
Lappeenranta
LAPPEENRANTA
SUOMEN ILMASTOPÄÄKAUPUNKI
Kuva Petri Tulkki, RoboDroneS

Provincial Centre of South Karelia and home of more than half of the inhabitants of the province

Inhabitants in South Karelia
125 000



CITY OF LAPPEENRANTA

About Lappeenranta

Lappeenranta, the climate capital of Finland, has been chosen as one of the Greenest European Cities. European Green Leaf Award 2021 winner 2021.

- Selected 26.4. 2022 as one of the EU Climate-Neutral and Smart Mission Cities
    - Mission Label 2024
- Renewable energy and clean environment
- Center of Southeastern Finland
- 73.000 resident’s + 70.000 in the region
- The Lappeenranta-Lahti University of Technology LUT is the best energy University in Finland
- Forest industry area
- Green Electrification development site







City of Lappeenranta is a Forerunner in Environment and Green Transition

- **Climate** actions since 2000 – Carbon Neutral in 2030
  - Climate program 2020
  - EU Climate Neutral and Smart Cities 2022
  - EU Mission Label 2024
- No pollution – No waste – Sustainable Consumption - policy 2015
- **Circular Economy**
  - Roadmap 2021
  - Waste policy targets
- **Nature**
  - Biodiversity plan 2023
  - Water restoration
    - Over 100 built wetlands
  - Ground water protection
- **Noise reduction** -policy



- Most of the programs can be found in the https://www.greenreality.fi/ web pages


LAPPEENRANTA WILL BE
CARBON NEUTRAL IN 2030

Covenant of Mayors Heating and Cooling Award 2025

- The City of Lappeenranta was Awarded by “EU Covenant of Mayors Heating and Cooling Award” in March 2025.
- *“The City of Lappeenranta has made a successful energy transition in district heating. First, the transition from natural gas to bioenergy in 2010. Now change towards climate neutral electricity and waste heat has begun. Lappeenranta has also piloted new technologies. The change is good for climate and good for the citizens.”*

  Tuomo Sallinen, Mayor of the City of Lappeenranta.

- Lappeenranta actions:
  - Withdrawal from natural gas
  - Sustainable biomass as a heating source from 2010- >
  - Solutions to use climate neutral electricity
    - Heat storage at Mertaniemi
    - Piloting a innovative heat storage (ELSTOR)
  - Use of the waste heat from various sources
    - Data centers
    - Power-2-x units
  - Building energy efficiency development
    - Building automation, virtual power plant, AI development




LAPPEENRANTA IN THE YEAR 2050
SUSTAINABLE WELL-BEING
NO OVERCONSUMPTION
NO EMISSIONS
NO WASTE

Climate targets and programs

- Climate program (2020) can be followed from Lappeenrannan kestävyysvahti
- Main activities
  - Energy production and energy use
  - Mobility
  - Buildings, renovation
  - Sinks and compensations
- EU Mission label provides investment funding possibilities
  - Direct contacts with EU Commission
  - A EU wide working group and help in climate policy actions by NetZeroCities
  - 92 cities are selected as forerunners in Europe, Lappeenranta among them



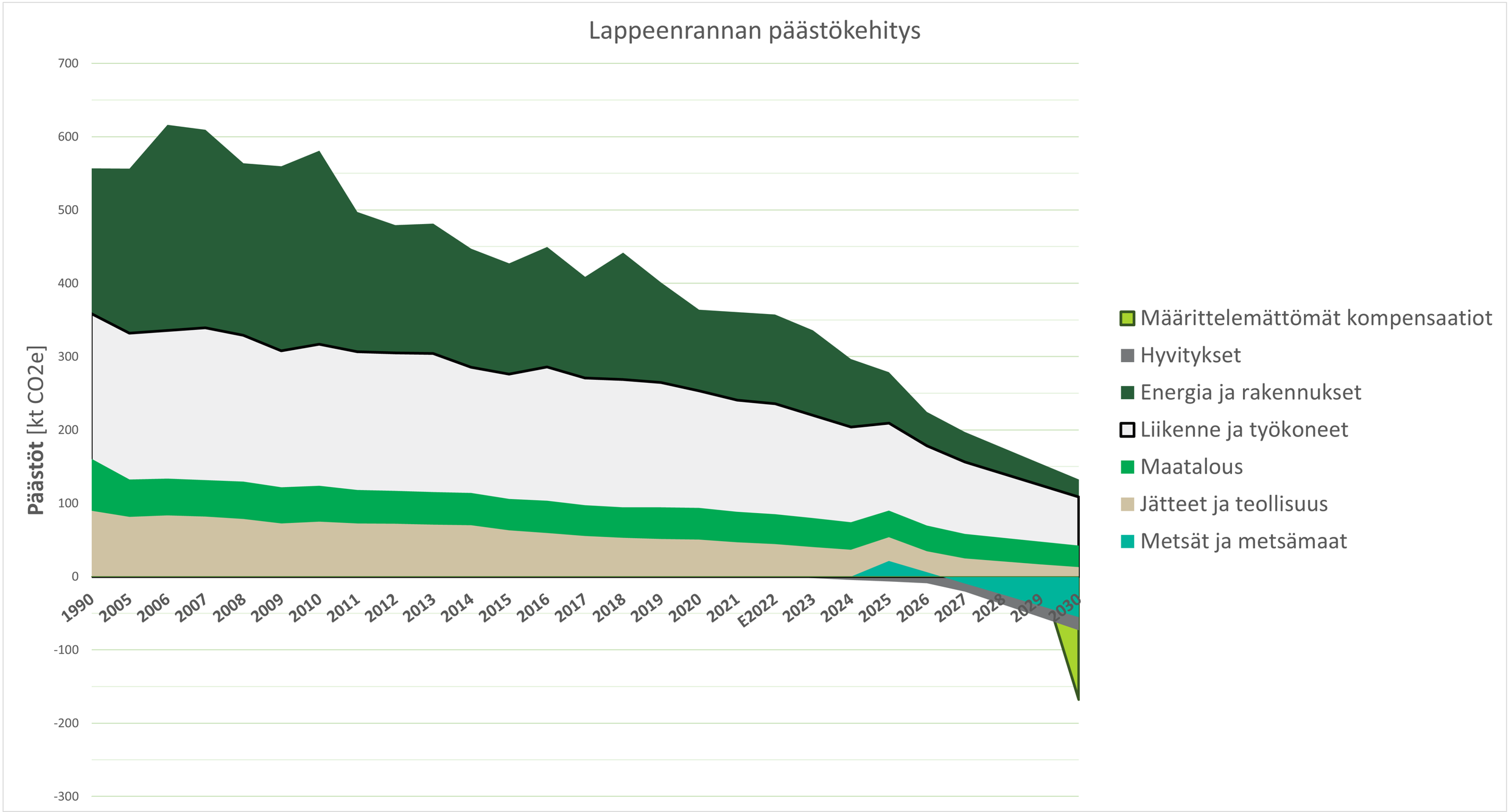


CFO Jari Iskanius receiving the Label 21.3.2024 from EU Mission Manager Patric Child



City of Lappeenranta led session at Vlinus 6.5.2025
Heating and Cooling best practises

Maankäyttösektori mukana vuodesta 2025





City of Lappeenranta invests on solar PV for tis buildings. City has 20 installations 2025.

#EUmissions
#HorizonEU
#MissionCities

EU MISSIONS
CLIMATE-NEUTRAL & SMART CITIES

Lappeenrannan Lämpövoima Oy, Heat storage (water tank)



Funded by
the European Union

#EUmissions
#HorizonEU
#MissionCities

EU MISSIONS
CLIMATE-NEUTRAL & SMART CITIES

Elstor Oy heat storage (from electricity to heat)



Funded by
the European Union

Circular economy

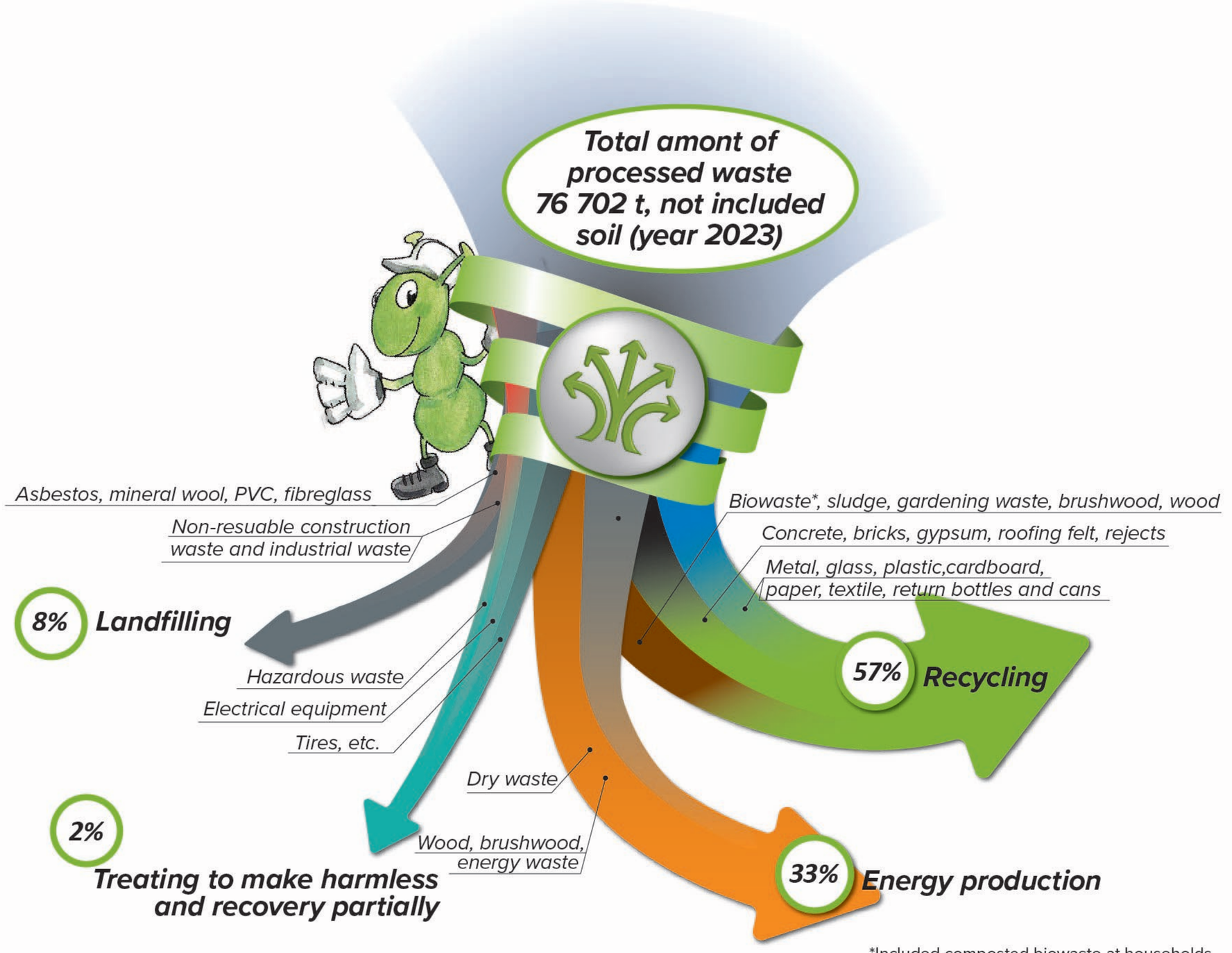
Innovative solutions to recycle and reuse products and services, circular mindset



Variety of actions

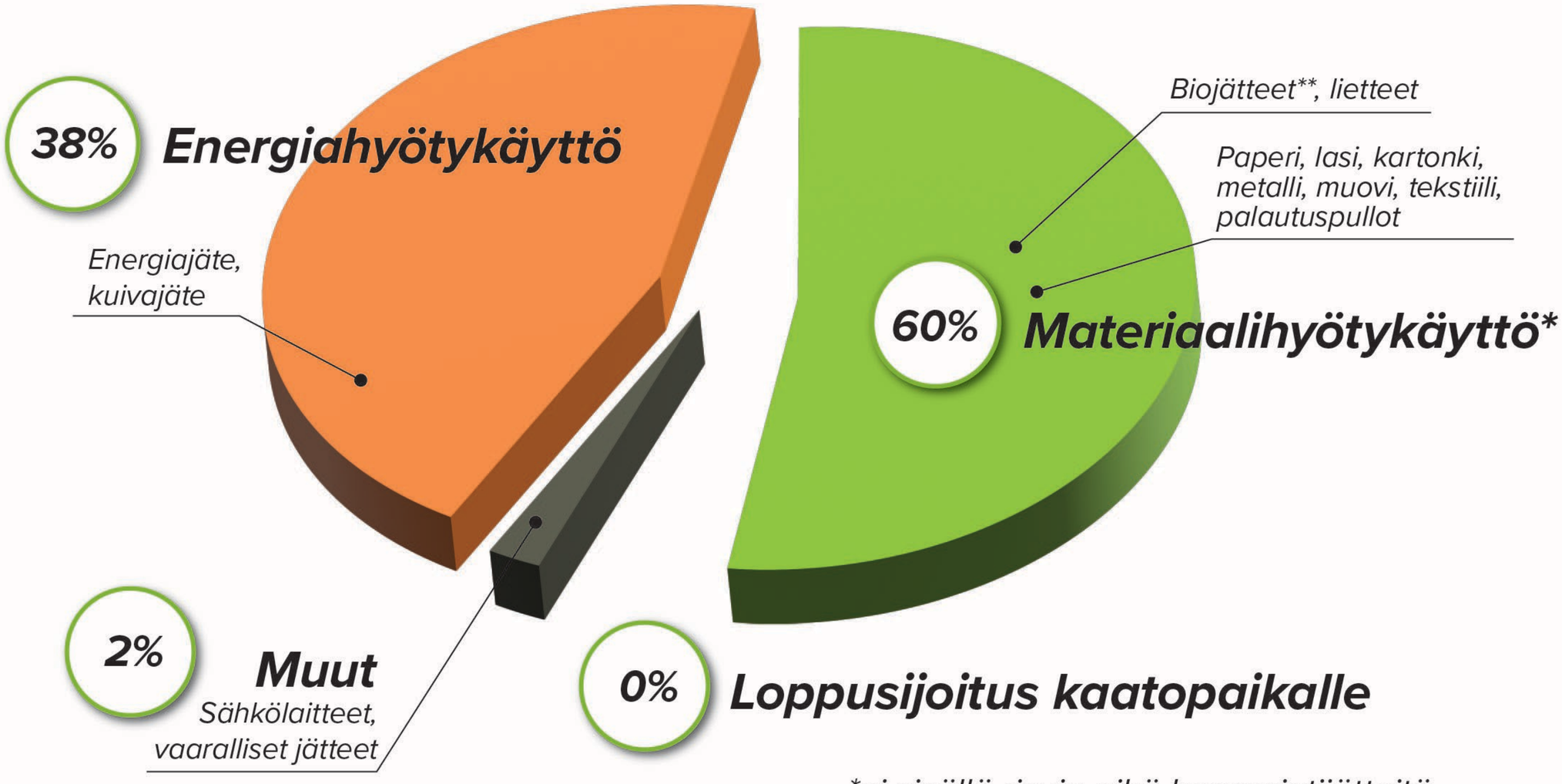
- Promoting industrial symbiosis
  - Tailings (Nordkalk) - geopolymer
  - Wood & plastics (Wimao)
- Developing Recycling center Hyötyhalli
- Side stream utilization
- Upcycling – design

- Enchancing citizens envolvement
- Environmental awaressness questionnary
- Guidance of biowaste recycling
  - Composting - soil
  - Biogas - energy



*Included composted biowaste at households (40 kg / person), based on composting notices.

Käsitellyt yhdyskuntajätteet (2024)
EKJH + tuottajavastuu 46 683 t



*ei sisällä risuja eikä haravointijätteitä

**Huomioitu myös kotikompostoidut biojätteet, (40kg /hlö), perustuen kompostointi-ilmoitusten määrään






Kivisalmen
pumppaamo






WE
PROTECT









CLOSE TO NATURE



Green Transition Actions

The focus areas of the Green Electrification ecosystem

1. Energy efficient electric drives and motors
2. Production methods for carbon neutral synthetic and biobased fuels (P2X)
    - Carbon capture and utilization
    - Production of green hydrogen and promoting the hydrogen economy
    - Synthesis technology
3. Smart and flexible energy grids and buildings
    - Microgrids and storing of electricity and heat
    - Building automation and digital services
4. Building of a small modular reactor ecostystem (SMR)

PIENYDINVOIMALAITOKSEN TOTEUTETTAVUUSSELVITYS

LAPPEENRANNAN KAUPUNKI

LOPPURAPORTTI 25.6.2024
Rev 1.0

WWW.RAMBOLL.COM

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Bright ideas. Sustainable change.

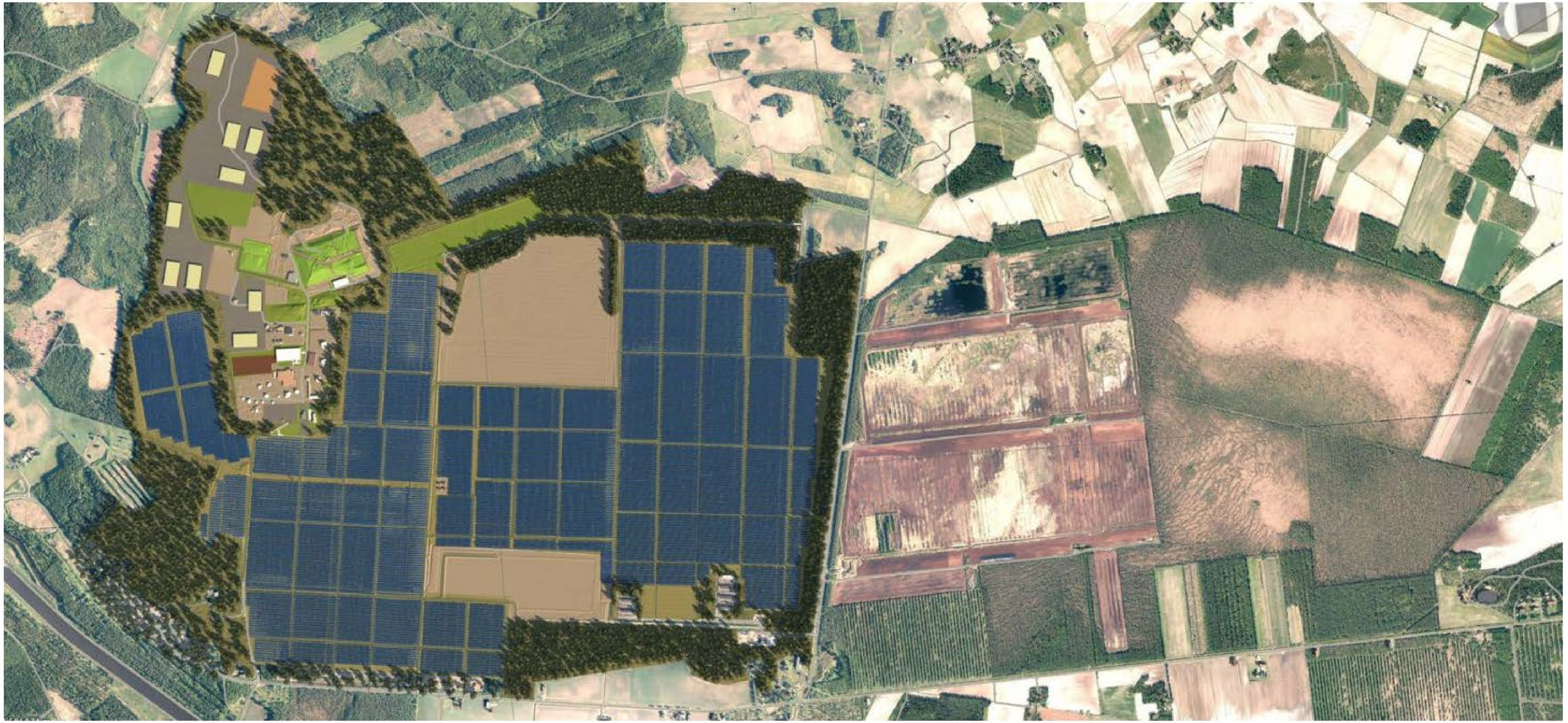


Euroopan unionin osarahoittama

LAPPEENRANTA

innokaupungit

ETELÄ-KARJALAN LIITTO



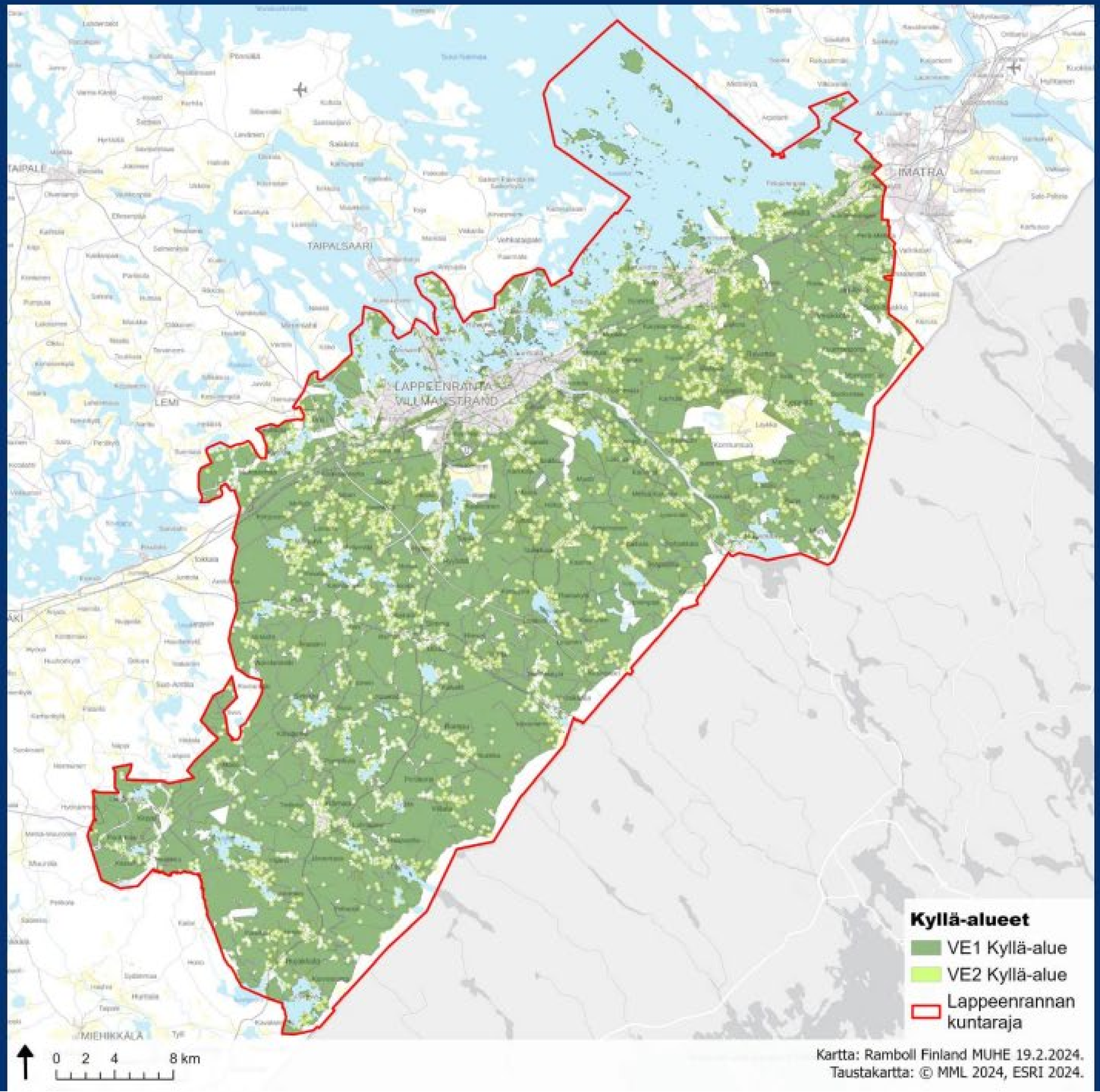
LAPPEENRANNAN KAUPUNKI

Muodostuneet Kyllä-alueet

Hyödyntämällä paikkatietoja tehty poissulkuanalyysi, jonka perusteella on määritetty alueet, joissa vedyn tuotanto voi olla mahdollista ympäristön reunaehdot huomioiden.

Kartalla:

- 100 m (VE1) ja 200 m (VE2) etäisyysvyöhykkeet herkkiin kohteisiin
- EI-alueet karsittu pois (mm. kulttuuriympäristö ja luonnonsuojelu)



LAPPEENRANNAN KAUPUNKI

Greenreality

EN FI

Etusivu Greenreality Lappeenranta Asukkaat Yritykset ja yhteisöt Greenreality Network Yhteystiedot



Mitä tarkoittaa Greenreality?

Me Lappeenrannassa ja Etelä-Karjalassa uskomme, että vihreä tulevaisuus on jo täällä. Greenreality on ekologista ajattelua, tietoa, vastuullisia valintoja ja ennen kaikkea tekoja kestävän huomisen puolesta. Tulevaisuutta teemme yhdessä yritysten, yhteisöjen ja asukkaiden kanssa.









Greenreality Network -videot

Videoilla Greenreality Networkin jäsenet esittäytyvät sekä kertovat ilmastoteoistaan ja siitä, miksi he kokevat tärkeäksi kuulua verkostoon. Kuulet myös, miksi Etelä-Karjalan alue on energia- ja ympäristöalan yrityksille hyvä paikka toimia.

Lue lisää

LAPPEENRANNAN KAUPUNKI



Thank You!

lappeenranta.fi
greenreality.fi

LAPPEENRANTA
SUOMEN ILMASTOPÄÄKAUPUNKI

EU MISSION LABEL
CLIMATE-NEUTRAL & SMART CITIES LAPPEENRANTA