# my SMART Life

A European urban transition project towards more sustainable cities through innovative solutions, in the fields of mobility, energy and digitality.

## Smart City

#### **Global project**

**Coordination:** CARTIF **European grant:** 18M € 30 partners, 6 countries

Period: Dec. 2016 - Nov. 2021 Demonstrators: Hamburg, Helsinki, Nantes

@mysmartlife\_EU https://mysmartlife.eu/

#### Helsinki demonstrator site

Coordination: The City of Helsinki European grant: 5,6 M€ 7 partners

Coordinator: maria.viitanen@hel.fi

helsinginilmastoteot.fi/my-smart-life

#### Energy Policy improvements

Action leader: The City of Helsinki

Contact: maria.viitanen@hel.fi

https://helsinginilmastoteot.fi/en/



## Helsinki

## **Energy Renaissance Strategy**

This action was implemented by The City of Helsinki. A full report (D 4.2), written in English in November 2017, is available on <u>https://mysmartlife.eu/publications-media/public-deliverables/</u>

## OBJECTIVES

- To improve the energy efficiency of condominiums and reduce greenhouse gas emissions
- > To develop a strategy for the City of Helsinki to promote energy efficiency renovations in the private residential building stock

### IMPLEMENTATION



Strategy preparation workshop in Viikki Environment House Building 2018

#### **CONTEXT/CHALLENGE**

According to the estimates, the energy consumption of Helsinki's current building stock must decrease by about 30% so that the City of Helsinki can be carbon neutral in the target year of 2035. At the same time, a considerable amount of electricity and heat must be produced sustainably with real estate or neighbourhood level solutions. This requires open interaction and cooperation with local stakeholders.

This action focuses on improving the energy efficiency of privately owned condominiums that contribute about 15% of the emissions in the Helsinki area. The assumption is that the city can influence the emissions of the private residential building stock through political guidance and by providing concrete assistance in energy renovations to apartment house companies.

#### PROGRESS

The Energy Renaissance strategy was prepared for the City of Helsinki during the project. The Energy Renaissance strategy focuses on the provision of proactive advice for apartment house companies taking into account the different stages in a typical renovation process, the development of a design library for energy renovations, the promotion of local cooperation forums for apartment house companies and the consideration of energy efficiency targets in areal development planning and the municipal building ordinances. The strategy takes into account both the building level and urban planning, including urban densification and sustainable mobility planning.

The experience gained from the other project actions (see info sheet on Retrofitting of the residential construction) fed into the preparation of the strategy. These actions included the mapping of the needs of apartment house companies and providing energy renovation advice. This produced insights regarding the relevance of energy studies, such as thermal imaging and multi-objective building optimisations to the companies. Finally, the urban data services (see info sheet on Urban data services) will support the implementation of the Energy Renaissance strategy.

#### WHAT'S NEXT

The implementation of the Energy Renaissance strategy has started in 2021. A team of energy advisors has started their work in Spring 2021 and they are providing energy efficiency advisory services to the apartment house companies in Helsinki in accordance with the Energy Renaissance strategy.

## LESSONS LEARNT

Privately owned condominiums need information about the implementation of energy renovations. Multi-objective building optimisation is a good and comprehensive energy survey but it is quite expensive especially for small apartment house companies. A model library of energy renovations could benefit the companies, and make it possible to compare your condominium with others from an

energy perspective.

The focus is on the support provided by the city and good interaction between the actors. City services must be easy to use and a well-established contact point at the city for the apartment house companies is desirable.

#### BENEFITS

#### Environmental

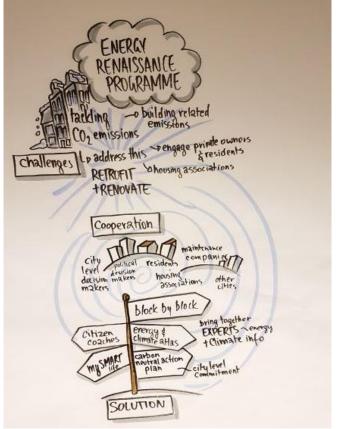
- Energy consumption of the private residential building stock is reduced which diminishes the need for energy production
- > Greenhouse gas emissions are reduced

#### Technical / economic

- > The number of energy renovations is growing
- Energy renovations pay for themselves when energy bills decrease
- > The value of renovated properties is rising
- Renovations and other energy improvements will increase demand in the sector and create new business

#### **Users / citizens**

- > Impartial support for apartment house companies
- > Free expert service





This project has received funding from the European Union's Horizon 2020 research and innovation programme under agreement n°731297.











Metropolia