

Boosting energy retrofits in condominiums:

Key policy recommendations for EU, national and regional policy makers

Condominiums must be recognised in policy as a specific building type that presents opportunities and challenges for deep retrofit. Without this recognition, ambitions in the European Green Deal for building renovation will not be met.

About the ACE-Retrofitting Project

Through these recommendations, partners from the EU-funded ACE-Retrofitting project share their policy learnings on how to act as facilitators between co-owners and building experts. ACE-Retrofitting was a three and a half-year project, running from 2017 until mid-2020. A multi-disciplinary project team was formed comprising the European city network Energy Cities, six local authorities from five different countries, along with Maastricht University and the environmental charity Changeworks. Together they have tested a set of methods to overcome the legal, human and financial barriers that are currently hindering energy retrofitting of condominiums.

ACE-Retrofitting partners: test beds for new condominium approaches

6 pilot cities represented by:

- Paris Climate Agency (France)
- Energy House Antwerp (Belgium)
- City of Liège (Belgium)
- City of Maastricht (The Netherlands)
- Aberdeen City Council (United Kingdom)
- Frankfurt Energy Agency (Germany)

3 organisations:

- ▲ Energy Cities, the European network of local authorities in energy transition (leader)
- ▲ University of Maastricht (The Netherlands)
- ▲ Changeworks (United Kingdom)



www.nweurope.eu/ace-retrofitting

ACE-Retrofitting Policy Development

1 Review of LEAF (Low Energy Apartment Futures) report: Recommendations for local, national and EU policy on retrofitting multi-occupancy, mixed tenure buildings. Horizon 2020 funded (2016)
www.lowenergyapartments.eu/project-findings/policy-recommendations/



2 Insight from ACE-Retrofitting cities (Aberdeen, Antwerp, Frankfurt, Liège, Maastricht, Paris), ACE-Conference (Brussels, November 2019)



3 Long list of policy recommendations developed, reviewed and shortlisted to eight by ACE partners

Context

The European Green Deal¹ aspires to ‘Starting a renovation wave’ across the continent, doubling the current rates of renovation of public and private buildings. However, to accelerate deep retrofit of domestic dwellings, the role of condominiums or co-owned properties must be considered. Across the EU, 41.2% of the population reside in condominiums with figures in some EU countries rising as high as 65%². With their shared envelope and multiple occupants and owners, deep retrofit of condominiums presents particular challenges. These require recognition in policy at the EU and national level in order to develop the ‘enabling environment’ required to accelerate deep retrofit. Only then will the scale of change meet the challenge of the Climate Emergency and the benefits to the environment, citizens and business alike be realised.

ACE-Retrofitting³ was funded by Interreg (2016-2020) to address the challenge of deep retrofit in condominiums with a specific focus on accelerating activity in six pioneering cities. The project engaged with both occupants (demand) and building professionals (supply) and uniquely linked them together through a number of approaches including the established and successful CoachCopro⁴ online portal operated by the Paris Climate Agency (APC).

This policy brief is informed by direct experience of the current operating environment and focuses on areas specific to condominiums. These should be considered alongside positive retrofit enablers relevant to all building archetypes such as favourable VAT rates on materials.

¹ BUILD UP (2020) <https://www.buildup.eu/en/news/green-deal-works-everyone-making-renovation-wave-reality>

² Eurostat: https://ec.europa.eu/eurostat/web/products-datasets/-/ILC_LVH001

³ ACE-Retrofitting project: <https://www.nweurope.eu/projects/project-search/accelerating-condominium-energy-retrofitting-ace-retrofitting/>

⁴ Agence Parisienne du climat, CoachCopro: <https://paris.coachcopro.com/>

Recommendation overview

To accelerate deep retrofit in condominiums, ACE Retrofitting partners call on EU, national and regional policy makers to recognise this critical common and specific building type and shape policy in the following areas.

- + **Energy Performance Certificates and Standards**
- + **Condominium Data Availability**
- + **Comprehensive Building Audits and Retrofit Plans**
- + **Ownership Structures**
- + **Financial Support Mechanisms**
- + **Supply Chain Development**
- + **Support for Owners**
- + **Supply and Demand Linkage**

ACE-Retrofitting Policy Recommendations



Energy Performance Certificates and Standards

Energy Performance Certificates (EPCs) linked to minimum energy performance standards for whole buildings are required as a driver for whole building retrofit.

Deep retrofit requires a whole building approach. EPCs at the apartment level exclude common areas and communal low carbon heating options and stimulate a focus on measures within the apartment instead of the whole building. The opportunity to reinforce the reality of shared fabric and shared responsibility is also missed. To raise the requirement for improved energy performance with owners, minimum energy performance standards should be linked to the whole building. These could take the form of national targets specific to condominiums. EPCs should be available to all prospective buyers or tenants at the whole building and apartment level to allow for transparency on energy costs and required buildings works to meet standards. Minimum standards could be linked to point of renovation or sale/lease.



Condominium Data Availability

EPC registers and databases with condominium specific data should be available and publicly accessible to meet the needs of city or regional actors developing and implementing condominium retrofit strategies.

ACE partner cities have had challenges accessing data to strengthen the case for condominium retrofit or to develop strategies to allow for more effective targeting. We assume this will be true for most EU countries. The Energy Performance in Buildings Directive (EPBD) had a Key Implementation Decision to develop and maintain a national database of EPCs and the EU Building Stock Observatory⁵ was launched to provide comprehensive building related data at the EU and national levels for a broad range of stakeholders including policy makers.

In Scotland, the Home Analytics⁶ database is available to Scottish Government and local authorities and includes EPC data on apartments in condominiums as well as multiple additional datasets allowing for improved targeting of activity. Liège along with other cities have had to build their own condominium specific database as the lack of data seriously hindered targeting. Key information required includes year and type of construction, number of apartments, tenure, EPC rating and listed building status. Contact info for owners' associations could also be centralised by local authorities or municipalities although compliance with GDPR would need to be observed.

⁵ EU Building Stock Observatory: <https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/eu-bso>

⁶ Home Analytics, Energy Saving Trust: <https://energysavingtrust.org.uk/scotland/businesses-organisations/data-services/home-analytics>



Comprehensive Building Audits and Retrofit Plans

Comprehensive building audits of condominiums should be mandated along with a process of ongoing inspection to realise holistic retrofit and/or renovations.

ACE-Retrofitting has showcased the value of comprehensive whole building audits that assess the current building condition. These are the essential precursor for any multiyear retrofit/ renovation plan that avoids a lock-in by certain solutions that restricts future required works. These plans also create the roadmap for meeting EPBD or more stringent local energy performance standards. However, the value of audits is only fully realised when the programme of works factors in anticipated maintenance, health and safety compliance and improvements in comfort. This also creates the opportunity to identify suitable financial instruments.

The audit needs to be tailored for the property and involve a suitably qualified architect and thermal/ heating engineer.

Audits like these are compulsory in France. In Paris the online CoachCopro platform supports owners to engage with the process. This model has inspired its replication in Liège and Antwerp with local variations. Antwerp provides a 50% subsidy of audit costs in part through ACE-Retrofitting. Furthermore, audits and retrofit roadmaps are recognised as requirements of the Walloon long-term strategy for the retrofitting of the building stock. These steps are eligible for the financing facility for the co-owners associations (0% loans) of the Walloon Housing Fund. (See also the Finance Support Mechanisms recommendation).



Ownership Structures

Compulsory owners associations and management arrangements within condominiums should be required to facilitate effective communications and decision-making processes, allow groups to enter into contracts and to develop adequate building reserve funds.

Deep retrofit requires effective engagement with and between owners (owner occupiers and private and social landlords) and a positive decision-making process. The ability for a group to enter into contracts or take a loan might also be required. To accelerate deep retrofit, policy should require these arrangements to be in place, clarifying which parts of the building are to be considered common. In Scotland these arrangements are largely absent but recommendations⁷ to address this have been passed to Scottish Government. In France there is an established framework of Copropriété (owners), Managing Agents (Syndic) and Assemblée Générale (annual owners assembly). Similar arrangements exist in Belgium, Germany and the Netherlands.

Arrangements across the EU vary as do required majorities for decisions on maintenance and improvements. Energy efficiency retrofit to meet required standards should be given the same status as building maintenance in decision-making.

Local agencies delivering deep retrofit programmes can support governance structures providing targeted funds to hold additional retrofit related meetings to accelerate the decision-making process.

Owners associations should also have an obligation to develop suitable building reserve fund alongside a long-term plan for retrofitting and maintenance. A central fund could also be developed at a regional or national level as an option to hold funds.

⁷ Working Group on Maintenance of Tenement Scheme Property (RICS, 2019): <https://www.befs.org.uk/wp-content/uploads/2019/06/Working-Group-on-Maintenance-of-Tenement-Scheme-Property-Final-Recommendations-Report.pdf>



Financial Support Mechanisms

Expand the range of condominium specific financial support mechanisms to facilitate the retrofit and renovation journey.

Financial support and incentives (public and commercial) need to be available and tailored for the needs of condominiums. Challenges such as the lack of collateral of a co-owners association, the difficulty in obtaining loans for buildings rather than individuals and the long time frame needed by condominiums for decision-making require innovative financing solutions to be tested. Encouraging examples do exist. Early in the retrofit journey, ACE-Retrofitting has been able to finance early stage engagement and audit development, while ELENA⁸, a joint initiative by the EIB and the European Commission, can fund audits to assess the energy performance of residential buildings and help households select the most relevant and cost-effective solutions to significantly improve the energy performance of their buildings.

ACE-Retrofitting⁹ researched the current range of finance options available to condominiums and identified a number of higher scoring models (Assen Service Cost model, Effirenov by ENGIE, Energies Posit'if and ABRACADABRA). However even these are not universally known, applicable or suitable. Further work is required by a range of EU, national and regional actors to develop financial models that meet the specific needs of condominiums and their owners. There are examples of where this is taking place. In Holland the Nationaal Energiebespaarfonds¹⁰ is offering loans to condominiums over 15/20/30 years periods depending on the ambition and depth of the retrofit proposed. Of note is the loan being for the building and not tied by name to the owner. Payback is through service costs though at present it is only available to buildings of eight apartments or more.

⁸ ELENA: <https://www.eib.org/en/products/advising/elena/index.htm>

⁹ ACE-Retrofitting Financial Solutions for Condominium Retrofitting: https://www.nweurope.eu/media/9615/dt411_financial_solutions.pdf

¹⁰ VVe Energiebespaarlening: <https://www.energiebespaarlening.nl/vve>



Supply Chain Development

Direct funding to support development of the supply chain of building professionals is required to deliver high quality retrofit projects.

ACE partner cities worked to engage and develop capacity within the supply chain of building professionals including architects, engineers, heating specialists and installers. With the current low take up of energy efficiency retrofit in condominiums, the supply chain for building professionals is not mature and in some areas is largely absent. Investment is required to make the supply chain aware of the opportunities and the anticipated acceleration in retrofit (and market growth) needed to meet city wide, national or EU targets. ACE activities include training sessions explaining the energy retrofit market and advice on how to enter the market. Interactive conferences gave professionals the opportunity to present technical retrofitting solutions identified by the Paris Climate Agency (e.g. ventilation, external insulation) to other building professionals. In addition, a number of meetings, webinars and working groups where professionals talk about their experiences and barriers to market entry, and challenges and opportunities around innovative retrofit solutions, were held. Examples of this activity are to be found in the ACE-Retrofitting Guide¹¹ available in four language versions.

¹¹ ACE-Retrofitting Guide: <https://www.nweurope.eu/projects/project-search/accelerating-condominium-energy-retrofitting-ace-retrofitting/#tab-5>



Support for Owners

Expand energy advice services to provide a complete support package and service to condominium owners.

The long decision-making process before a retrofit takes place is where most energy retrofit activities end. Navigation of this complex, multi factored roadmap, given the current level of capacity within owners and trustees, presents near insurmountable challenges for co-owners without specific and comprehensive independent coaching support. Energy advisors or renovation coaches working for ACE project cities offer a comprehensive coaching service from the start through to realisation of works. The ACE-Retrofitting Step-by-Step tool¹² is a comprehensive three phase process that can act as a template for any local authority looking to facilitate energy retrofitting projects in condominiums. It addresses the problematic process in condominium decision-making and in cities where it has been fully implemented e.g. Maastricht, interest in rolling it out to the provincial level and beyond has been noted.

Phase 1 (First Steps) inspires and mobilises co-owners and assesses existing and required resources.

Phase 2 (Taking Off): Designs the roadmap and draws in legal, technical and financial professionals and addresses issues of governance and communications.

Phase 3 (The Real Thing): Facilitates the project management plan, timeline and transparent communications.

¹² ACE-Retrofitting Step by Step tool: <https://www.nweurope.eu/projects/project-search/accelerating-condominium-energy-retrofitting-ace-retrofitting/#tab-4>



Supply and Demand Linkage

Improve links between owners (Demand) and building professionals (Supply).

ACE-Retrofitting partner cities took action to bring the supply and demand sides together. This often overlooked issue is critical to facilitate the retrofit roadmap, developing trust and raising the standards of work undertaken. Online platforms and portals to bring owners and professionals together have been developed to meet local needs in Aberdeen, Antwerp, Frankfurt, Liège, Maastricht and Paris. Common themes include the development of directories of building professionals and matchmaking events. Frankfurt set up the «WEG-Bereiter-Liste»¹³, a quality-controlled directory of building professionals, energy consultants and building managers. The Paris CoachCopro platform gives visibility to owners of engaged professionals and in turn links them to retrofit opportunities. Antwerp¹⁴ has a digital marketplace to facilitate matchmaking between co-owners and professionals with renovation coaches from the City and the AG Energiebesparingsfonds driving activity to the site.

While business models that do not require public subsidy might be able to replicate this activity (as has been the case in other markets) the current retrofit market is not mature enough to do so. There is also considerable value in having independent and impartial actors who bring parties together in an open and transparent way with a goal of achieving high quality retrofit.

¹³ Frankfurt Sanierungswegweiser: <https://www.sanierungswegweiser.info/weg-bereiter-liste-0>

¹⁴ Antwerp Saamen Klimaatactief: <https://samenklimaatactief.be/>

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