

## These municipalities did it, when will you?



### “Energy Expert” training, a real multi-stakeholder approach in Tampere

**Tampere,  
Finland**

231 900 inhabitants  
50% live in buildings managed  
by housing companies

**Timeframe:**  
started in 2015

### + Quick tour: what's in it for you?



The City of Tampere has set the target of becoming carbon neutral by 2030. In order to achieve this, residential buildings need to reduce their emissions by 10%. Housing associations are mainly in charge to undertake measures to achieve this goal and they need support to do so. This is why the City of Tampere has been actively supporting condominiums (limited liability housing companies) with “Energy Expert” training courses. Between 2015 and 2017, this activity was supported by the Low Carbon Housing Tampere Plus (TARMO+) project. The aim of this project has been to make housing companies in this region think about how to be energy efficient in line with the 2025 city strategy. This project was based on a true multi-stakeholder

approach, focused on strengthening cooperation among all stakeholders in the territory. To date 250 housing cooperatives and 50 energy services companies have got involved in the project and nearly 400 free-willing residents from different housing companies have been trained.

*“I live my life by the principle that I save money elsewhere, so that I can spend it where it truly brings me joy. I think housing company associations should follow the same principle and not waste money where it does not provide any joy or welfare”*

**Arto Puikkonen,  
a trainee Energy Expert**

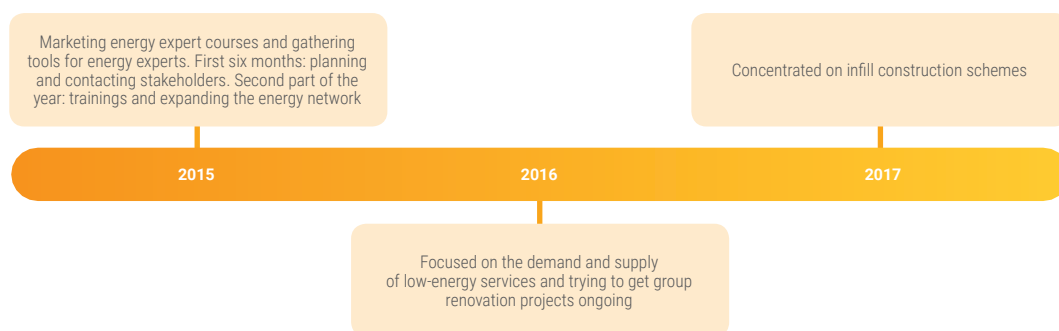
In 2019, the city decided to extend their energy expert trainings and partnered with the TAMK University of Applied Sciences to launch their CARE-project, a programme that is focusing on educating building managers on energy issues and new technologies.

In this case study, you will learn about the Energy Expert trainings developed in the Tampere Region that can be used as an inspirational example by other cities that want to launch or further low-energy and carbon solutions to make housing more affordable for all residents.

## ⊕ Accelerating Condominium Energy Retrofitting: how Tampere ACed it

To achieve a decrease in energy consumption and increase the quality of life for all residents, TARMO+ project supported neutral energy expert activities focused on training willing residents.

### ⊕ Planning scheme



An Energy Expert is a regular resident, most often a part of the board of the housing company, who participates in the trainings and gains the basic understanding of a diversity of energy efficiency related issues: heating systems and ventilation, the use of solar energy and an exhaust air heat pump (EAHP), the energy consumption of the condominium, the economic use of water, repair work and retrofitting, reviews and reports, building regulations, automation systems and lighting, safety, waste management, planning and the maintenance record book.

Finnish housing companies have an annual general meeting once or twice a year where all the residents (flat owners) gather. In the meeting, the board is voted by the residents and is responsible for running most of the things that involve the housing company.

The trainings last 4 evenings (12-15 hours in total) and trainees have the opportunity to meet current Energy Experts and companies, which offer different kinds of solutions for energy renovation, and exchange and learn from their experiences. Once trained, the Energy Experts are able to give tips and help other residents to be energy efficient. Also, after the trainings, they are ready to take an active role in identifying energy related problems or dysfunctions in their residential buildings or surrounding urban facilities.



Trainings can be beneficial for both the individual and his/her housing cooperative as it is perceived as a nice hobby or activity and thanks to the work done by the Energy Experts the housing company saves money (and energy). Several building managers have taken part in the trainings as well. National and local associations who are representing housing companies and building managers found these courses extremely useful for their member housing companies.

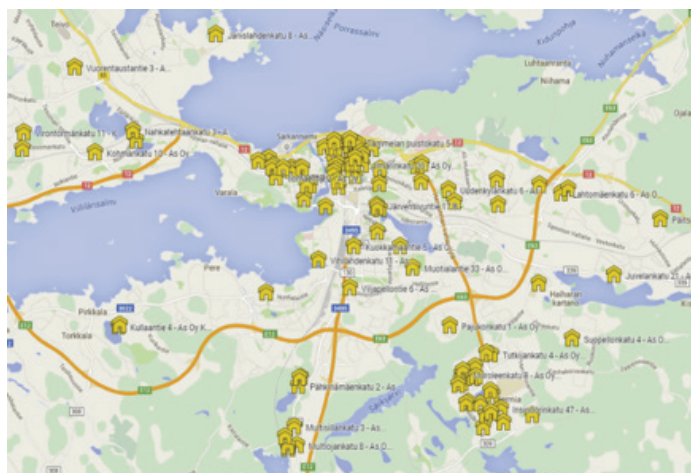


This project paid attention to **market the courses** and **make them attractive and accessible** for residents. They also offered light food and coffee/tea at every evening training.

Numerous **communication activities** such as public events, workshops and energy saving competition were organised. All in all, TARMO+ arranged or participated in 29 different events and the planned Energy Expert trainings were advertised whenever possible. The local association that represents housing companies and the association that represents building managers locally were both very important advertising channels. Also the Real Estate Federation of Tampere Region was (and is still) in charge of giving legal, renovation and management support for the housing companies, making sure that housing companies were heard when new legislations were being passed by the Government and organising peer support by arranging events for the housing company residents.

New economic measures and technical solutions were created, like an **interactive web platform** in order to support the pooling of energy renovation projects between groups of cooperatives and local companies.

What's more, housing companies were also able to add their location to the repair map to improve cooperation.



Trainings are still ongoing (two courses a year) and a web based course is under construction at the moment to make it even easier to participate in the action if a person doesn't have time to participate in the course itself.

The project also focused on boosting supply and demand between housing companies and local business offering low-energy and renovation services, and infill construction and group renovation projects of housing companies.

TARMO+ brought together residents, housing companies, city officials, local universities, local energy company, companies that offer different kinds of renovations for the housing companies as well as tertiary associations. Within this project and among all the actors involved, two integration tendencies can be observed: on the one hand, a horizontal integration in the information offered to housing companies about renewable energy and other energy services, ways of monitoring and reducing the energy consumption, running campaigns and competitions as well as participating in various events in order to reach and inspire the relevant stakeholders. On the other hand, there is a vertical integration in how the project works with businesses, housing companies, educational institutions and municipalities both to make it easier to pursue infill construction and development projects, and to facilitate the formulation of a robust operating model, with these achieved with the help of workshops, seminars and collaboration with educational institutions.

The city of Tampere decided to extend their engagement in energy training and launched the CARE-project ("CARE- Resource efficient caretaking of residential buildings") in 2019. They partnered with the local University of Applied Science to provide education programmes to building managers. The programme contains courses about new energy technologies and digitalisation for building managers to make sure that they are able to make use of the possibilities that new technologies are providing. There are also classes on professional communication skills. The Tampere Energy Agency also aims at helping building managers to establish a network with local SME construction companies, as well as helping these companies to establish new leads. The CARE project's goal is to educate 100 building managers on modern energy saving technologies so that they are able to undertake measures to improve their buildings' energy efficiency or on-site renewable energy production. The knowledge and skill acquired through the programme will help housing associations to meet the low-carbon targets set by the Sustainable Tampere 2030 programme, or similar programmes in other municipalities.

## **How much does it cost?**

The funding came from the City of Tampere (through the European Regional Development Fund) and their local energy utility also supported these actions. The cost for arranging one training course was around 2 500 euros. Some of the courses have been financed by collecting €60 fees from the people who were attending the courses. The marketing of the courses has been done through different local networks, like associations where housing companies belong, with minimum costs.



## **And how is the project organised?**

Energy Expert trainings were organized by Rane Energy Counselling service that is funded by the City of Tampere and the service produced by EcoFellows Ltd. (a company that the city owns, also responsible for the TARMO+ project). Local businesses offering low energy services, like renovations and technical systems, were also fully involved in the implementation of the project.

## **Key figures**

TARMO+ project was recognised as a European Good Practice for the work done in the field of low carbon housing and received the “URBACT Good Practice” label, and there were also 15 good practice cases documented on [tarmoproject.fit](http://tarmoproject.fit). 100% of stakeholders declared TARMO+ actions beneficial.

According to surveys, all of the housing companies have benefited from these courses. The average saving in electricity has been 10% and in some cases even 60%. The water consumption has decreased on average 20% and in some housing companies even 40%, and district heating around 17%. Living comfort standards and social aspects have improved in condominiums managed by housing companies who have Energy Experts as they actively interact with residents thanks to the new communication tools that have been represented in the courses. At the moment about 200 residents are really active in their housing companies and that affects about 20 000 residents in the city (almost 10%).

These trainings also built stronger links between the community where some of the people are elderly and may feel lonely in their lives. They had a positive social impact, as they have been a way to meet new people.

## **Here is some advice if you'd like to do it in your city**

It is crucial to consider the multiple different aspects required to develop such trainings: communication and marketing, funding, linking the residents with energy companies or current Energy Experts, sharing experience... Achieving “natural” conversations between all stakeholders is the key to make more visible these trainings and ensure they become known and recognized.

## Any question?



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## Information



<http://www.neuvoo.fi/?lang=en>  
<http://eu-gugle.eu/pilot-cities/tampere/>  
<https://ekokumppanit.fi/en/>

### **You too are facing the challenge of the energy retrofitting of privately-owned condominiums in your city?**

The ACE-Retrofitting project aims to develop a governance model facilitated by cities linking owners and building professionals to accelerate condominium energy retrofitting. The French CoachCopro tool will be upgraded and adapted to other countries.

The consortium is composed of Agence Parisienne du Climat (France), Maastricht University (the Netherlands), Energy House Antwerp (Belgium), the City of Liège (Belgium), Aberdeen City Council (UK), Frankfurt Energy Agency (Germany), the City of Maastricht (the Netherlands), Changeworks (UK) and Energy Cities (coordinator). Study visits are organised in the partner cities of the consortium.

**[www.nweurope.eu/ace-retrofitting](http://www.nweurope.eu/ace-retrofitting)**

**Interreg**   
**North-West Europe**  
**ACE-Retrofitting**  
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This case study has been drafted by



**ENERGYCITIES**