

# LIFE EconomisE

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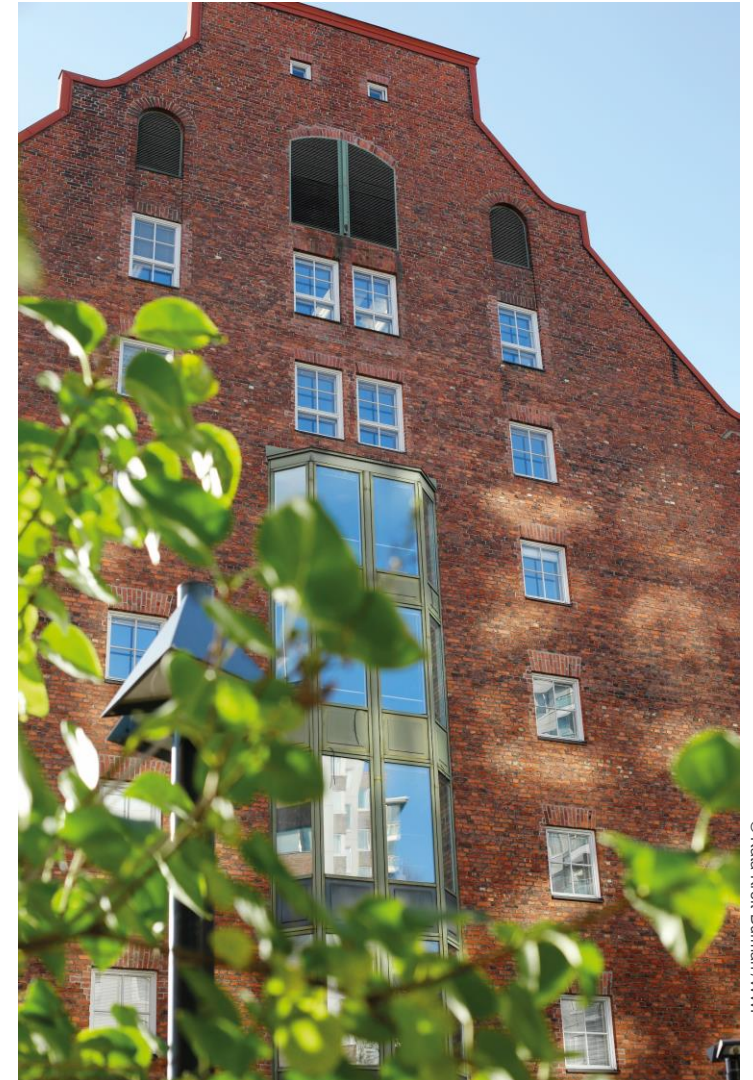
Value for money: unlocking the investment potential for resilient low-carbon Finnish building block

Katja Lähdesmäki-Josefsson, WWF Finland



# Overview

- Facts
- Goal of the work
- Why EconomisE?
  
- The EconomisE Platform
- Cooperation with institutional investors and real estate owners
- Empowering cities and municipalities
  
- Insights



# Facts

- Funded by the EU LIFE Climate Governance and Information programme
- Partners: Coordinating beneficiary WWF Finland, associated beneficiaries the Finnish Environment Institute (SYKE) and SYKLI Environmental School of Finland





## Goal of the work

We aim at reducing emissions by cooperating with municipalities and owners of larger real estate portfolios to catalyse investments supporting a low carbon and resilient economy.

1. **The EconomisE platform** for innovation and business development
2. Cooperation with **institutional investors and real estate owners** in order to encourage them to align their portfolios with the Paris Agreement goals
3. Support decision-makers and civil servants in **cities and municipalities** to make informed decisions concerning building stock

# Why EconomisE?

- Buildings have an enormous role to play in the attempts to slash emissions;
  - In Finland 32% energy and 30% of CO2 emissions
- Buildings that are in place today will form ~70 % of the building stock in 2050
- Municipalities and institutional investors are among the largest owners of building stock in Finland

The potential of profitable energy efficiency investments is not yet realised, it must be unlocked!





# RECO TECH

# The EconomisE platform

ReCoTech Breakfast:  
**INNOVATIIVISET  
ENERGIATEHOKKUUSRATKAISUT**  
Tiistaina 6.3.2018  
klo 8.00-10.00



ENERGY & MATERIAL LEAP

ENERGY LEAPS (46) MATERIAL LEAPS (28) ACTORS AND PROJECTS ABOUT SUOMI

### Energy Leap (46)

Energy production (8) Energy use in buildings (32) Street and outdoor lighting (2) Transport and mobility (1) Product or service improving energy efficiency (4) Energy efficiency campaign (6)

Commuter transportation experiment, Ii

Heating of the Jakkukylä school from oil to air-water heat pump, Ii

Micropolis intelligent street lighting, Ii

Intelligent lighting of the Micropolis corridor, Ii

Ventilation Renovation of Lakso kindergarten, Ii

Energy tracking and savings in schools and kindergartens by 50-50 Methods, Ii

WWW.HINKUFOUMI.FI

**HINKU**

TOWARDS  
A CARBON-NEUTRAL  
MUNICIPALITY!

**-80% CO<sub>2</sub>**  
BY 2030



# The EconomisE platform

The EconomisE platform targets institutional investors, owners of larger real estate portfolios, municipalities & companies offering innovative solutions

The platform consists of three levels of collaboration

- One-to-one meetings
- Matchmaking and innovation events
- The online platform [www.energialoikka.fi](http://www.energialoikka.fi)



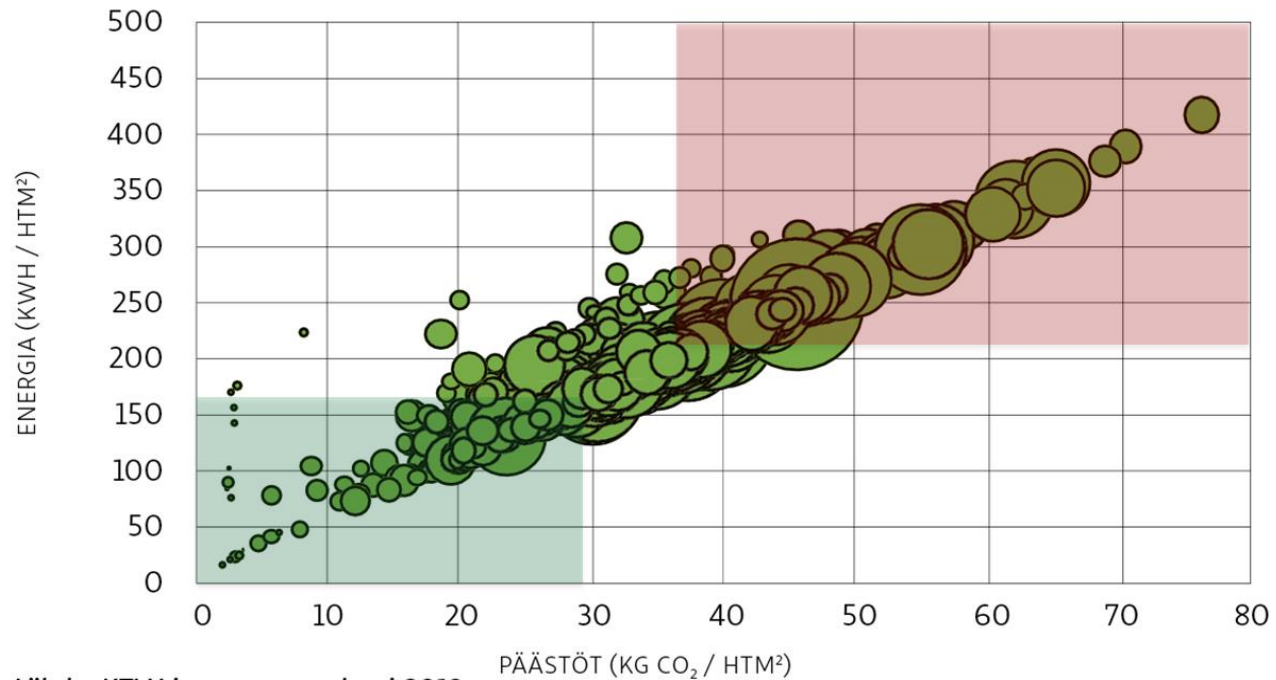
# One-to-one meetings

- Meetings with institutional investors, real estate owners & managers, innovation hubs, cleantech businesses, etc.
- Focus on financial benefits and technological opportunities
- Cooperation established with many key players;
  - The Finnish Association of Property Owners and Construction Clients
  - Green Building Council
  - KTI Property Information Ltd



# What is a 1.5C aligned real estate portfolio?

CO<sub>2</sub> emissions and energy consumption in residential buildings

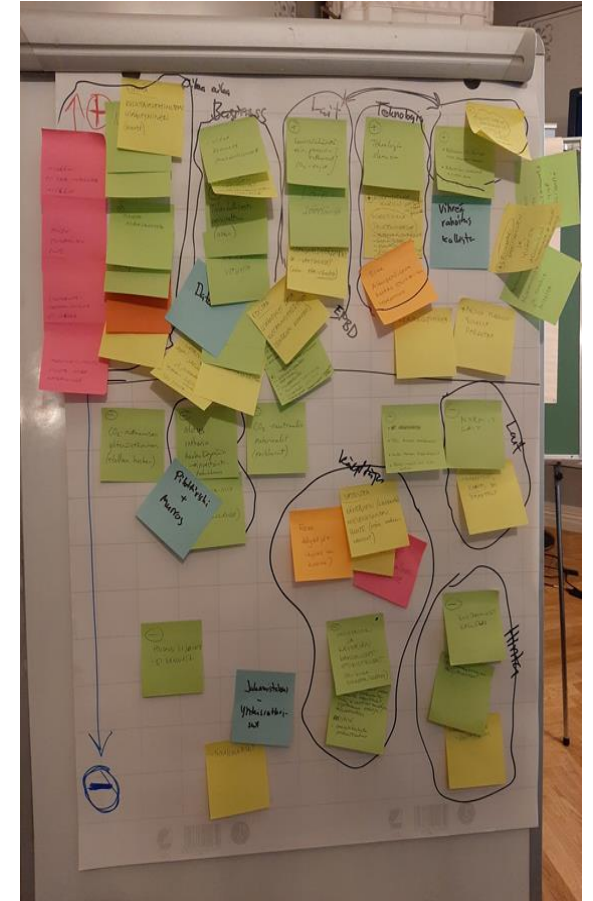


Lähde: KTI Yritysvastuuanalyysi 2019

# Innovation & matchmaking events

The project has organised / participated in various types of events;

- Speed-meets at Slush 2018
  - Slush / ReCoTech 2019 – project stand + meetings with companies offering EE solutions
  - ReCoTech breakfast 2018 – “Innovative energy efficiency solutions”
  - “Energy Efficiency in Finnish municipalities” workshop 2018
  - WWF Green Office innovation event 2018
  - Workshop “Towards emission reductions in real estate” with The Finnish Association of Property Owners and Construction Clients 2019
  - “The Energy Genius” competition 2019
- Goal: To support innovation, scalable multi-stakeholder experiments projects, development of business concepts, connect actors on the real estate sector



# Energialoikka.fi for sharing information

- Aims to encourage and inspire by sharing experiences about more efficient energy and material technologies and practices.
- Good solutions are introduced to be replicated in other locations all over Finland.
- Printable "Solution cards" with facts about the implemented solutions
  - Dissemination tool
  - Used to support decision-making
  - Simple way of presenting costs, paypack period, etc.

**ACTION**  
Energy Savings at a Golf Course Club House from the Installation of Remote Controllable Heat Pumps

**LOCATION**  
Kanavagolf Vääksy Oy, Asikkala

<b>IMPLEMENTATION</b>	<b>INVESTMENT</b>
2017	16 500 €
<b>OPERATIVE</b>	<b>PAYBACK PERIOD</b>
15 years	7 years
<b>INTERNAL RATE OF RETURN</b>	<b>SAVINGS PER YEAR</b>
13%	2 500 €
<b>REDUCED EMISSIONS</b>	
5 250 kg CO <sub>2</sub> e / year	

[More information](#)






Image: Kanavagolf Vääksy Oy

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**ACTION**  
Installation of Ventilation Heat Recovery in Three Apartment Houses Alongside Combined Heat & Power

**LOCATION**  
As oy Sulkapolku 6, Helsinki

<b>IMPLEMENTATION</b>	<b>INVESTMENT</b>
2018	209 600 €
<b>OPERATIVE</b>	<b>PAYBACK PERIOD</b>
20 years	7,6 years
<b>INTERNAL RATE OF RETURN</b>	<b>SAVINGS PER YEAR</b>
12%	27 600 €
<b>REDUCED EMISSIONS</b>	
79 120 kg CO <sub>2</sub> e / year	

[More information](#)



Image: M. Manner, Tom Allen Senera

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# Cooperation with institutional investors and real estate owners

# Investor dialogue – setting the scene

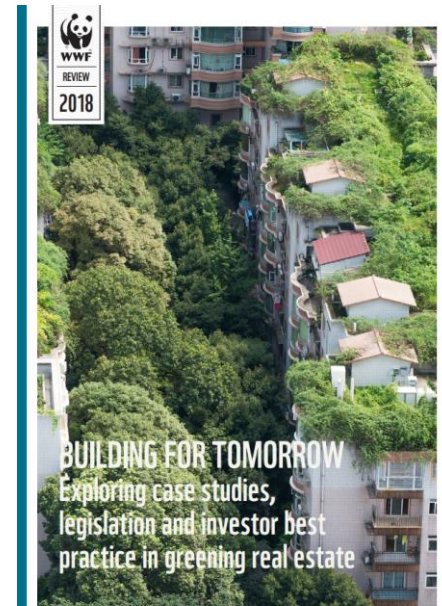
- Two Science-based Portfolio Alignment roundtable events held in 2017-2018
  - Gathered the representatives of the main institutional investors in Finland.
  - Some of the recommendations of the Task Force on Climate-related Financial Disclosures (June 2017) and the High-Level Expert Group final report (January 2018) were presented and discussed.



# Rating investment portfolios

- Development of WWF Energy Efficiency Score Card
  - Measured commitments, plans and actions on energy efficiency of buildings of institutional investors based in Finland.
  - Cooperation started with KTI Property Information Ltd
    - Access to detailed data reported by real estate owners
    - Cooperation with yearly barometer on responsibility in real estate – WWF questions included in the 2020 barometer
- Target 75% investors are more aligned with the Paris Agreement goals by the end of the project

- Leading the way
- Well on the path
- Started the journey
- Not yet in the starting blocks
- Non-respondents





# Case: Varma Pension Insurance Fund

Goal: Emission reduction of 48% of the whole residential building stock owned by Varma by 2023.

- Energy efficiency renovation programme for 36 buildings; solar panels, heat pumps, ventilation heat recovery and changing from district heating to geothermal heating.
- Investments are made based on profitability.
- Completed together with the company LeaseGreen

*(Note: This positive development took place in the Economise focus group but the project cannot claim direct influence on this development)*



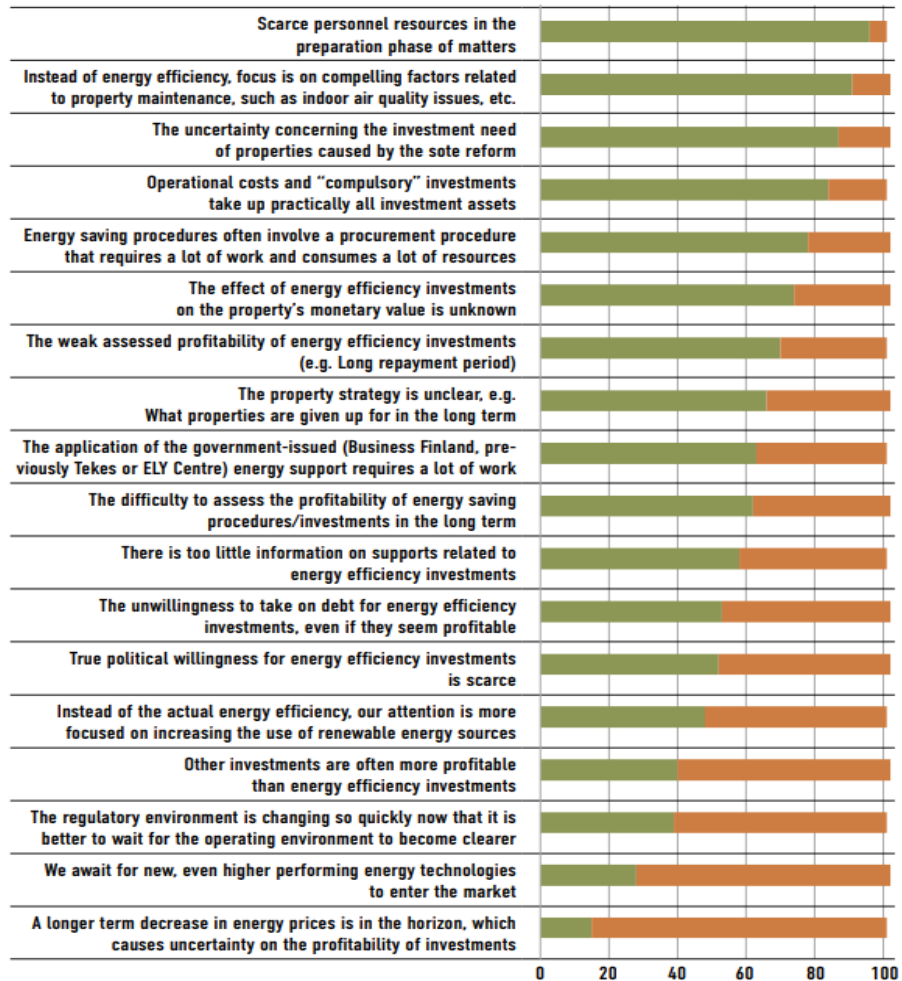
# Empowering cities & municipalities



Photo: © Timo Newton-Syms, CC BY-SA 2.0, Flickr



# Why slow progress?



- A survey carried out by SYKLI in cooperation with the Association of Finnish Local and Regional Authorities.
- Main obstacles for energy efficient investments include:
  - Insufficient personnel resources,
  - Difficult operating environment with its multiple simultaneous challenges,
  - Insufficient information on the profitability of investments and the effect on property value as well as the lack of a premises strategy,
  - Lack of information and the uncertainty caused by rapid changes

# Training for municipalities

- Two training packages;
    - Decision-makers
      - Focus on basics of EE in buildings
      - Target setting & planning
      - Investments & prioritisation, funding opportunities, procurement
      - Good examples
    - Technical staff
      - A more technical, detailed focus
      - Feasibility calculations
      - Use & maintenance of buildings
      - Indoor air quality ....
  - Direct contact to municipalities; letter – e-mail – phone calls
- By now 17 municipalities & 106 persons trained



[https://www.fi/app/uploads/q/q/n/2njlfo5p3xdvnts1pu/guide-for-energy-efficient-investments\\_en.pdf](https://www.fi/app/uploads/q/q/n/2njlfo5p3xdvnts1pu/guide-for-energy-efficient-investments_en.pdf)

# Catalysing energy investments in municipalities

- Focus on improving energy efficiency in the network of Carbon Neutral Municipalities (Hinku) and Finnish Sustainable Communities (FISU)
- Free energy audits – real estate portfolio review & in-depth focus on chosen building(s)
- A technical approach has been expanded to include advice on the financial side
  - Feasibility calculations
  - Assistance in tendering
  - Assistance in participating joint procurements
  - Information on financing opportunities, as well as subsidies



# Realised energy investments

- The work has resulted in 110 investments, in the value of € 2M.
- New government subsidies on energy efficiency measures



# Insights

- Impact & influencing via already established actors & networks
  - Finland is small and the real estate sector well organised
  - Efficiency from establishing partnerships
  - HINKU & FISU networks of municipalities
  - "The Energy Leap" –website
- Responsibility issues are often linked
  - Climate resilience and energy efficiency of buildings – but also the other related strategies
- Long-term impact via new ideas and further developing existing tools
  - KTI Property Information – "climate tool" & corporate responsibility barometer





Thank you!

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[Energialoikka.fi](http://Energialoikka.fi)

