

AREA 21 + action

Report: Piloting advice to homeowners with electrically heated houses in Härmälä

This report describes the piloting of a model of advice directed to homeowners with electrically heated houses in Tampere's Härmälä district. The goal was to test and develop a new operating model that could encourage owners of small houses with electric heating to implement energy efficiency measures in their properties. The operating model has previously been tested on oil-heated properties. The aim of the electric heating advice was to test the following things:

- how communicating by mail to homeowners works
- the benefits of offering counselling in the neighbourhood of homeowners
- whether it would be possible to organize co-operation between house owners so that they could make the procurement process together
- how electric heating advice is received compared to oil heating advice

Execution of work

Address information for electric-heated small houses in the Härmälä district was collected from the Tampere city register. 284 addresses of small properties with electric heating were found. No register exists with information on how many people have implemented energy efficiency measures in their buildings.

A letter was sent to all the addresses collected, explaining about the counseling planned to be piloted in the project. The letter raised issues about why the electric heating system should be made more efficient. Those interested in counseling were invited to visit a counseling point on 1 September in a park in Härmälä. This letter is attached to the report.

1.9. 12 local residents came to visit the organized counselling point. Based on this, approximately 4% of the residents who received the letter arrived. Detailed contact information was collected from those who came to visit the site, the energy efficiency measures implemented in their properties were discussed, and the time of the next counseling session was announced. All those who left their contact information gave their permission to provide additional information regarding follow-up advice. Those who left their contact information were contacted by e-mail and by phone.

15.9. the next counseling session was held in Härmälä. The owners of three different small houses attended. Two owners arrived based on the information they received at the counselling point, and one couple arrived after hearing about the event from a neighbor. The event included a presentation of the workings of the electric heating system and various efficiency measures that should be taken into account when carrying out energy renovations. At the event, the partner from Härmälä area was very interested in

finding out together with Ecofellows Oy how joint procurement could help these homeowners. Participants were also asked to answer a feedback survey at the event.

Conclusions on counselling

Approaching the homeowners with a letter was a workable solution. The participation of homeowners in counseling sessions was at a satisfactory level. Based on the feedback survey, the letter is a good way to approach the residents, and in addition, holding the event the participants' neighborhood was considered to be important. Everyone who answered the survey is interested in making energy efficiency measures for their property, which can be positively influenced by advice. Bidding and procurement of equipment jointly can more effectively involve people who are still thinking about which energy efficiency measures to take.

The completion of the counseling website Sähkölämmitysneuvonta.fi was pushed to August, so the counseling events had to be organized on a very tight schedule. It is recommended to organize counseling sessions at a slightly longer interval from each other, for example, the second session could be held 1-2 months after the first session. In this way, it would be easier to find business partners and customers would have time to think about which energy efficiency measures they would be willing to implement. In the first event, suitable themes for the following events are mapped, and in the following events, the desired themes are reviewed together with the energy advisors. As a result of Covid-19, the first event was organized outside. The second event, when the crowd was less than 10 people, could be organized inside.

The feedback survey revealed that the second occasion could have focused more effectively on different energy sources and technologies. For example, the topic could be heat pumps, solar panels or direct electric heating. At the counseling session, people were clearly interested in different energy efficiency measures for their specific houses. As a result of the pilot joint equipment purchases got wind in their sails, and the residents of the area will be asked which equipment they are interested in purchasing together. A total of 13 different property owners participated in the counseling sessions.

The challenge in providing advice to house owners concerning electric heating is that the buildings have very different technical solutions. The number of effective energy efficiency measures varies significantly between different properties, depending on the age of the property and its technical solutions. In the future, there will be more demand for electric heating advice as the heating systems of small houses become electrified, so there will be more measures to consider. For example, demand side management of electricity as a term is very unfamiliar to most consultees.

Action model:

An approach outlined based on the pilot, in which oil heaters should be advised on a district basis:

1. Map an area with about 100-200 electric-heated detached houses and get their addresses
2. Send a letter to the houses outlining free and impartial advice to be offered, as well as the counseling events taking place nearby (sample letter attached)
3. Have the first event be open to the public and find the issues that the homeowners find interesting. Explain the essential issues in this energy efficiency theme (different electric heating systems, heat pumps, solar panels, home automation, local contractors)
4. Organize the next event and invite partners, for example contractors who can make offers on necessary equipment
5. After the second event, contact the participants. Ask if they still have unanswered questions for the counseling.

The letter

Hi there!

You are receiving this letter because your house has an electric heating system according to the building register of the city of Tampere.

In the Härmälä area, we are experimenting with new ways to advise and encourage owners of small houses to improve the efficiency of their electric heating systems and thus reduce their electricity consumption. At the same time, we support Tampere's goal of being carbon neutral by 2030. The city organization itself intends to become more efficient in the next few years too in regards to energy use in its properties.

During September 2021, we will organize a series of events where we will offer answers at least to the following questions:

- *How to increase the efficiency of an electric heating system and what alternatives are there?*
- *How to design a solar power system and evaluate its suitability?*
- *How should the energy efficiency measures be put out to tender?*
- *When, why and how should electrical loads be controlled?*

In addition, counseling events offer the opportunity to discuss with others who are planning to change or improve their heating system. Participating in the event does not oblige you to anything and it is definitely worth coming along, even if making changes to your heating system is not relevant for you at the moment.

Come and discuss the possibilities to optimize an electric heating system and learn about the energy counseling services offered by the city to Metsolanpuisto (the intersection of Perkiönkatu and Metsolankatu) on Wednesday, September 1st from 3 to 7 p.m. At the counseling tent, we offer coffee and buns to the first 30 visitors. If you cannot make it, you can contact us by phone or e-mail.

Based on the discussions held in the event, we will make a free counseling plan that will help you to find out how to enhance your electric heating system and what it would cost. We will inform about the next event via e-mail to those who have left their contact information for us in the event or to those who contacted us by other means.

With best regards,

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Tervehdys!

Saat tämän kirjeen, koska Tampereen kaupungin rakennusrekisterin mukaan kodissanne on käytössä sähkölämmitys.

Kokeilemme Härmälän alueella uusia tapoja neuvoa ja kannustaa pientalojen omistajia tehostamaan sähkölämmitysjärjestelmiään ja näin pienentämään omaa sähkön kulutusta. Samalla tuemme Tampereen tavoitetta olla hiilineutraali vuoteen 2030 mennessä ja kaupunki onkin lähivuosien aikana tehostamassa myös omien kiinteistöjensä energiatehokkuutta.

Syyskuun 2021 aikana järjestämme tapahtumasarjan, jossa tarjoamme vastauksia mm. seuraaviin kysymyksiin:

- Miten sähkölämmitysjärjestelmää kannattaa tehostaa ja mitä vaihtoehtoja on olemassa?
- Miten sopiva aurinkosähköjärjestelmä mitoitetaan ja sen soveltuvuus?
- Miten lämmitysjärjestelmän tehostamistoimenpiteet kannattaa kilpailuttaa?
- Milloin, miksi ja miten sähkökuormia kannattaa ohjata?

Lisäksi neuvontatapahtumissa on mahdollisuus keskustella muiden lämmitysjärjestelmän vaihtoa tai tehostamista suunnittelevien kanssa. Tapahtumiin osallistuminen ei velvoita mihinkään ja mukaan kannattaa tulla, vaikka lämmitysjärjestelmän vaihtaminen tai tehostaminen ei olisikaan juuri tällä hetkellä ajankohtaista.

Tule keskustelemaan sähkölämmitysjärjestelmän tehostamisesta ja kaupungin tarjoamasta neuvonnasta Metsolanpuistoon (Perkiönkadun ja Metsolankadun risteys) keskiviikkona 1. syyskuuta klo 15-19 välisenä aikana. Neuvontateltalla tarjoamme pullakahvit 30:lle ensimmäiselle kävijälle. Jos et pääse tulemaan paikalle, ota ihmeessä yhteyttä puhelimitse tai sähköpostilla.

Neuvontateltalla käytyjen keskustelujen pohjalta teemme maksuttoman neuvontasuunnitelman, jonka avulla saatte tietoonne, miten teidän kannattaisi sähkölämmitystä tehostaa ja mitä se tulisi maksamaan. Ilmoitamme seuraavasta tapahtumasta sähköpostitse vain neuvontateltalla yhteystietonsa jättäneille tai muuten yhteyttä ottaneille.

Ystävällisin terveisin,

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The advertisement

Do you want to save on electric heating?

REDUCTION OF ENERGY CONSUMPTION

- Structural changes that reduce the electricity use.
- Improving the energy use of the heating system.

SOLAR ELECTRICITY

- Choosing the appropriate system according to your consumption.
- Increasing the share of self-used electricity with control solutions.

TENDER THE ELECTRICITY CONTRACT

- Tendering the price of electric energy at regular intervals.
- Selection of a suitable transmission tariff according to consumption.

LEARN MORE ABOUT THE POSSIBLE ACTIONS

<http://www.sahkolammitysneuvonta.fi/>

Haluatko säästää sähkölämmityksessä?

ENERGIANKULUTUKSEN VÄHENTÄMINEN

- Sähköenergian lämmityskäyttöä vähentävät rakenteelliset muutokset.
- Lämmitysjärjestelmän energiakäytön tehostaminen.

AURINKOSÄHKÖ

- Soveltuvan järjestelmän valinta oman kulutuksen mukaan.
- Omakäyttöosuuden lisääminen tuotannon ajalle ohjaustratkaisulla.

SÄHKÖN KILPAILUTUS

- Sähköenergian hinnan kilpailuttaminen säännöllisin väliajoin.
- Sopivan siirtotariffin valinta kulutuksen mukaan.



KATSO LISÄÄ TIETOJA TOIMENPITEISTÄ

www.sahkolammitusneuvonta.fi