



## Survey on upskilling initiatives in Housing Europe's members

Given that buildings represent 36% of greenhouse gas emissions in [Europe](#) it is unsurprising that they are at the centre of European countries' commitments to the Paris Goals - to limit global warming to well below 2 degrees compared to pre-industrial levels. However, by European Commission accounts retrofitting that significantly lowers the energy consumption of a building is residual ([0.2%](#) of the total building stock every year in Europe are subject to a renovation reducing energy consumption by at least 60%).

Social Housing Associations have been at the forefront of decarbonisation. Despite leading the way, to carry out the deep refurbishments that are required, business-as-usual will not suffice. For example, the EU Building Performance Directive mandates that EU countries demonstrate how they plan to decarbonise their building stock, set minimum energy performance requirements, and ensure all new buildings follow the NZEB principle.

Through COVID-recovery plans, as well as other [programmes](#), housing associations throughout Europe are being given the opportunity to finance investments in deep energy renovations. These new regulations and funding channels present an opportunity but also a clear challenge to a sector still grasping with capacity and skills gaps. Aware of the problems, Housing Federations have stepped up to support their members to build capacity and/or upskill to carry out deep decarbonisation projects.

To find out exactly how this is taking place throughout the continent, Housing Europe interviewed a number of its members. We found several initiatives being developed with and for their own associations, including awareness raising initiatives, training programmes, renovation solutions catalogue, communities of practice, mass renovation strategies, joint goal-setting, joint procurement initiatives, decision-making support tools and financial incentives. Some members have even gone a step further and have outlined the decarbonisation roadmap for their associations.

### **Awareness-Raising Initiatives**

[GEBALIS](#) created a practical guide for the tenant, where practical aspects of house maintenance and energy preservation are communicated in an uncomplicated manner.



In 2010, [HSB - The Swedish Cooperative Housing Association](#) built a 'Climate Train' - a 100-metre-long train filled with information and tips on how to save money, energy and the climate. During that year, visitors were able to learn about housing and the climate, providing concrete answers to common questions such as investment profitability. HSB wanted to influence the perspectives of both public, housing owners, and policymakers as well as raise awareness in the media on energy use in our homes.

### Training Programmes

[The Spanish Social Housing Association \(AVS\)](#) provides training courses in housing renovation management. The course goes through all the aspects of running a successful housing company, including regulation, funding, planning, delivery and evaluation of renovation strategies, whilst incorporating considerations about involving the tenant and the local community.

The [Scottish Federation of Housing Associations](#) has engaged their members in [Carbon Literacy training programmes](#). The training is provided by an accredited Carbon Literacy organisation and helps community-led organisations make informed choices about lower carbon options available to them.

In Estonia, the [Estonian Union of Co-operative Housing Associations](#) (EKÜL) has been developing a nationwide training programme for local housing associations. The programme includes a systematic examination of energy efficiency and renewable energy practices in housing renovations with a view to improve processes and renovation quality.

### Renovation Solutions Catalogue

[The Association of Housing Corporations \(AEDES\)](#) has created an inventory of market-ready innovations ([uptempo.nu](#)) where Dutch housing associations and homeowners can find the right innovation to meet their (sustainable) renovation needs. The database is sourced with projects that have received an [Netherlands Enterprise Agency](#) grant, complemented with the [Topsector Energie database](#) and voluntary submissions of solutions from innovative registered companies. The list is composed solely of products that are market-ready and recent (after 2017). To help users sort the more relevant solutions, Uptempo! Database is split into 16 categories, including construction year, building type and number of applications.



### Information Sharing and Communities of Practice.

[The Scottish Federation of Housing Associations \(SFHA\)](#) is co-chairing the Zero Emissions Social Housing Taskforce (ZEST), which brings together key strategic organisations and practitioners with experience of delivering decarbonisation projects in the social sector to drive progress towards the aim of zero emissions housing.

EKYL has established a cooperation network to mobilise and share expertise and knowledge for delivering energy renovations. Housing associations are the main beneficiaries of the network, supporting them in facing everyday challenges with housing management and energy-efficiency interventions.

### Joint Procurement

[Public Housing Sweden](#) has successfully been able to centrally procure renovation works on behalf of their members, so that they can benefit from economies of scale and increased negotiating power. The scheme, called [Kombohus](#), takes place through a bidding contest. The successful tenderer is required to enter framework agreements with the Federation. Interested housing owners can then establish advantageous contracts under these agreements for their renovations. Public Housing Sweden has implemented three such procurements for ready-to-occupy apartment blocks: Kombohus Bas, Plus and Mini respectively.

### “Serialised Renovation”

The [Federal Association of German Housing and Real Estate Companies](#) (GdW) provides the opportunity to housing companies to select their renovations projects from a catalogue of prefabricated higher efficiency building modules. These buildings components can be added on top of pre-existing buildings, simplifying and greatly accelerating renovation times and reducing the cost.

In France, [Social Union for Housing](#) supports members in managing innovation in procurement. Local housing companies in France use a hybrid system that combines centralised procurement and prefabricated components to renovate their building stock (the [EnergieSprong approach](#)). In 2020, a [central purchasing entity](#) was created and was involved in delivering the renovation of [2000 zero-energy houses](#) in Pays de la Loire and Brittany.



### Joint Goal Setting

In Sweden, under the auspices of [Public Housing Sweden](#), housing companies were invited to voluntarily commit to a carbon reduction target back in 2006 (the [Skane Initiative](#)). Between 2007 and 2016 more than 80 companies [signed a letter of intent](#) to reduce their energy usage by 20%. To track their progress, they reported their energy consumption every year. A recent assessment of the initiative has shown that the involved companies were able to reduce carbon emissions by 17%.

In 2018, Public Housing Sweden launched a more ambitious initiative ([Public Benefit Initiative](#)) dedicated to lowering an additional 30% energy use by 2030 (calculated from 2007). Housing companies can voluntarily join the initiative and choose three focus areas:

- [Power peaks and renewable energy](#) – actions to reduce the need for non-renewable energy during peak times.
- [Requirements for suppliers](#) – actions to introduce climate legal requirements in public procurement.
- [Climate-smart housing](#) – actions to reduce tenants' carbon footprint.

### Decision-making support tools

In Holland, [AEDES](#) developed a [Total Cost of Ownership tool](#) (TCO tool) to help housing associations make informed decisions regarding building stock interventions. The TCO tool aims at breaking short-term thinking and to make decisions, such as regarding deep renovations, considering all operating costs that are paid throughout the lifetime of a building. The tool is composed of a fill-in template and an operation manual. If the housing associations does not dispose of maintenance data, the model offers standard maintenance costs. AEDES is providing a number of knowledge sessions across the country to explain how to use and apply the tool.

### Financial Incentives

[Swiss Housing Cooperatives](#) follow a different model, based on financial incentives. Housing owners that are planning to renovate their building stock can access a combination of federal, canton and Federation's funds, [but these are conditional](#) on



energy consumption or CO2 emissions reductions. The process is anchored in reaching certain energy certification standards - the most common being the [Minergie label](#). Created by the government and technical chambers (architects, engineers, etc.), this independent label includes a range of criteria including energy efficiency, renewable sources of energy, but also rent levels, building costs, and the consideration of community space and amenities. The [Minergie ECO label](#) provides the highest standard for building and renovation, and allows to take into account aspects related to the health and ecology of the construction, e.g., local sourcing of materials. The results of this model have been generally notable, as [Mehr Als Wohnen buildings and quarters](#) shows.

### Roadmapping

AEDES also challenged its members to jointly set climate goals, whilst providing the required suggested [carbon-reduction roadmaps](#). AEDES prepared 4 different roadmap choices that local associations can opt-in to achieve zero-energy homes:

- Maximum insulation within the existing shell.
- Extra insulation on top of the possibilities of the existing shell.
- Maximum insulation plus solar panels and possibly low temperature heating.
- Adding extra measures to the second scenario for generating the remaining energy requirement.

### Social housing providers and Housing Europe exploring the next frontiers

Social housing providers across Europe are working on the new frontiers in our sector, envisioning the future-proofed neighbourhoods which can cater for elderly, youth, integration of services, different lifestyles e.g., working from home, sharing economy, circular economy and of course with the decentralised zero energy neighbourhoods (ZEN) with an adapted energy system fitted to these changes.

A fitting example is the [Living Lab](#) created by [HSB - The Swedish Cooperative Housing Association](#). The HSB Living Lab is both a residence and a laboratory that functions as a test bed for finding solutions for the sustainable living of the future. The building is made up of 44 modules, where researchers and students actually live permanently. This allows new technologies to be experimented and monitored with sensors, but importantly, to receive



immediate feedback from the tenants. New techniques and processes are also studied to draw knowledge on businesses models for mobiles homes.

As Federation of federations, Housing Europe has played a role boosting innovation through participation in European Union (and partners) supported projects, together with members (and members of members) thereby promoting ground-breaking partnerships in the social housing sector. Some of these research and innovations projects for sustainability include:

- [Open innovation test beds for façades.](#)
- [Buildings as material banks for greater circularity,](#)
- [Improving interface between energy management systems and residents.](#)
- [Contributing to positive energy districts.](#)
- [Factory-built renovation components,](#)
- [Digital tools for renovation](#) (engagement of residents, predictive maintenance, BIM for planning).
- [One-stop-shops for renovation.](#)

[UK institutions will continue to be able](#) to access EU research and innovation programmes on equivalent terms as organisations in EU countries, that is including the 95.5B€ Horizon Europe research and innovation programme (100% cofunding for non-governmental organisations), where the process of piloting some of the initiatives described above can be funded.

### **Housing Europe's other initiatives**

The [Housing Evolutions Hub](#) brings together best practices of social, affordable, cooperative and public housing. The Hub offers the possibility for practitioners in the sector to exchange on innovation in different fields and as part of thematic communities. Members can also add experts to be part of energy contact lists and refer to peers across Europe. By adding a link to the website national federations can add an international dimension to their support to members.

[Our Homes Our Deal](#) is another Housing Europe initiative and website to benchmark the work done within the public, cooperative and social housing sector on building and renovating homes in energy efficient but also a just and social way.