned from Jim Scheer's presentation from Sustainable Energy Authority of Ireland:

- It's key to access meter level data to make future projections
- Recognize that energy behavior is complex and there are no foolproof methods to impacts it
- Partner with energy companies / businesses for scale
- Get senior levels support within an organization/ city early on
- Information campaigns don't work - we need action oriented campaigns
- Talk to energy experts in your community

CHANGING ENERGY BEHAVIOUR: Guidelines for Behavioural Change Programmes

http://www.idae.es/uploads/documentos/documentos_10457_BEHAVE_changing_energy_behaviour_09_c5724555.pdf

In order to improve policy interventions aimed at influencing the behaviour of consumers, the European Commission, under the Intelligent Energy for Europe programme, decided to cofund the project BEHAVE. The aim of this project has been to draw lessons from an evaluation of 41 energy behaviour change programmes from all over Europe, combine them with insights from theory, provide an overview of best practices, and create guidelines to develop and implement successful policy interventions aimed at consumers. This report provided an overview of lessons learnt in 41 cases in Europe over the past year.

Behaviour Change and Energy Use

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/60536/behaviour-change-and-energy-use.pdf

This paper shows how government can make it easier for people to use energy more efficiently. It is not a traditional government document.

This evidence shows that the behaviours of individuals can deviate greatly from a standard rational choice model,¹ in which people objectively weigh up the costs and benefits of investing time and money into ‘greening’ their homes and being more energy efficient. Research indicates that social, cognitive and behavioural factors are important in explaining why many people have not – yet – introduced changes that could help them to enjoy cosier homes and lower energy bills.

Greening your home, through the installation of energy efficiency measures, can help to save energy and money. But making the kind of improvements that have these effects is not always simple they usually require some planning, time and a degree of hassle.

Additional incentives offered with the Green Deal:

In partnership with Homebase supported by Carillion, we will team up with a local authority to conduct a trial to test two different types of immediate rewards to consumers for installing loft and/or cavity wall insulation.

1. Entitlement to a one-month council tax holiday. We anticipate that the offer to offset a month’s council tax will be highly appealing to householders. This offer will be time limited, which we hope will tap into people’s aversion to anticipated regret people will not wish to miss out on a good offer that others are taking advantage of.
2. Vouchers for products or services from the Home Retail Group. The trial will test the effectiveness of an upfront reward in the form of a voucher redeemable on products or services available from the Home Retail Group (Homebase and Argos).

Discounts for neighbours: In this trial, homeowners in Merton will be offered a discount on B&Q energy-efficient products such as loft and cavity wall insulation. People will be incentivised to encourage others in their local community to take up the offer with them – discounts for each household range from 10% for two households, to 15% for three households and 25% for five households.

Community rewards: The Behavioural Insights Team and DECC is partnering with E.ON to run a trial to test the impact of offering collective rewards – versus a standard offer of green products and services – on people’s uptake of investment in energy efficiency products. Depending on results from initial focus groups, these community

rewards could range from microgeneration technology for community buildings, to training for community volunteers and additional support for vulnerable groups.

How we feel we compare with others has long been known to be a key determinant of our feelings and actions.²⁸ In the context of domestic energy use, providing consumers with feedback on how their energy use compares with similar households in their neighbourhood has been shown to reduce energy consumption in higher-than-average users.

Achieving energy efficiency through behaviour change: what does it take?

<https://www.eea.europa.eu/publications/achieving-energy-efficiency-through-behaviour/file>

“The literature reviewed supports the idea that there is a direct link between implementing energy audits and achieving tangible energy savings but is less clear about the extent to which energy audits can trigger real and persistent changes in consumer behaviour”

“Community based initiatives could lead to long-term behaviour change because they facilitate the introduction of new, pro-environmental social norms. Examples include groups sharing information to facilitate behaviour change. The literature researched noted that for these types of initiatives to be successful, it is important that they are part of a wider programme that has clear objectives. These could include reducing the environmental footprint or delivering energy savings. A pre-existing relationship between the participants and whether participants share pro-environmental views also contribute to the success of such measures. Such initiatives are likely to be more successful if they involve a role model respected by the selected group.”

Energy efficiency/conservation initiatives use several different types of interventions: 1. communication and engagement: • information and promotion, training, personal advice and one-to-one engagement, demonstrations, benchmarking, commitment, goal-setting, labelling, prompts, modelling, feedback; 2. economic incentives and disincentives: • subsidies, levies, surcharges, taxes, bonuses, tax differentiations, tax refunds, financial instruments such as interest free loans, rewards and penalties; 3. regulatory: • general laws and rules, specific exemptions, covenants and agreements;

“households are often 'energy conscious, but not energy knowledgeable', i.e. people are aware of the importance of low energy use, but they may not know how to carry out energy-saving measures in their homes.”

“A key issue with public campaigns and energy advice is trust — whether people trust the information source. The credibility of the source of energy information/advice influences the extent to which energy efficiency measures are adopted.”

“Public campaigns tend to be more successful when they are organised with trusted local partners (the municipality, a housing association, etc.), are accompanied by a good communication strategy specifically tailored to the needs of the targeted

consumer group, and are followed up with additional measures (feedback measures, rewards for champions, investment strategies, etc.).”

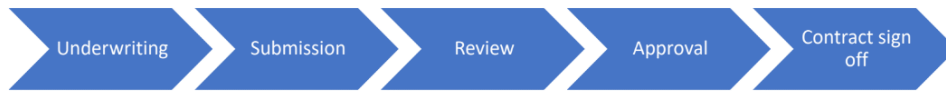
Energy audits deliver energy savings in the range of 5 – 20 %.

Annex 7. - Commercial Bank Product Benchmarking for HolaDomus Pilot

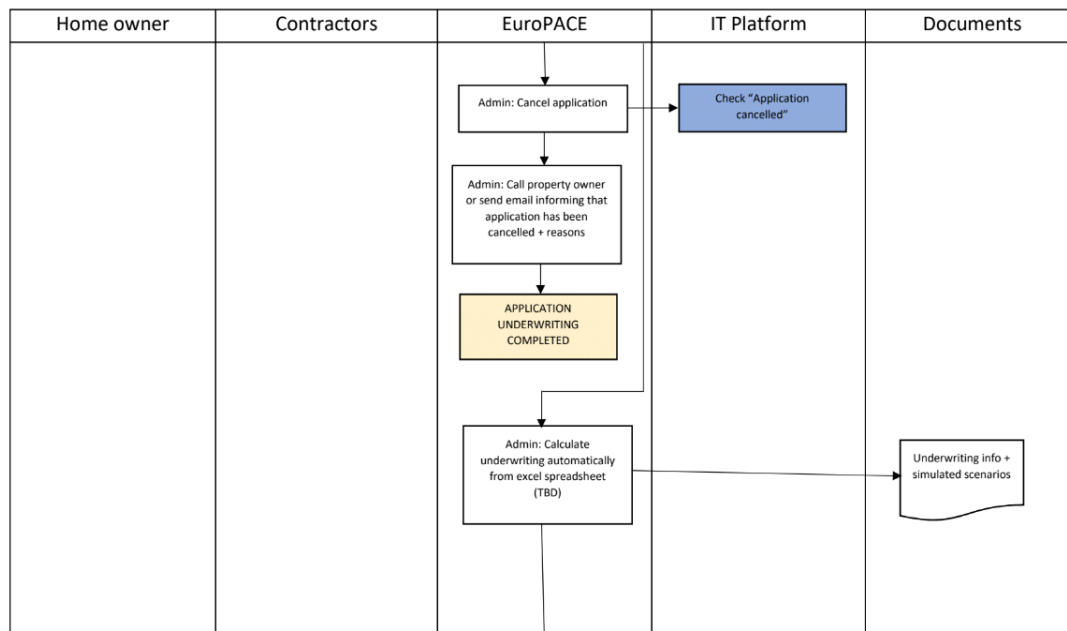
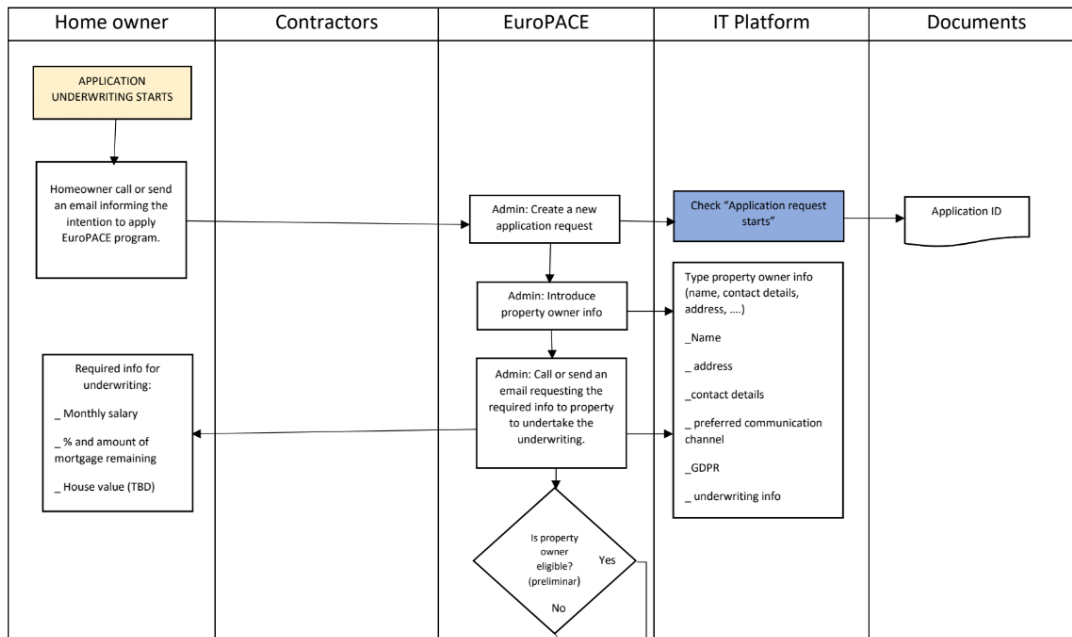
This benchmark was constructed on the basis of publicly available information from the banks that are referenced. As such, the information displayed below may vary on a case by case basis, depending on homeowners' credit scores.

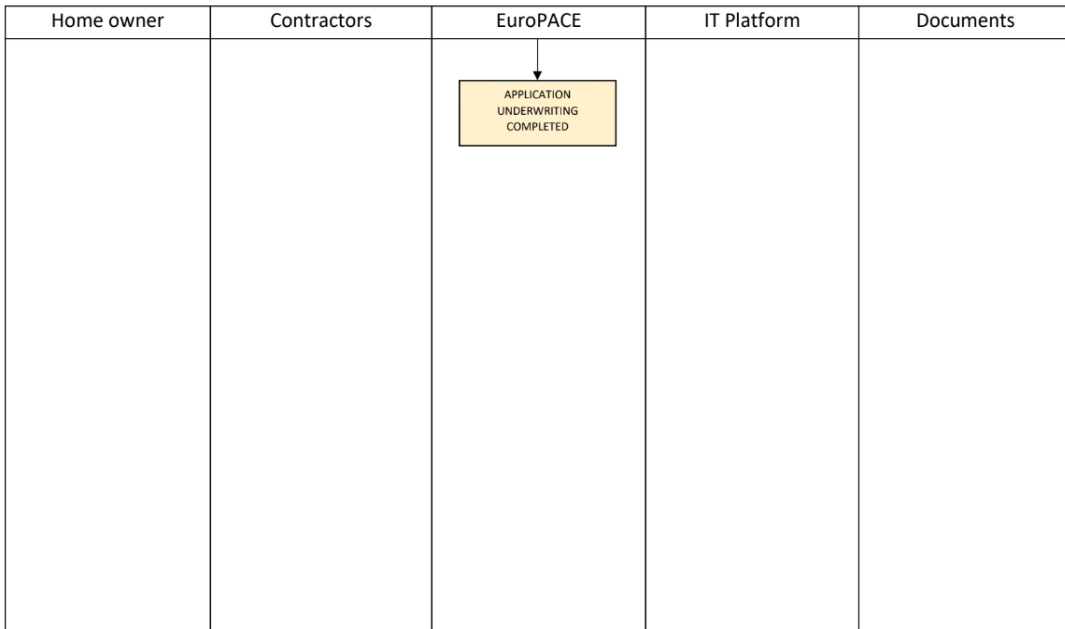
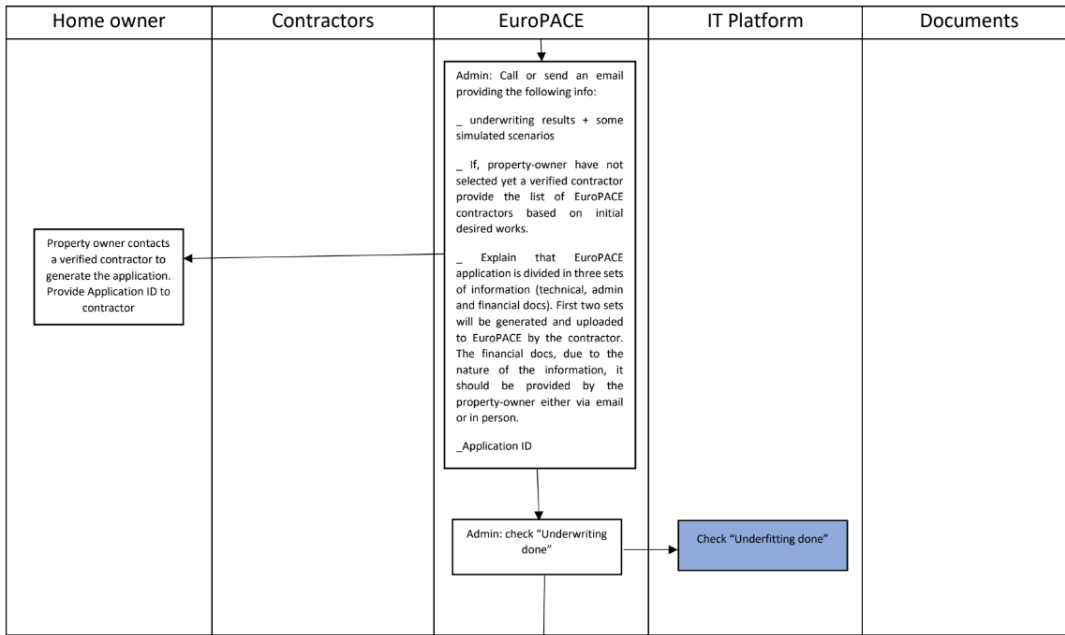
Bank Name	Purpose/Collateral	Term	Principal	Minimum Rate	Minimum All-in rate (*)	Up-front Fee	Prepay Fee	Late fee / charges	Insurance	Monthly Payment (**)	Notes
Kutxabank	Personal Loan	7 years	€0.5-40k	n/a	n/a	n/a	n/a	n/a	n/a		No detailed information available
Kutxabank	Personal Loan / Reforma del Hogar	10 years	€0.5-75k	n/a	n/a	n/a	n/a	1%	n/a		No detailed information available
BBVA	Internet Loan / Personal Loan	8 years	€1.5-50k	5,50%-9,95%	5,69%-10,76%	2,3%	0,5%-1,0%	0,50%	n/a	€322,48	Minimum rate if bank account, minimum card usage, and salary received in account
Laboral Kutxa	Internet Loan / Personal Loan under risk evaluation	7 years	>€1K	6,00%	6,17%	0%	0,5%-1,0%	0,50%	n/a	€365,21	
Sabadell	Internet Loan / Personal Loan under risk evaluation	8 years	€2.5-60k	8,75%	11,63%	2,25% (min. €75)	n/a	n/a	Yes	€350,25	
Santander	Reforma Vivienda	8 years	€0-90k	5,95%-9,95%	6,54%-11,50%	1,5%	0,5%-1,0%	n/a	Yes	€332,85	Minimum rate if bank account, minimum card usage, and salary received in account
Abarca	Internet loan / "Préstamo 24h"	8 years	€0.5-60k	5,45%-8,45%	9,50%-9,34%	1,5%	n/a	2,00%	Yes	€321,88	Minimum rate if bank account, minimum card usage, and salary received in account, payment assurance
Cetelem	Internet loan	8 years	€4-60k	5,95-9,90%	7,18%-10,36%	n/a	n/a	n/a	n/a	€327,93	
Cofidis	Internet loan / Personal loan / Reformas del Hogar	8 years	€4-15k	5,95%-10,99%	6,12%-11,61%	Not charged	n/a	n/a	No		No bank account
ING	Internet loan / Personal loan / Préstamo Naranja	7 years	€6-60k	5,95%-11,95%	6,11%-12,63%	Not charged	Not charged	n/a	Yes	364,61	No bank account
CaixaBank	Préstamos Personales	6 years	€0-60k	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Loan simulaion is not available. Have to log in.
Caja de Ingenieros	Préstamo ECO	5 years	€0-30k	3,90%	4,17%	0,5% (min. €100)	0,5%-1,0%	n/a	n/a	n/a	Specifically related to improvement of energy efficiency. Minimum rate if bank account, minimum card usage, and salary received in account. Juan Alario contactó al gestor de cuenta y obtuvo este feedback: "Me ha confirmado las condiciones del préstamo (3,9% 5 años y con la comisión de apertura 4,18%). Me ha confirmado que es para EE/RE y me ha preguntado detalles de la inversión (le he dicho bomba de calor de alta eficiencia y PVI). Me ha confirmado la elegibilidad. Los requerimientos para acceder al mismo son muy sencillos, como explican en su web. Ha mostrado mucho interés en contactar con mi hermana para formalizar el tema y comparar la alternativa ampliación de hipoteca con este préstamo, aunque él piensa que por el monto es mejor el préstamo ECO. Evidentemente, le he dicho que todo está muy verde. Me ha explicado que es un crédito subvencionado, para promover uno de los objetivos de la Caixa: sostenibilidad. Como te dije al principio del EuroPACE, cuando estábamos desarrollando el Etema Barcelona la Caixa muestra mucho interés en participar en el proyecto."
Caja de Ingenieros	Préstamo Reforma/Consumo	10 years	€3-60k	6,90%	7,48%	0,5%-1,5% (min. €100)	0,5%-1,0%	n/a	n/a	288,98	Minimum rate if bank account, minimum card usage, and salary received in account
Bankia	Personal loan	5 years	€1-60k	10,50%	11,99%	2,00% (min. €120)	n/a	n/a	n/a	537,35	salary received in account

Annex 8. – Information Request Flowcharts

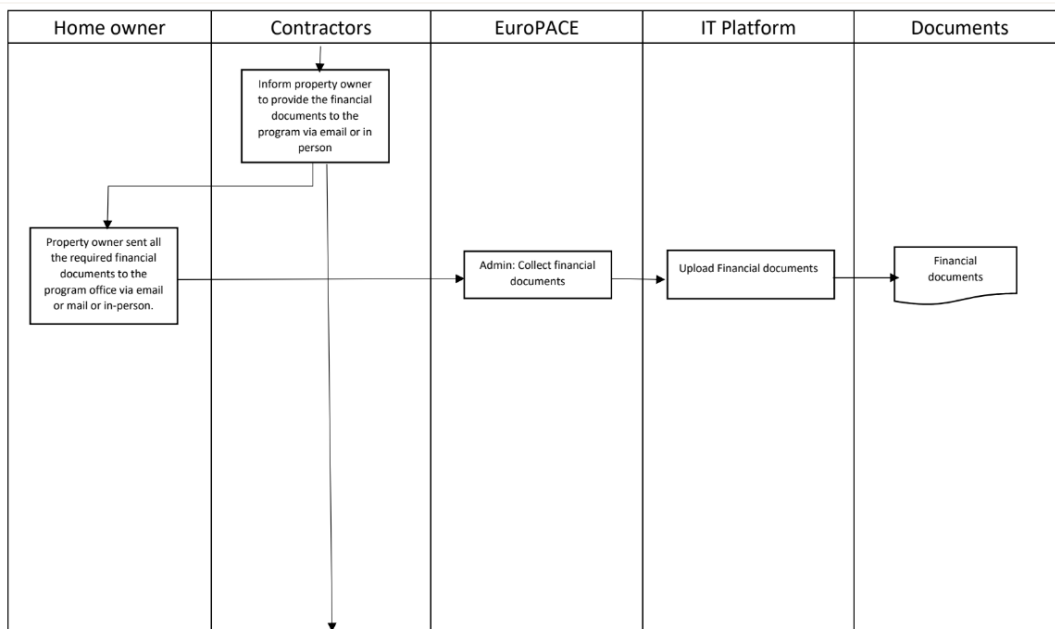
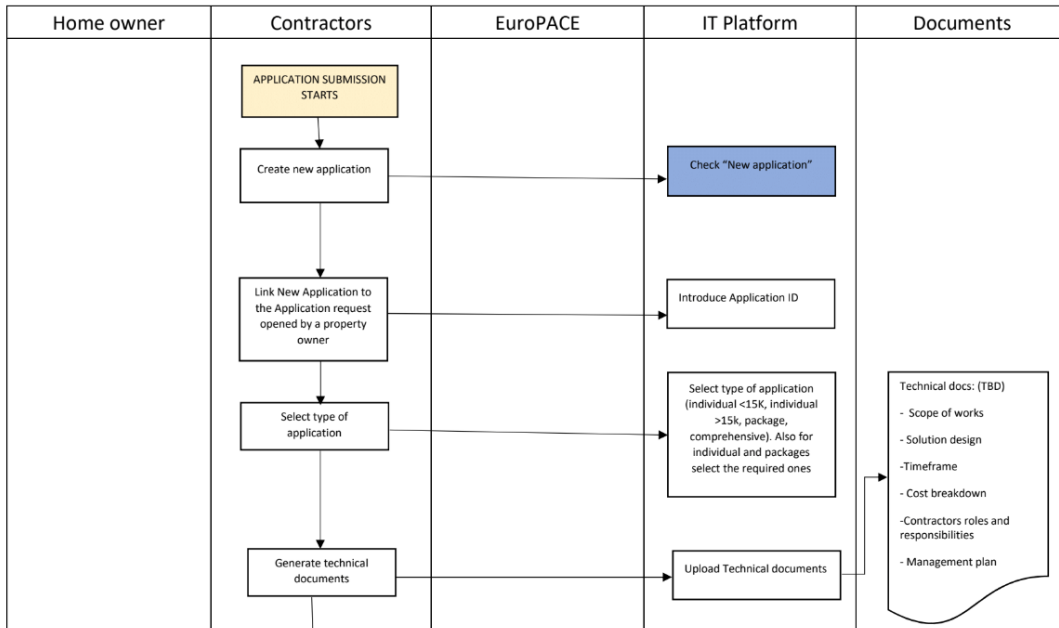


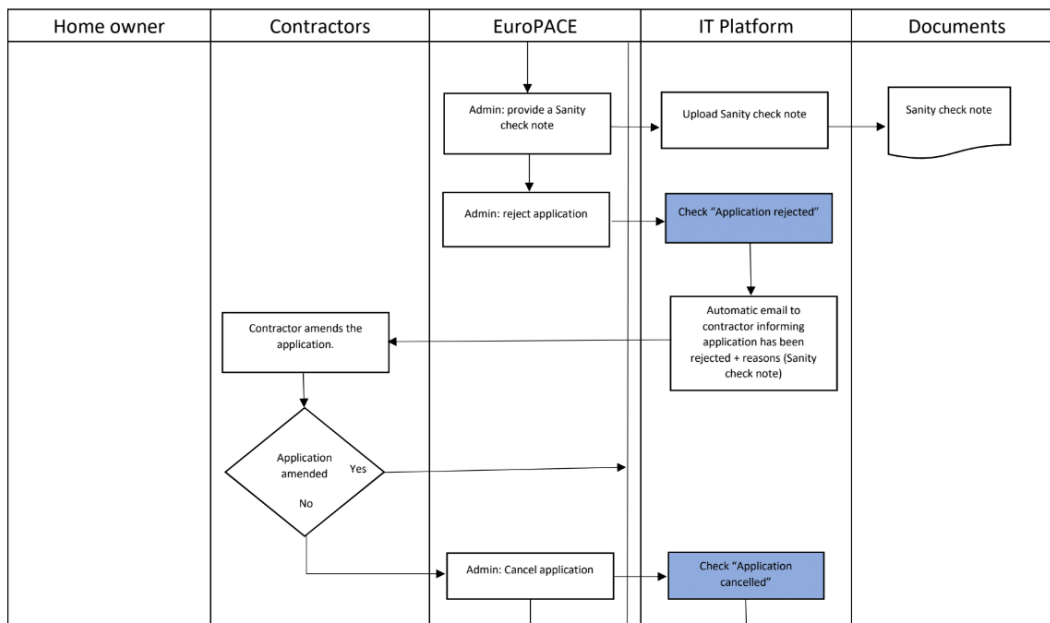
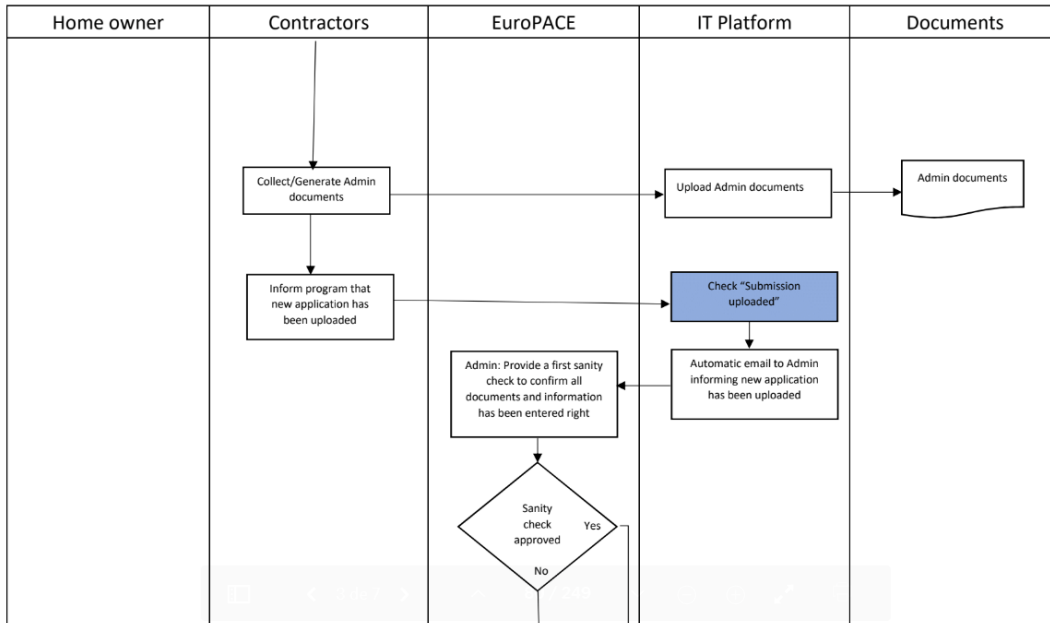
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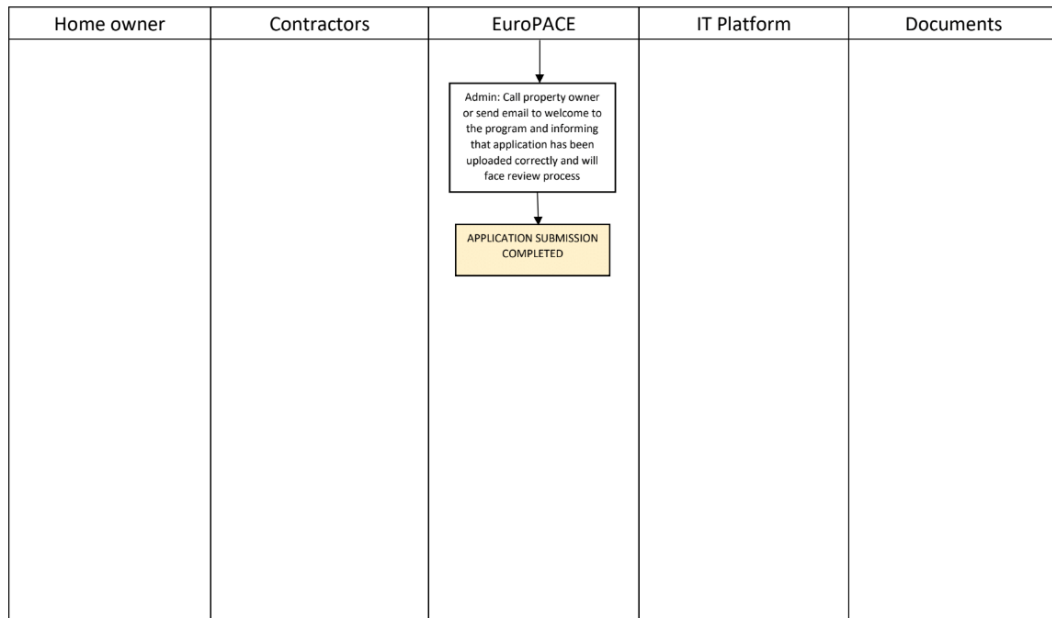
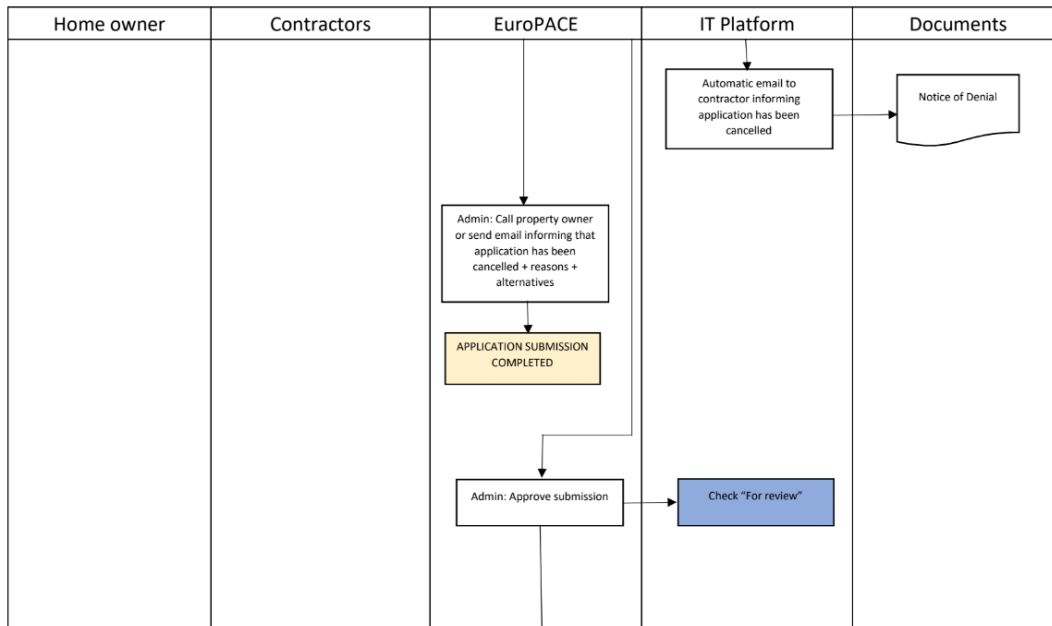




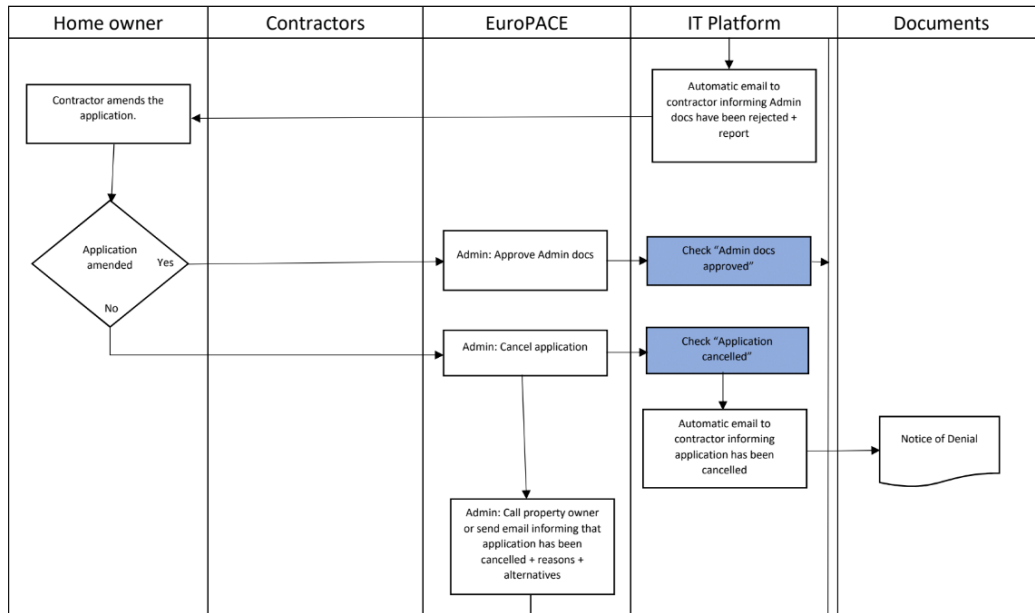
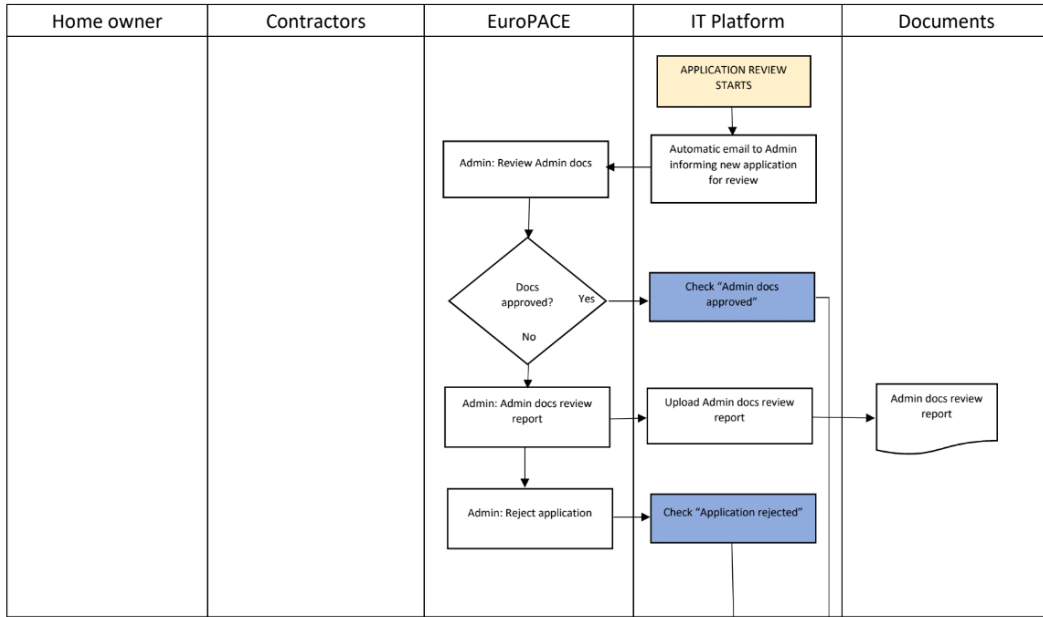
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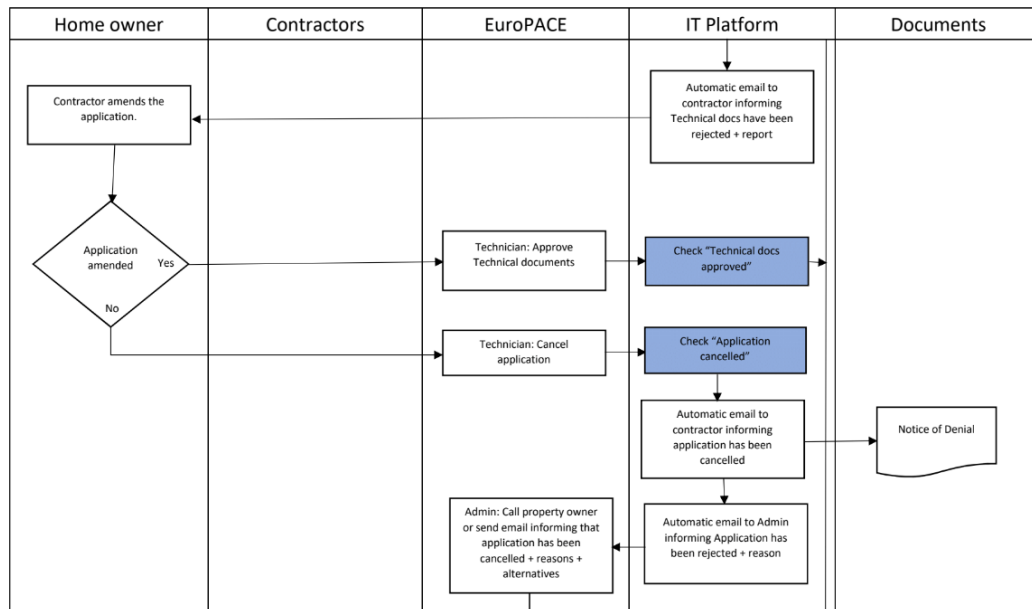
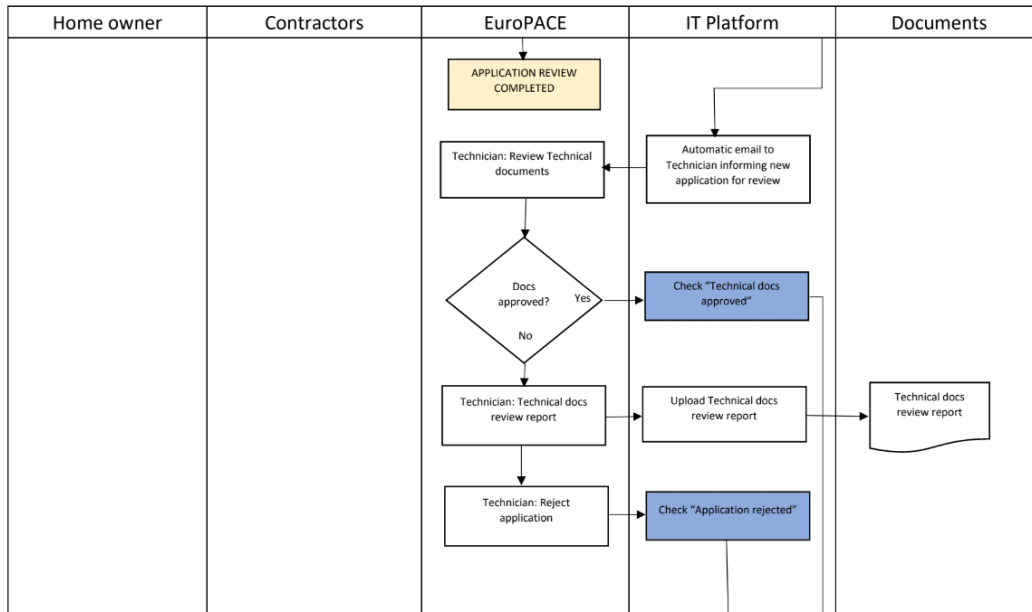


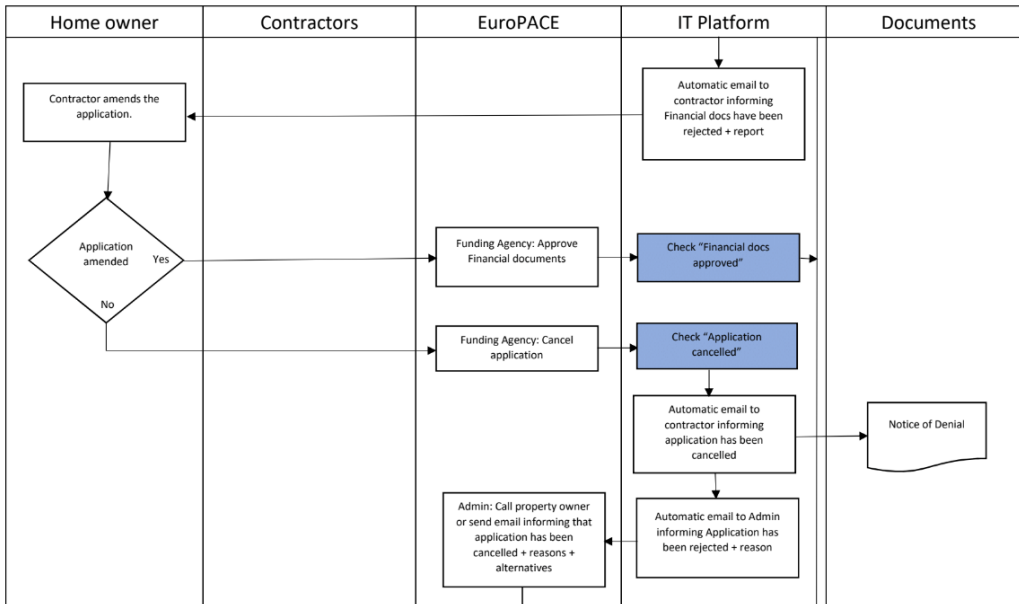
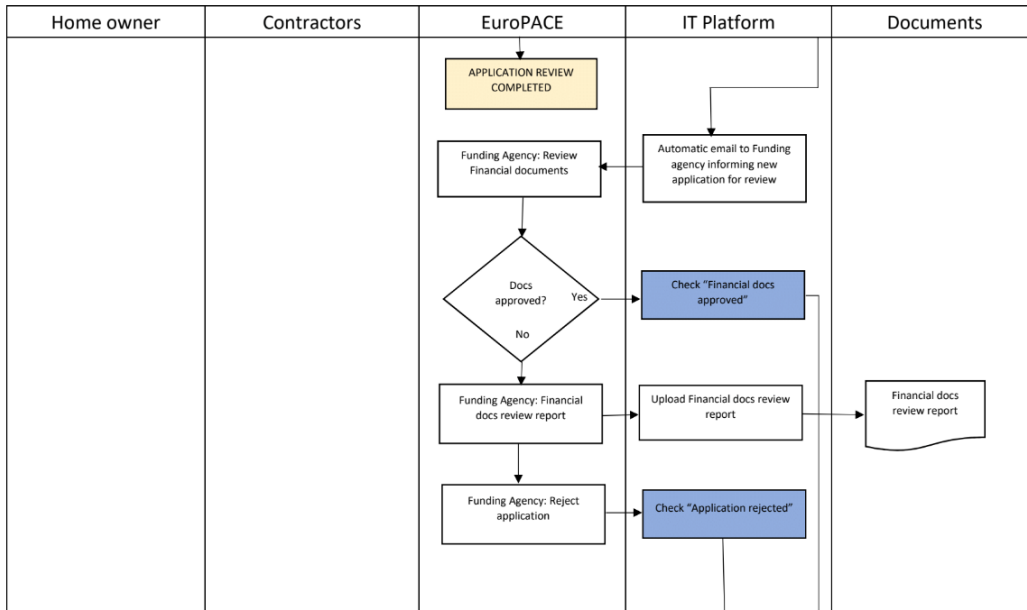


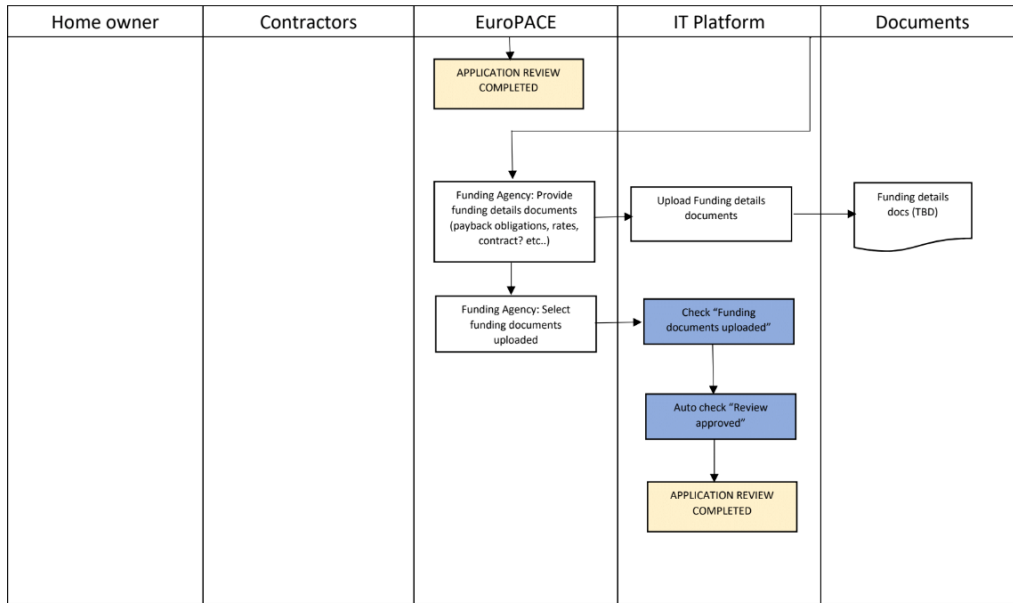


Review

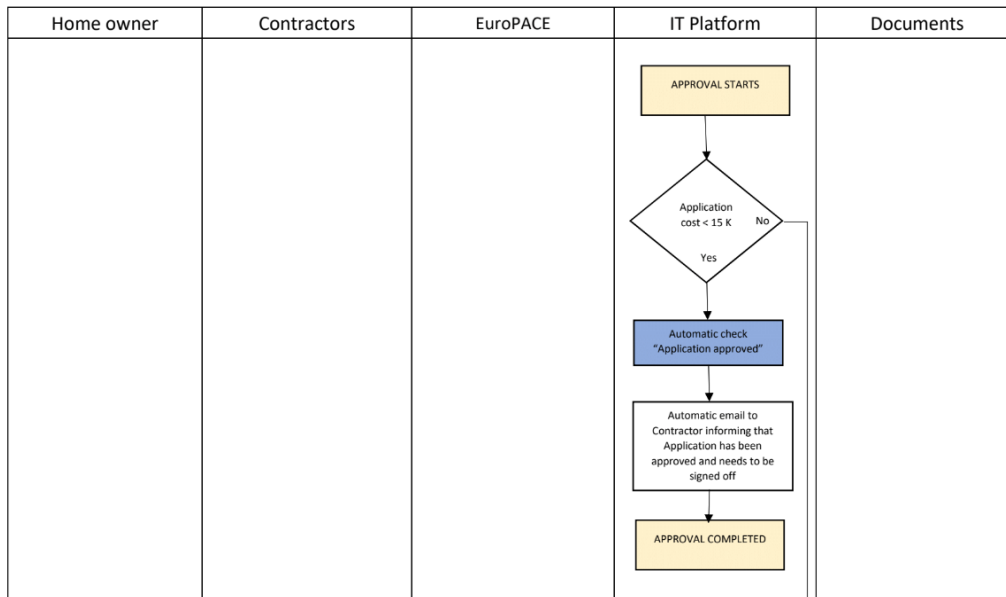


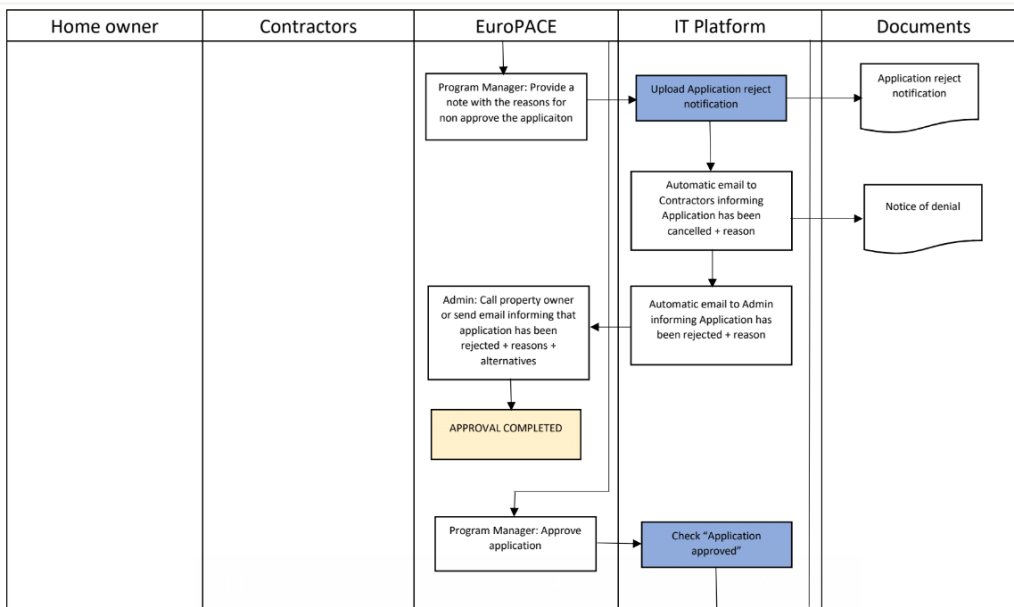
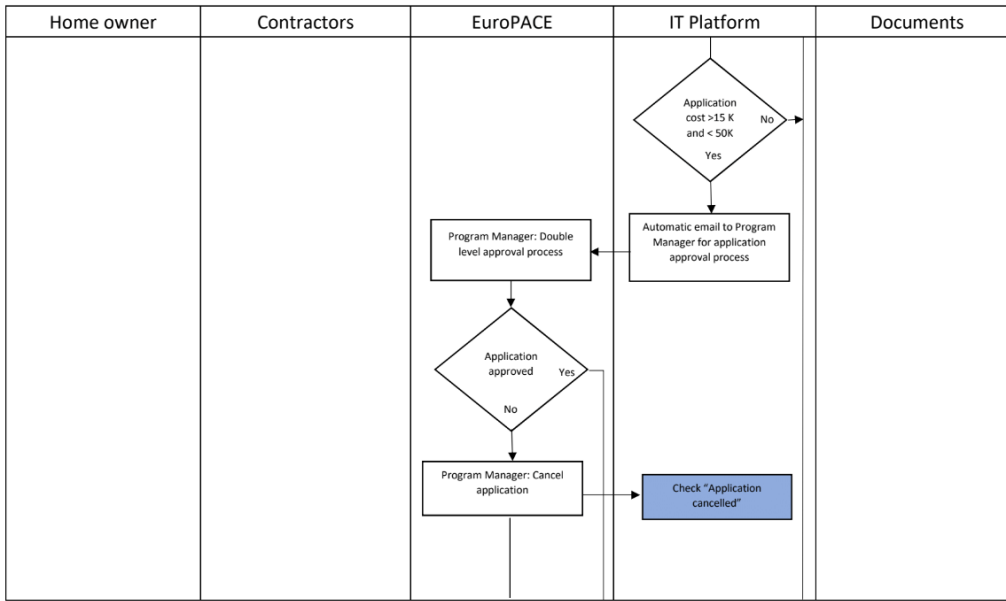


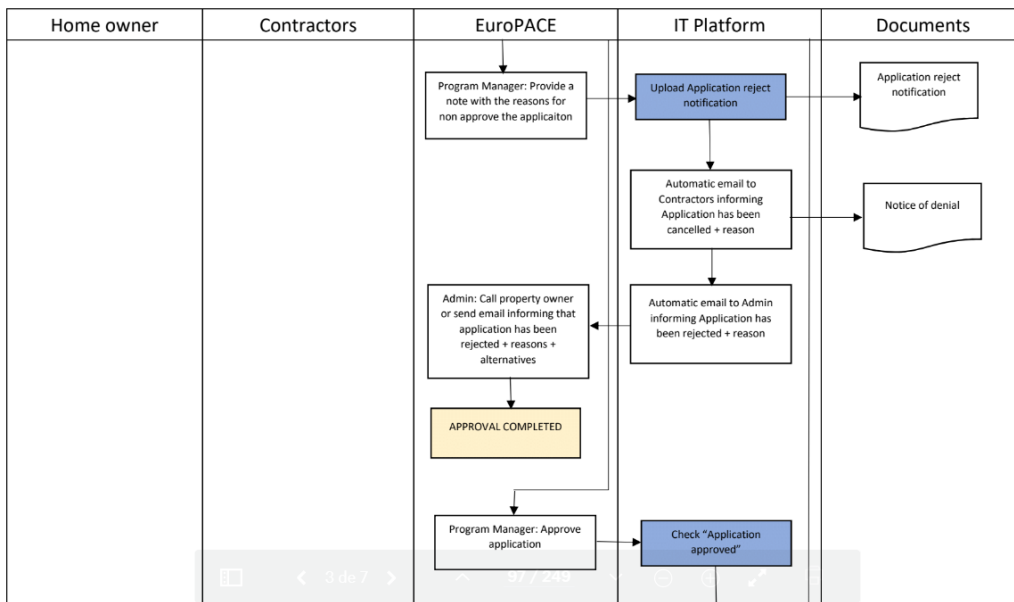
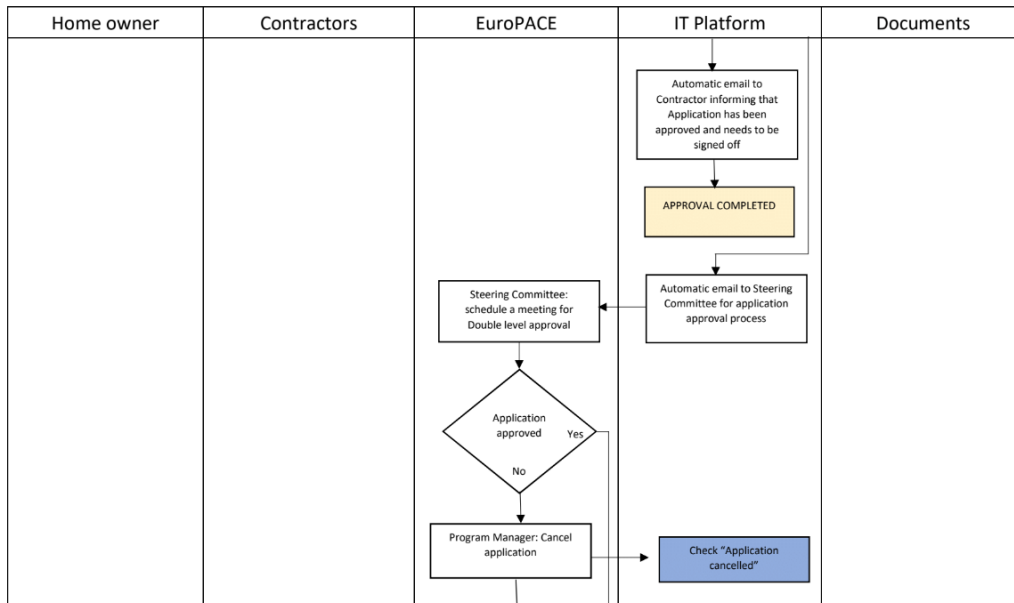


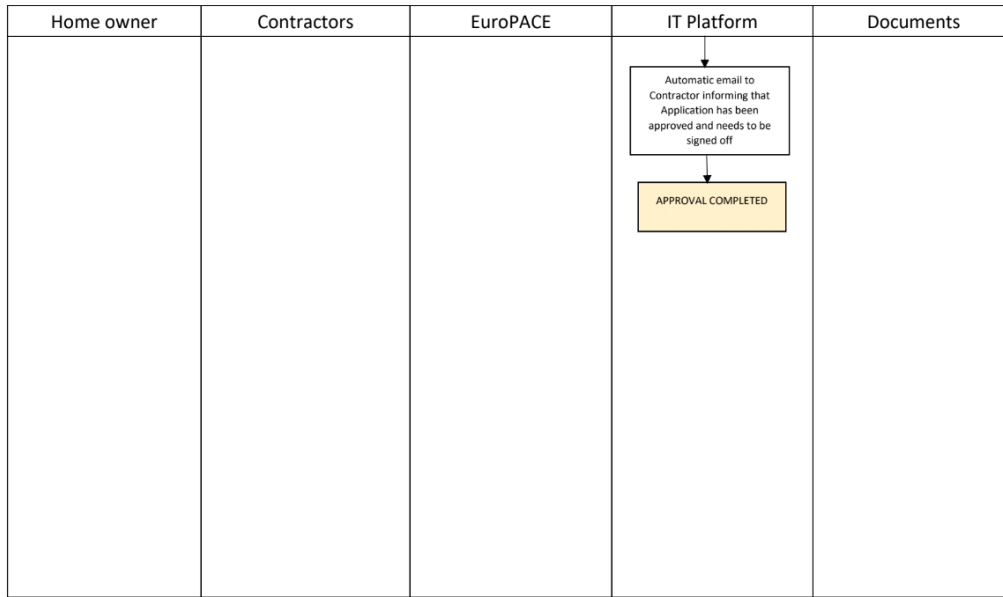


Approval

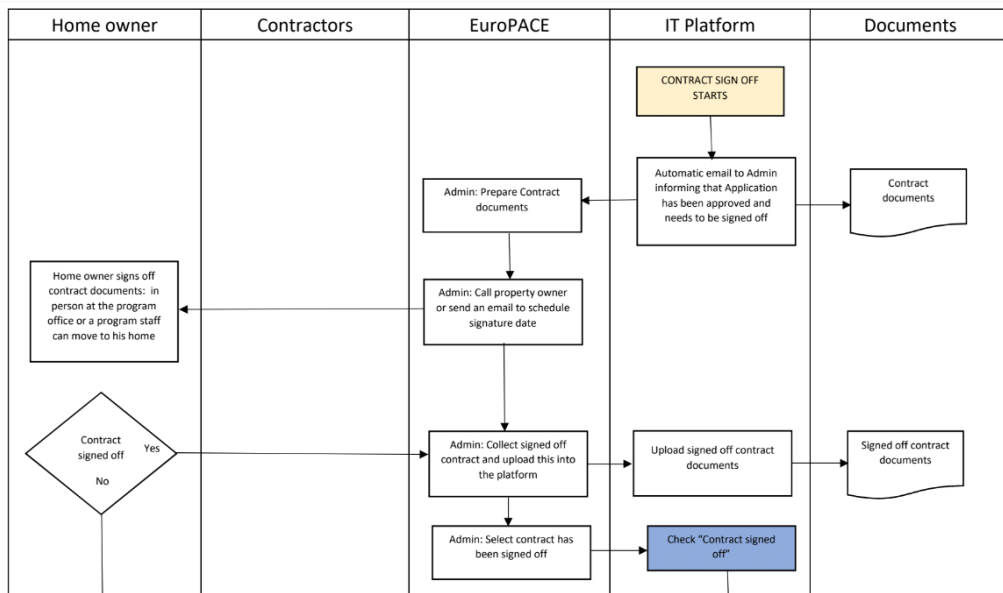


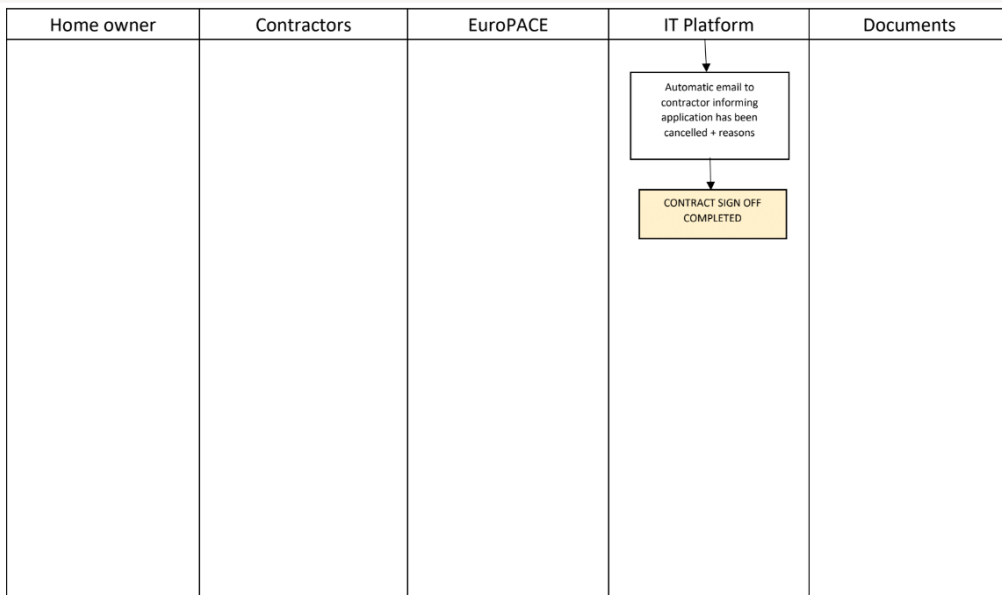
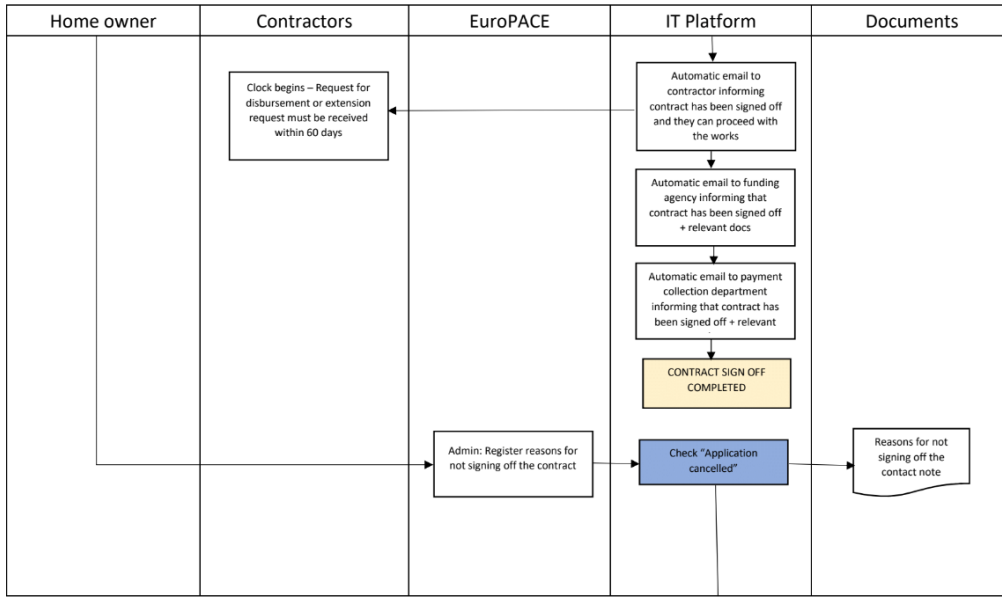






Contract sign off





Annex 9. – Contractor Validation Requirements



VALIDACIÓ DE PROFESSIONALS

ACTIVITATS PER LES QUALS ES SOL·LICITA LA INSCRIPCIÓ AL PROGRAMA HOLADOMUS

Disseny, redacció de projectes i certificats energètics

- Certificats d'eficiència energètica/auditories energètiques (expert energètic)
- Redacció de projecte bàsic, executiu o memòries tècniques (arquitecte i arquitecte tècnic)

Aïllament de façana

- Aïllament de façana per l'exterior
- Aïllament de façana per càmera d'aire
- Aïllament de façana per l'interior

Aïllament de coberta

- Aïllament de coberta per l'exterior
- Aïllament de coberta per l'interior

Aïllament de terres

- Aïllament de terres

Substitució de finestres

- Substitució de finestres

Protecció solar exterior

- Tendals
- Lames i gelosies
- Persianes
- Cortines

Il·luminació

- Pous de llum
- Sistemes d'il·luminació de baix consum

Sistemes tèrmics no renovables

- Caldera de condensació de gas natural individual
- Caldera de condensació de gas natural col·lectives
- Bombes de calor
- Intercanviadores de calor

- Connexió a xarxa de district heating, basada en alta eficiència o energies renovables
- Unitats de micro-cogeneració

Sistemes tèrmics renovables

- Aerotèrmia en substitució d'una caldera mixta (i d'una bomba de calor en el cas de refrigeració)
- Caldera de biomassa
- Solar tèrmica per unifamiliar: termosifó
- Solar tèrmica per plurifamiliar: solució amb acumulació i caldera centralitzada
- Instal·lació d'energia geotèrmica de baixa temperatura

Sistemes elèctrics renovables

- Instal·lació de plaques fotovoltaïques
- Acumulador d'energia
- Punts de recàrrega cotxe elèctric

Millores en consum d'aigua

- Sistemes de millora qualitat de l'aigua

Millores en l'accessibilitat

- Instal·lació d'ascensor
- Accessos adaptats (habitatge i bloc de pisos)

Millores de gestió i vigilància

- Sistemes domòtics
- Vàlvules termostàtiques als radiadors
- Instal·lació d'alarma

Rehabilitació d'habitatges

- Reforma interior d'habitatges
- Rehabilitació integral d'habitatges
- Pintat, arrebossat i reparació de fissures en façanes (manteniment)
- Repassos de teulada (manteniment)



REQUERIMENTS ADMINISTRATIUS

DOCUMENTS A PRESENTAR PER PART DELS CONTRACTISTES

Autònom

- Còpia últim rebut d'autònoms
- Certificat col·legial actualitzat

Empresa

- Document acreditatiu del compliment de deures de disposar d'un servei de prevenció de riscos laborals i d'un servei de vigilància de la salut. Rebut conforme està al pagament.
- Document acreditatiu dels poders del representant de l'empresa
- Còpia de la targeta del NIF
- Certificat d'inscripció al REA

Autònoms i empreses

- Certificat expedit per la Tresoreria General de la Seguretat Social d'estar al corrent de les seves obligacions amb la Seguretat Social o mútua col·legial (R.E.T.A)
- Certificat expedit per l'Agència Tributària d'estar al corrent amb el compliment de les seves obligacions tributàries
- Document d'alta en els epígrafs corresponents a l'IAE
- Última còpia de la declaració de l'IVA
- Certificat d'inscripció al RASIC. (només instal·ladors)
- Còpia de la pòlissa de responsabilitat civil i còpia de l'últim rebut

REQUERIMENTS TÈCNICS

DOCUMENTS A PRESENTAR PER PART DELS CONTRACTISTES

Requeriments tècnics

- Declaració responsable acreditació solvència tècnica. Relació dels 15 últims projectes realitzats durant els darrers 3 anys, amb com a mínim 5 projectes de cada naturalesa en el cas de realitzar més d'una mesura. *Annex 1.

Certificats de qualitat (opcional)

- Certificat d'instal·lador (Organisme de certificació, data i vigència)
- ISO 14001 (Organisme de certificació, data i vigència)
- ISO 9001 (Organisme de certificació, data i vigència)
- OHSAS 18001 (Organisme de certificació, data i vigència)
- SGE-21 (Organisme de certificació, data i vigència)
- Altres (Organisme de certificació, data i vigència)



Annex 10. – Contractor Validation Certificate

Certificat de validació contractista

Nom empresa:

Data de la validació:

Vigència del certificat:

Persona que realitza la validació:

Aïllament façanes	Aïllament coberta	Aïllament terra	Substitució finestres	Caldera condensació
Caldera biomassa	Aerotermita	Intercanviador de calor	Plaques fotovoltaïques	Bomba de calor
Il·luminació Leed	Protecció solar	Plaques solar tèrmiques	Rehabilitació integral	Millores accessibilitat

La empresa compleix la solvència administrativa?

Si No Observ.

La empresa compleix la solvència tècnica?

Si No Observ.

La empresa ha complert tota la formació?

Si No Observ.

*Si el professional només està validat a realitzar les mesures seleccionades, si la empresa vol validar més mesures s'ha de posar en contacte amb HolaDomus.

Conformitat HolaDomus

Firma

Codi de Conducta per professionals

Programa EuroPACE
Olot

CONTIGUT

1. Introducció
2. La nostra filosofia
3. Conflicte d'Interessos
4. Obsequis, Àpats i Entreteniment
5. Suborns
6. Registres Comptables
7. Ús d'actius d'EuroPACE
8. Ús de Recursos Tecnològics
9. Ús d'Informació Privilegiada
10. Drets de Propietat Intel·lectual
11. Denúncia de Conductes Indegudes
12. Compliment de les Lleis
13. Salut i Seguretat
14. Relacions Laborals i Drets Humans
15. Discriminació i Assetjament
16. Medi Ambient
17. Avaluació i Control dels Professionals
18. Mitjà de comunicació social
19. Normes generals i comportament en el lloc de treball

1. Introducció

El programa EuroPACE i tots els seus integrants estan compromesos amb la cultura de la transparència i la integritat, basada en el comportament ètic i el compliment de les lleis. El Codi de Conducta d'EuroPACE per a Professionals reflecteix aquesta cultura, a més d'inspirar i orientar les accions d'aquells tercers amb els quals el programa interactua en el desenvolupament ordinari de la seva activitat.

El compromís i el compliment d'aquestes normes comunes per part de tercers és essencial per garantir la concreció dels objectius i expectatives d'EuroPACE sobre conductes ètiques, transparents i correctes. És per això que EuroPACE ha desenvolupat el present Codi de Conducta per Professionals, que serà aplicable tant als professionals com als seus empleats, funcionaris, directors o representants autoritzats, sense excepció.

El compliment diligent i sistemàtic de les disposicions establertes en el Codi de Conducta per Professionals serà tingut en compte en la selecció, retenció i avaluació d'aquests Professionals.

Els Professionals seran responsables que s'apliquin els principis contemplats en el present Codi de Conducta, fins i tot en les seves relacions amb els subcontractistes amb els quals treballen, en la mesura en què participin de qualsevol manera en alguna de les activitats del programa.

Sota cap circumstància els Professionals hauran d'acatar una ordre, sol·licitud o instrucció que pogués constituir un incompliment o violació de les disposicions del present Codi de Conducta per Professionals.

Als fins d'aquest Codi de Conducta per Professionals inclou a qualsevol persona o entitat que presti serveis o proveeixi qualsevol tipus de béns a EuroPACE, incloent-hi, a títol enunciatiu, distribuïdors, fabricants, experts energètics, arquitectes, constructors i instal·ladors

2. La nostra filosofia

EuroPACE estem dedicats a simplificar i facilitar i agilitzar els processos de rehabilitació d'habitatges a través d'un acompanyament tècnic, administratiu i financer amb l'objectiu últim de satisfer les expectatives generades pels nostres usuaris. Aquestes expectatives només es poden complir a través de la promoció de la construcció de qualitat de la mà d'un grup de professionals compromesos, dedicats i altament qualificats.

És per aquest motiu que la clau de l'èxit rau en el compliment dels següents valors innegociables i que s'erigeixen primer a tot el personal del al Programa EuroPACE i també de qualsevol persona o entitat que presti serveis o proveeixi qualsevol tipus de béns al Programa.

- INTEGRITAT – Comportament segons el codi moral i ètic

- PROFESSIONALITAT – Treball en base als estàndards professionals
- RESPONSABILITAT – Actuar de forma responsable
- EXCEL·LÈNCIA – Buscar en tot moment l'excel·lència
- COMPROMÍS – Compromís amb un servei de qualitat
- TREBALL EN EQUIP – Fomentar un bon clima de treball i el companyerisme
- RESPECTE - Tractar a tots els individus amb educació

3. conflicte d'Interessos

Els Professionals han d'evitar qualsevol interacció amb empleats d'EuroPACE que pugui donar lloc a un conflicte, o un potencial conflicte, respecte dels interessos d'EuroPACE.

Per exemple, els Professionals no han de contractar o efectuar pagaments a cap empleat d'EuroPACE mentre hi hagi una prestació de serveis o provisió de bens al Programa. En cas que hi hagi una relació de parentiu entre un empleat un Professional i un empleat d'EuroPACE (per exemple, cònjuge, pare, germà, avi, fill, net, familiar polític, etc.), o si un empleat d'un Professional manté un altre tipus de relació amb un empleat d'EuroPACE que pogués representar un conflicte d'interessos, el Professional ha d'informar d'aquesta circumstància al Programa.

4. Obsequis, Àpats i Entreteniment

Els Professionals no poden d'oferir cap obsequi(1), viatge, àpat o activitat de lleure a cap empleat d'EuroPACE en circumstàncies que poguessin influenciar les decisions d'aquest empleat respecte el Professional, o que puguin interpretar-se en tal sentit.

En determinades circumstàncies, però, els Professionals podran oferir petits regals, àpats o activitats de lleure als empleats d'EuroPACE prèvia aprovació per part de la Direcció del Programa.

(1) El terme "obsequi" es refereix a qualsevol element de valor, el que pot incloure, entre d'altres, qualsevol tipus de gratificació, avantatge (per exemple, permetre l'ús de vehicles o instal·lacions), efectiu o equivalents, viatges, allotjament, àpats, entreteniments, incentius, préstecs, recompenses, facilitar instal·lacions o serveis a un valor inferior al cost total, contractació o continuïtat de serveis i qualsevol altre avantatge o benefici de qualsevol naturalesa (ja sigui que constitueixi, o derivi de, fons o actius corporatius, o fons o actius personals o de tercers).

5. Suborns

Sota cap circumstància els Professionals han de ser part de cap esquema de suborn, ni oferir cap tipus d'incentiu a cap empleat d'EuroPACE, ni a familiars o amics d'empleats d'EuroPACE, amb la finalitat d'obtenir benefici professional.

Els Professionals han de complir amb totes les lleis anticorrupció aplicables i en matèria d'actes de suborn respecte de Funcionaris públics (2).

(2) El terme "Funcionari públic" es refereix a (A) qualsevol funcionari o empleat, o qualsevol persona, ja sigui triada o designada, que s'ocupi en un lloc legislatiu, administratiu o judicial, o que representi o actuï en nom d'un estat, govern o organització pública.

6. Registres Comptables

Mantenir informació i registres precisos i fiables és essencial per al compliment de les obligacions financeres, legals i administratives d'EuroPACE i necessari per reflectir degudament les activitats del Programa. Els Professionals han de portar registres precisos de totes les qüestions vinculades amb les seves relacions professionals amb EuroPACE. Això implica registrar en forma deguda, completa i oportuna totes les despeses i pagaments, i garantir la disponibilitat de tota la documentació corresponent que doni suport aquests registres. Els Professionals en cas poden obstaculitzar, dilatar, entorpir o de qualsevol altra forma dificultar el processament de la documentació comptable en forma deguda i oportuna per part d'EuroPACE.

7. Ús d'actius d'EuroPACE

Els Professionals han de protegir i utilitzar de manera responsable els béns i altres actius tangibles i intangibles propietat d'EuroPACE.

Els Professionals no han d'utilitzar cap marca comercial ni cap altre tipus de propietat intel·lectual del Programa, llevat que comptin amb una autorització expressa per escrit d'EuroPACE.

8. Ús de Recursos Tecnològics

Quan la prestació de serveis, la provisió de béns o el compliment de les seves obligacions de qualsevol altra manera exigeixi l'ús d'equips, sistemes i dispositius tecnològics d'EuroPACE, els Professionals han d'utilitzar aquests elements únicament per a aquelles fins autoritzats per EuroPACE o que es relacionin en forma directa amb el compliment de l'objecte dels acords corresponents.

Els Professionals que operin recursos tecnològics d'EuroPACE han de conèixer les restriccions aplicables als usuaris i no han de violar els acords i autoritzacions corresponents, ni efectuar cap acte que pogués comprometre la responsabilitat d'EuroPACE o generar responsabilitat per part d'EuroPACE respecte de tercers o de qualsevol autoritat.

Els recursos tecnològics d'EuroPACE s'han d'utilitzar d'acord amb les normes aplicables i polítiques del Programa.

EuroPACE té el dret a monitoritzar, en qualsevol moment i sense avís, l'ús dels seus recursos d'informació tecnològica, i per tant, a accedir, revisar, copiar o capturar arxius, documents, registres, base de dades, missatges electrònics, activitat a internet i qualsevol altra informació generada a través de l'ús dels recursos d'informació tecnològica d'EuroPACE. En el mateix sentit, els usuaris dels recursos informàtics d'EuroPACE no han de tenir expectatives de privacitat en relació a la informació o comunicacions que siguin generades o transmeses a través de, o emmagatzemades en els sistemes informàtics d'EuroPACE.

La informació i les dades emmagatzemades dins els servidors d'EuroPACE, els recursos informàtics són propietat d'EuroPACE i, en conseqüència, EuroPACE pot decidir sobre la provisió d'aquesta informació a les autoritats o altres tercers si ho considera apropiat o necessari però sempre complint amb la llei de protecció de dades Llei orgànica 3/2018, de 5 de desembre.

Els Professionals han de mantenir la confidencialitat de tota la informació a la qual tinguin accés en l'exercici de les seves tasques, prestació de serveis o provisió de béns a EuroPACE, tot i que no sigui informació classificada o no tracti específicament sobre EuroPACE, i han de prendre les accions necessàries per evitar el seu ús indegut, robatori, frau o divulgació inadequada.

En tots els casos, els Professionals han d'usar la informació que reben o a la qual tinguin accés de forma legítima, per la finalitat específica per al qual va ser revelada, rebuda o obtinguda, i de conformitat amb les lleis aplicables. EuroPACE no tolerarà cap tipus d'ús indegut, deshonest, no autoritzat, il·legal o inadequat de cap tipus d'informació, tot i que això pogués implicar un benefici o avantatge per EuroPACE.

Els Professionals han d'actuar amb la deguda diligència en manipular, debatre o transmetre informació confidencial o delicada que pogués afectar EuroPACE, o als seus empleats, els seus clients, o al públic en general. Els Professionals seran directament responsables de prendre les mesures necessàries per protegir la informació d'EuroPACE de qualsevol dany o pèrdua i garantir la seva custòdia. La responsabilitat dels Professionals de no revelar la informació confidencial d'EuroPACE és una obligació contínua que s'estén més enllà dels serveis o acord contractual amb EuroPACE.

9. Ús d'Informació Privilegiada

Si un Professional tingué coneixement d'informació concreta vinculada amb EuroPACE o amb els negocis del Programa i que no estigués disponible al públic, no podrà efectuar cap altre acte que impliqui obtenir un avantatge a partir d'aquesta informació.

10. Drets de Propietat Intel·lectual

Els Professionals han de protegir, preservar i respectar els drets de propietat intel·lectual d'EuroPACE. Aquests drets inclouen, entre d'altres, titularitat sobre plans, sistemes, procediments, metodologies, cursos, informes, projeccions o il·lustracions als que els Professionals tinguin accés en el desenvolupament de la seva relació comercial amb EuroPACE.

11. Denúncia de Conductes Indegudes

En cas que un Professional que tingui coneixement sobre algun tipus de conducta il·legal o indeguda, o una potencial violació dels principis establerts en el present Codi de Conducta per part d'un empleat d'EuroPACE, qualsevol persona que actuï en nom d'EuroPACE, qualsevol empleat o representant o subcontractista del Professional vinculat amb la prestació de serveis o provisió de subministraments al Programa, ha de informar-ho a EuroPACE.

12. Compliment de les Lleis

Els Professionals tenen la responsabilitat de garantir que els seus directors, funcionaris, empleats i subcontractistes, representants o agents compreguin i compleixin les reglamentacions i normes vigents, així com també la legislació regional i nacional, en la mesura que resulti aplicable a l'acord pertinent entre les parts.

13. Salut i Seguretat

Es requereix que els Professionals i els seus subcontractistes treballin activament per prevenir els accidents de treball i crear un ambient de treball segur i saludable. L'objectiu és zero accidents.

Els Professionals i els seus subcontractistes han de garantir que tota la feina es realitza de conformitat amb la legislació de Salut i Seguretat i garantir que mantenen els equips de treball capacitats per a les tasques que estan realitzant.

14. Relacions Laborals i Drets Humans

EuroPACE manté el compromís de dur a terme totes les seves activitats de forma consistent amb els principis de drets humans aplicables i contemplats en el marc de la Declaració Universal de Drets Humans. EuroPACE espera que els Professionals adequïn les seves accions als mateixos estàndards.

Els Professionals han de donar compliment als principis articulats en la Declaració de Principis i Drets Fonamentals en el Treball de l'OIT (Organització Internacional del Treball). Entre ells s'inclou la prohibició contra el treball infantil, el treball forçat i les conductes discriminatòries, com així també el reconeixement dels drets a la llibertat d'associació i a la negociació col·lectiva.

EuroPACE valora i respecta les cultures i tradicions de les comunitats en les que ocupa les seves tasques i treballa activament considerant les qüestions de salut, seguretat, medi ambient, drets humans i benestar econòmic d'aquestes comunitats en totes les seves activitats, i espera que els Professionals involucrats al Programa

mantinguin, respectin i promoguin aquests valors en totes les activitats relacionades amb EuroPACE.

15. Discriminació i Assetjament

EuroPACE manté el compromís de crear i mantenir un ambient de treball en el qual tots els seus empleats tinguin oportunitats de creixement i desenvolupament i puguin contribuir plenament a l'èxit del Programa. En aquest context, sota cap circumstància es toleraran fets d'assetjament, assetjament sexual, intimidació o discriminació respecte de cap empleat.

Els Professionals no realitzaran actes de discriminació respecte de cap persona en el transcurs de la relació laboral, incloent contractació, salari, beneficis, ascensos, disciplina, fi de la relació laboral o retir, per raons de gènere, raça, religió, edat, discapacitat, orientació sexual, nacionalitat, opinió política, o origen social o ètnic.

Els Professionals i els seus subcontractistes han de tractar als seus empleats amb respecte i dignitat. Cap dels seus empleats estarà subjecte a cap tipus d'abús o assetjament, ja sigui físic, sexual o psicològic, i tots tenen l'obligació d'evitar qualsevol forma d'assetjament.

16. Medi Ambient

EuroPACE compleix tant amb l'esperit com amb les disposicions de les lleis i reglamentacions ambientals aplicables i espera una actitud semblant per part de tots els Professionals. Quan no existeixin normes estipulades, els Professionals han d'ajustar les seves accions a estàndards elevats.

Els Professionals han de treballar activament en augmentar l'impacte positiu i limitar els efectes negatius per al medi ambient i la societat i així manifestar-ho a través de la creació de plans mediambientals adequats a la naturalesa de l'activitat del Professional i els riscos vinculats amb aquesta activitat.

17. Avaluació i Control dels Professionals

L'acceptació i compliment sistemàtic de les disposicions d'aquest Codi és part integral del procediment de gestió i avaluació dels Professionals involucrats amb EuroPACE. De conformitat amb l'enfocament basat en riscos adoptat per EuroPACE, el Programa pot sol·licitar als Professionals autoritzacions específiques o complementàries i exigir el compliment de mesures addicionals per verificar l'observació de les disposicions d'aquest Codi.

El present document, igual que la informació o dades aquí incloses, constitueixen propietat exclusiva d'EuroPACE i, com a tal, es considera confidencial. Així mateix, no podran ser objecte de còpia, reproducció, divulgació, o ús de qualsevol altra manera, per part de tercers per a cap fi, sense el previ consentiment exprés i per escrit d'EuroPACE. Aquestes accions es sancionaran amb tot l'abast permès per les lleis.
TOTS ELS DRETS RESERVATS

18. Mitjà de comunicació social

Els mitjans socials són qualsevol treball d'usuari creat vídeo, àudio, text o multimèdia que es publica i compartits en un entorn social, com un bloc, wiki, comunitat web o vídeo. Els exemples de mitjans socials inclouen, però no es limiten a, Twitter, Facebook, LinkedIn, YouTube i taulers d'anuncis als llocs web. Quan es treballi en nom d'EuroPACE és essencial que les contribucions als mitjans socials per dels Professionals i els seus empleats siguin respectuoses, protegeixin la reputació d'EuroPACE, no siguin contràries al Codi de Conducta EuroPACE per Professionals i segueixin les lleis de la regió on actuen. De manera més general, els Professionals se'ls recorda que qualsevol comunicació externa (notes de premsa, notícies de llocs web, missatges de xarxes socials, etc.) sobre els projectes EuroPACE han de ser aprovats abans de ser publicats pel Programa.

19. Normes generals i comportament en el lloc de treball

- Els Professionals han de presentar-se a treballar en un estat adequat. Qualsevol persona que es presenti a treballar sota la influència (o sospita d'estar sota la influència) o en possessió de drogues i/o Alcohol o sota els efectes d'una medicació, se li demanarà immediatament abandonar el lloc de treball sense excepcions.
- Tots els treballadors han de portar els EPI's apropiats a l'activitat de desempenyar. Totes les eines i EPIs han d'estar en bones condicions, adequats als objectius, i rebre totes les inspeccions obligatòries i reglamentàries, i també els controls i calibratges que siguin necessaris.
- En els habitatges on es realitzin actuacions està estrictament prohibit fumar, llevat que hi hagi una zona per a fumadors assignada i acordada conjuntament amb el propietari.
- Telèfons mòbils - l'ús de telèfons mòbils s'ha de minimitzar al ús estrictament necessari. Això assegura la qualitat del treball i la productivitat.
- En presència d'algun inquilí en l'habitatge, els equips de música només podran ser utilitzats sempre i quan el seu ús i volum hagin estat prèviament acordats amb els inquilins.
- Neteja i Residus – Els Professionals són responsables de mantenir un ambient de treball net, ordenat i segur, lliure de materials de rebuig innecessaris i embalatges. Els Professionals són responsables de netejar les zones de treball i l'eliminació dels seus residus adequadament a intervals regulars durant i al final de cada actuació. Els Professionals són responsables de proporcionar els seus propis contenidors.
- En actuacions on hi treballin a la vegada més d'un Professional ha de prevaler el tracte respectuós, educat i professional en tot moment per tal d'aconseguir i mantenir un ambient de treball positiu.

Annex 12. – Contractor Incident Report System

COMPLAINT SYSTEM

1.0 Purpose

This Policy provides guidelines for the reporting and handling of consumer complaints to ensure prompt, courteous and fair attention is given to all consumer complaints received by the Company.

2.0 Customer complaints characteristics

- Complaints, regardless of where or how they are submitted, are appropriately recorded and categorized;
- Complaints, whether regarding program, contractors or providers, are addressed and resolved promptly;
- Complaints that raise legal issues involving potential consumer or customer harm from unfair treatment or discrimination, unauthorized product enrolment, code of conduct violation, or other regulatory compliance issues, are identified as such and prioritized;
- Complaint data and individual cases of Complaints result in adjustments to policies, procedures, and general business practices as appropriate, to improve the customer experience, increase efficiency, improve profitability, and reduce risk; and
- Complaints result in retrospective corrective action to correct the effects of the Program, contractors or providers actions, policies, procedures or processes, monitoring, or training efforts when appropriate.
- Complaint penalty system is set for contractors to guaranty that contractors will not persist in non-professional behaviour, misconducting or any other behaviour not aligned with the code of conduct defined by the program.
 - Penalty score will be attached to each validated contractor.
 - Contractors will start with 0 penalty points.
 - When contractors reach 5 penalty points, criteria defined below, the contractor will be removed from the program for the period of 1 year.
 - When contractor reach 3 penalty points, the program will monitor the following 3 projects of that contractor.
 - For each 3 projects with no complaints, 1 penalty point will be removed.

3.0 Customer complaints process

1. Intake/Report of Incident:

The complaint will be properly recorded in the program IT platform and the assigned program staff member will attempt to resolve the issue immediately on the call. If the complaint is sent via email, program will inform to the complainant when complaint register is created.

- Date of the inquiry

- Application ID
- Compliant topic (Communication, solution design, execution, disbursement, measure performance)
- Compliant category (low, high) *
- Complaint Details
- Resolution action
- Resolution Deadline
- Complaint status (open, to be reviewed, rejected, cancelled, closed)
- Complaint resolution penalty points

** Complaint categories details:

- Low: At creation all complaints categories will be stated at "Low". When issue is escalated to the Complaint team this will set, based on the issue and initial response, new category if required. Typically this category of complaints will include misunderstandings between parties, short delays on specific actions (i.e. works execution, information submission, etc..).
- High: If compliant category is stated high, automatically the contractor receives 1 compliant penalty point. This category of complaints will include heavy delays on milestones, misconducting, wrong behaviour and bad practices.

2. Triage of Incident:

If program staff cannot resolve the issue on the first call, the complaint will be elevated to the compliance team that will classify and further analyse the issue.

3. Investigate Incident:

The Compliance Team will review the information of the complaint and contact either the same business day or the next day to the party with the complaint to further discuss resolution.

4. Remedial Action:

Upon remedial action agreement between parties or lately as direct instruction from Compliance team, complaint will have max 10 business days to carry out the required actions.

Also Compliance Team will inform to the complainant, through the preferred communication channel, about the remedial action agreed and deadlines for its implementation.

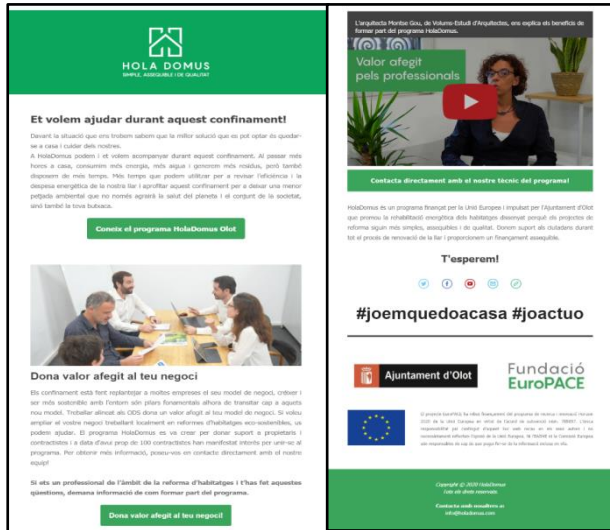
Complaint remedial action, if required, will be supported by document or further information required from the complainants.

5. Complaint resolution:

Compliance team will review the remedial action and ensures that all documentation related to the Complaint, including those related to the party response and its subsequent resolution and remediation efforts (if any), are properly register into the program IT platform for tracking and recordkeeping purposes.

Annex 13. – HolaDomus Promotional Materials

See below the newsletter, YouTube channel, bus ad, flyers, billboard, etc., which were some of the promotional tools used to create awareness amongst Olot homeowners and contractors about the program.



Et volem ajudar durant aquest confinament!

davant la situació que ens trobem sabem que la millor solució que es pot optar és quedar-se a casa i cuidar dels nostres.

A les nostres adreces i vet volem acompanyar durant aquest confinament. Al passar més hores a casa, consumim més energia, més aigua i gasom més roba, però també disponem de més temps. Més temps que podem utilitzar per a millorar l'eficiència i la despesa energètica de la nostra lar i aprofitar aquest confinament per a dissenyar una menor petjada ambiental que no només agraci la salut del planeta i el confort de la societat, sinó també la vostra butxaca.

Comença el programa HolaDomus Olot

T'esperem!

#joemquedoacasa #joactuo

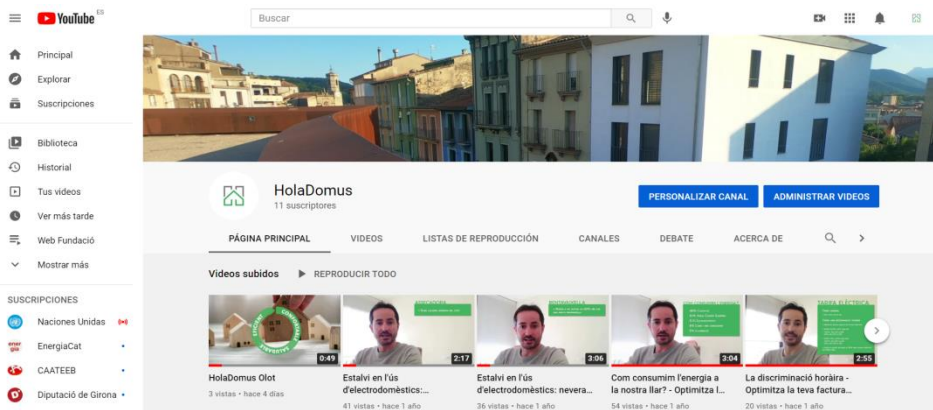
Ajuntament d'Olot Fundació EuroPACE

Dona valor afegit al teu negoci

Els confinaments estan fent replantejar a moltes empreses el seu model de negoci, creixent i ser més sostenible amb l'entorn són plans favorables a través de transferir cap a alguns nous models. Transferir alguns dels costos dona un valor afegit al teu model de negoci. Si volem ampliar el nostre negoci i treballar localment en reformes d'habitatges eco-sostenibles, un pla més viable. El programa HolaDomus es va crear per donar suport a propietaris i professionals i a data d'avui prop de 100 contractacions han manifestat interès per unir-se al programa. Per obtenir més informació, poseu-vos en contacte directament amb el nostre equip!

Si ets un professional de l'àmbit de la reforma d'habitatges i l'has fet aquestes qüestions, demana informació de com formar part del programa.

Dona valor afegit al teu negoci!

YouTube channel page for HolaDomus (11 subscribers). The page shows a search bar, navigation menu, and a list of videos:

- Holadomus Olot (3 vistas • hace 4 días)
- Estalvi en l'ús d'electrodomèstics:... (41 vistas • hace 1 año)
- Estalvi en l'ús d'electrodomèstics: nevera... (35 vistas • hace 1 año)
- Com consumim energia a la nostra llar? - Optimitza L... (54 vistas • hace 1 año)
- La discriminació horària - Optimitza la teva factura... (20 vistas • hace 1 año)



HOLA DOMUS SIMPLE, ASSEQUIBLE I DE QUALITAT

AUTOCONSUM FOTOVOLTAIC, PRODUÏX I CONSUMEIX LA TEVA PRÒPIA ENERGIA, T'AJUEM A FER-HO!

Què és l'autoconsum i quins beneficis té l'energia fotovoltaica?

Entenem per autoconsum d'energia elèctrica la producció d'electricitat per al consum propi.

Les instal·lacions d'autoconsum col·lectives s'ubiquen a la coberta del edifici, cobrint part del consum dels habitatges i dels serveis comuns, com ascensors o fontanament d'edificis.

Actualment, les instal·lacions d'autoconsum són lègals i qualitat, compensador d'energia efectiva amb altres usos residuats elèctrics.

- ▶ Reducció de les emissions d'eficiència energètica
- ▶ Independència energètica
- ▶ Reducció de la factura
- ▶ Democratització de l'energia
- ▶ Reducció de les pèrdues d'energia

A HolaDomus, se informen gratuïtament de la viabilitat d'una instal·lació d'autoconsum col·lectiu. A més, el programa acompanya a la comunitat en la selecció del professional per realitzar la instal·lació, administrativament per si es pot optar a bonificacions o subvencions i finançament.

Programa gratuït impulsat per: **Ajuntament d'Olot**

Telf. 972 27 91 36 www.holadomus.com

