

EXECUTIVE SUMMARY



**Driving the Green Transition
through building renovation**

Analysis of available financial
instruments: current status, Key
challenges, and proposals to accelerate
their deployment

Results of the Working Group Climate Action in the built environment
led by alinnea.

Hosted by



Supported by



European
Climate
Foundation



alinnea has been an active organization in Spain's climate-action ecosystem since mid-2024. It is part of IE University and is supported by the European Climate Foundation.

As a climate-action Think & Action Tank, alinnea specializes in comparative analysis and solution design for the development and orchestration of climate-action measures that involve stakeholders from the public and private sectors, as well as civil society. Operating under a multistakeholder dialogue–research–action framework, it seeks to overcome barriers to progress on climate action by delivering solutions that are socially just, economically prosperous, and positive for the environment and biodiversity.

Multistakeholder Working Group 'Climate Action in Urban Settings' – Methodology

With this participatory approach, the “**Climate Action in Urban Settings**” Working Group was created in 2024 to develop proposals for defining financial vehicles for building renovation and decarbonization.

Three extensive, in-person, closed-door working sessions were held under the **Chatham House Rule**. All sessions were supported by the technical expertise of **Iñaki Arto** and **María Victoria Román** from the Basque Centre for Climate Change (**BC3**). The dialogue was facilitated by **Cristina Monge**.

The report “Advancing the Green Transition through Building Renovation. Analysis of Available Financial Vehicles: Current State, Bottlenecks, and Proposals to Accelerate Deployment” reflects the deliberations of this working group, organizing them into **identified bottlenecks and a set of recommendations** intended as a **roadmap to accelerate building renovation in Spain**.

As a preliminary step, the report provides a detailed analysis of the current situation of Spain's real-estate sector, including a diagnosis of its main challenges and opportunities, as well as a comprehensive assessment of existing financial mechanisms to enable energy renovation.

Participation by the organizations involved does not necessarily imply endorsement—in the form of specific commitments—of the ideas presented in the final document.

Organizations participating in the dialogue

Ayuntamiento de Zaragoza	European Climate Foundation (ECF)	Instituto para la Diversificación y el Ahorro de la Energía (IDAE)
BBVA	Federación de Consumidores y Usuarios (CECU)	Kearney
BC3	GBCE	Ministerio de Transición Ecológica y Reto Demográfico (MITECO)
Caixabank	Ibercaja	Porticus
Climate KIC	Instituto de Crédito Oficial (ICO)	Urban Climate Economy S.L.U.
Ecodes		
Ensanche 21 Zabalgunea S.A		

THE REAL STATE SECTOR IN SPAIN

Energy renovation of the building stock is a fundamental priority for achieving the climate and sustainability objectives set by Spain and the European Union.

Spain's building stock consists largely of older structures: around 90% were built before the implementation of the 2006 Technical Building Code, which for the first time established minimum energy-efficiency requirements. As a result, low energy efficiency predominates—evidenced by the fact that 79% of issued energy performance certificates are rated below D.

At present, the annual renovation rate of the building stock is under 0.3%, far from the 3.4% needed to meet the EU's energy-renovation targets. This lag in renovation has negative impacts not only on environmental outcomes, but also on residents' quality of life and on the sector's overall economic efficiency.

Strategies and Measures to Reduce Environmental Impacts

The strategies focus primarily on improving energy efficiency:

- Adequate thermal insulation for walls, roofs, and floors to limit energy loss.
- Installation of high-performance windows with double or triple glazing and insulated frames.
- Use of renewable energy through photovoltaic panels, geothermal systems, and air-source heat pumps.
- Electrification of heating and cooling (HVAC) systems, ensuring electricity is sourced from renewables.
- Implementation of smart energy-management systems, including building/home automation and control sensors.
- Promotion of passive building design that leverages natural environmental conditions to reduce energy demand.
- Adoption of highly efficient appliances and equipment (A++ or higher).
- Awareness-raising and training to foster sustainable energy-use habits.

Financial Vehicles for Energy Renovation

Different financing mechanisms are identified and examined to facilitate the uptake of these energy-efficiency upgrades:

- Targeted grants and loans for energy-renovation projects.
- Energy Performance Contracts with Energy Service Companies (ESCOs), offering turnkey solutions and guaranteeing energy savings.
- Innovative instruments such as on-bill financing and tax-based schemes (on-tax financing).
- Implementation of models such as Commercial Property Assessed Clean Energy (C-PACE), which enables repayment through property-tax assessments.
- Green mortgages, offering preferential financial terms for energy-efficient buildings.

CURRENT KEY CHALLENGES IN IMPLEMENTATION

The working group identified technical, institutional, and financial barriers that hinder the feasibility and scalability of projects.

1. **Project costs:** Current business models do not reflect the social benefits of renovation. Collective decision-making is complex, and costs are high, especially for individual interventions. Although there are returns, many are not immediate or accessible to everyone. Recent regulations have improved access to finance, but some past policies have discouraged energy efficiency.
2. **Defaults and guarantees:** Financial risks need to be reduced, especially in small homeowners' associations. The current guarantee program of the Spanish Official Credit Institute (ICO) is complex and unattractive for financial institutions. Simplification is proposed, as well as exploring the role of local entities as guarantors with appropriate regulatory adjustments.
3. **Subsidies:** Existing aid tends to favor higher-income households. It is proposed to retarget support toward vulnerable groups and complement it with soft loans, green mortgages, or on-bill repayment. Simplifying administration is also recommended and channeling subsidies directly to financial institutions.
4. **Coordination:** A lack of leadership and coherence across administrations hampers processes. Consolidating information and coordinating key stakeholders under a clearly designated lead is proposed.
5. **Energy Savings Certificates (CAEs):** Despite their potential, CAEs are little known, and their impact is limited. It is proposed to enhance their value—especially in vulnerable areas—and to prioritize durable savings.
6. **Financing demand:** Current instruments do not sufficiently stimulate demand. It is recommended to assess their real impact and promote green mortgages with better terms.
7. **Sovereign wealth funds:** These funds require large investment volumes; aggregating demand is therefore key to attracting their interest.
8. **Information and training:** Limited experience and visibility of successful cases reduce uptake of efficiency measures.
9. **Vulnerable households:** Proposals include full-grant models and tailored payment solutions, with active involvement from municipalities, as in Santa Coloma de Gramenet.
10. **Mandates and incentives:** A combined approach is suggested, including measures such as taxes on non-renovated dwellings, while ensuring fairness and proportionality.
11. **Communication:** Awareness of the benefits of renovation is lacking. Campaigns are recommended featuring reliable data, real-world cases, and trusted messengers.
12. **Monitoring:** It is essential to track progress with transparency and accountability.

STRATEGIC RECOMMENDATIONS

To overcome these barriers and foster energy renovation, the working group proposes the following specific recommendations, detailed in the report:

1. **Institutionalize a collaborative, coordinated process** among different public administrations to streamline and facilitate energy renovation.
2. **Create a centralized coordinating agency (one-stop shop)** to act as a single point of contact, simplifying administrative procedures and ensuring operational efficiency.
3. **Establish a network of territorial offices** specialized in providing technical, administrative, and financial advice for renovation projects.
4. **Review and revise current grant-allocation criteria** to increase accessibility, particularly for vulnerable groups.
5. **Promote the development and uptake of tailored financial products** adapted to the Spanish context and designed to address identified needs.
6. **Encourage a more active role for the energy sector** as a strategic partner in promoting and implementing energy-renovation projects.
7. **Implement ongoing programmes of training, capacity-building, and awareness-raising** for all stakeholders—from technicians and property managers to owners and residents.
8. **Prioritise strategic planning** through the development of detailed classifications/typologies that identify specific needs and renovation opportunities at local, regional, and national levels

Conclusion

Energy renovation of the building stock is an urgent and strategic necessity. Achieving it requires strengthening both the institutional and financial frameworks, thereby enabling an effective transition to more sustainable, efficient, and resilient buildings. This report underscores the need for coordinated, well-financed actions, underpinned by a clear strategic vision, to ensure delivery on commitments.

You can access the full Report [here](http://www.alinnea.org/es/publications/) (www.alinnea.org/es/publications/)

If you would like to contact the alinnea team to learn more about our work or to take part in one of our working groups, please write to: info@alinnea.org