CIRCULAR PROCUREMENT PRACTICES IN THE NETHERLANDS

2 JUNE 2025

LECTORAAT PUBLIEKE INKOOP
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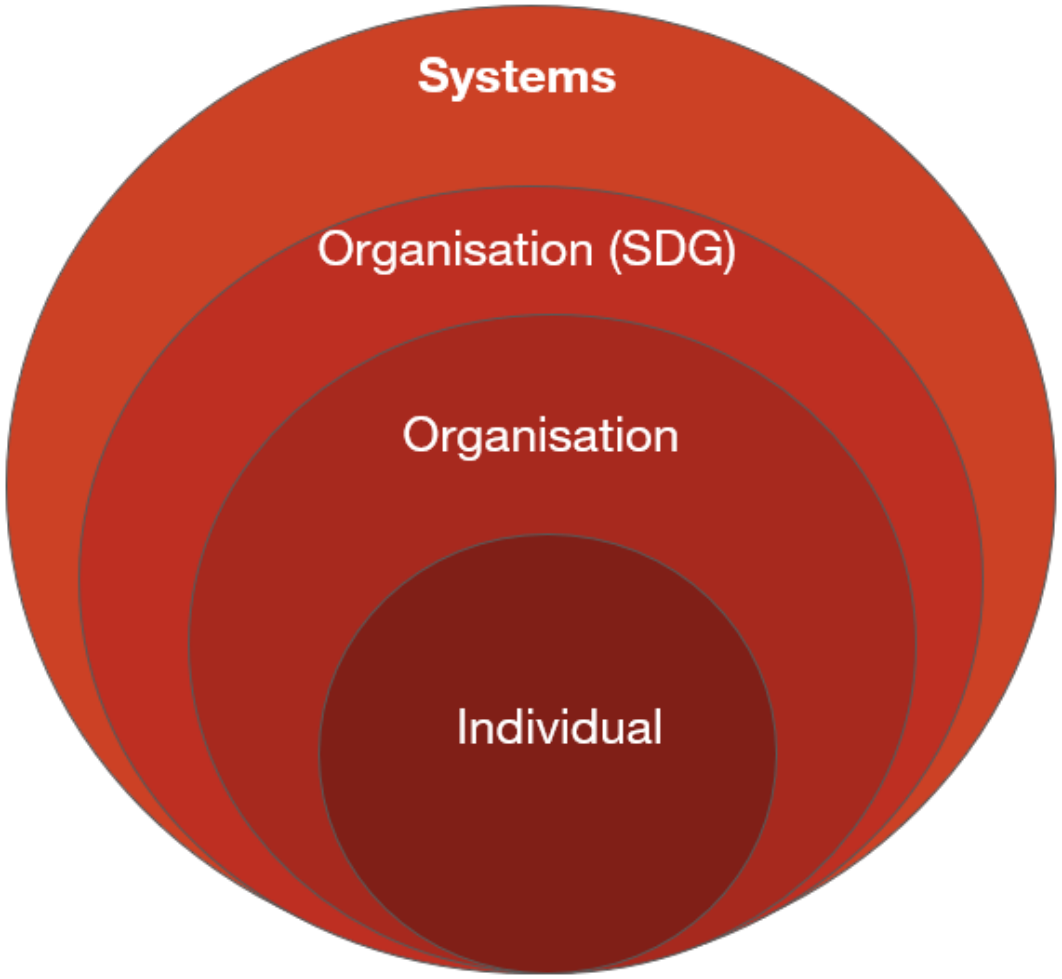
- *Chairwoman, autor ISO 20400 Sustainable Procurement*

……

Motto: successful by passion!

SUSTAINABLE DEVELOPMENT GOALS



INNER DEVELOPMENT GOALS

Transformational Skills for Sustainable Development

1 Being

Relationship to Self

- Inner Compass
- Integrity and Authenticity
- Openness and Learning Mindset
- Self-awareness
- Presence

2 Thinking

Cognitive Skills

- Critical Thinking
- Complexity Awareness
- Perspective Skills
- Sense-making
- Long-term Orientation and Visioning

3 Relating

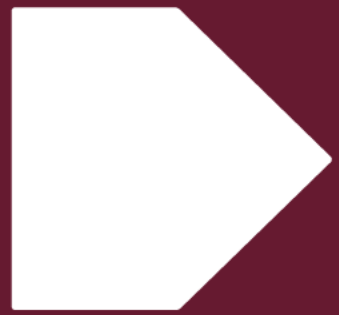
Caring for Others and the World

- Appreciation
- Connectedness
- Humility
- Empathy and Compassion

4 Collaborating

Social Skills

- Communication Skills
- Co-creation Skills
- Inclusive Mindset and Intercultural Competence
- Trust
- Mobilisation Skills



5 Acting

Enabling Change

- Courage
- Creativity
- Optimism
- Perseverance

INNER DEVELOPMENT GOALS

WANT TO KNOW MORE?

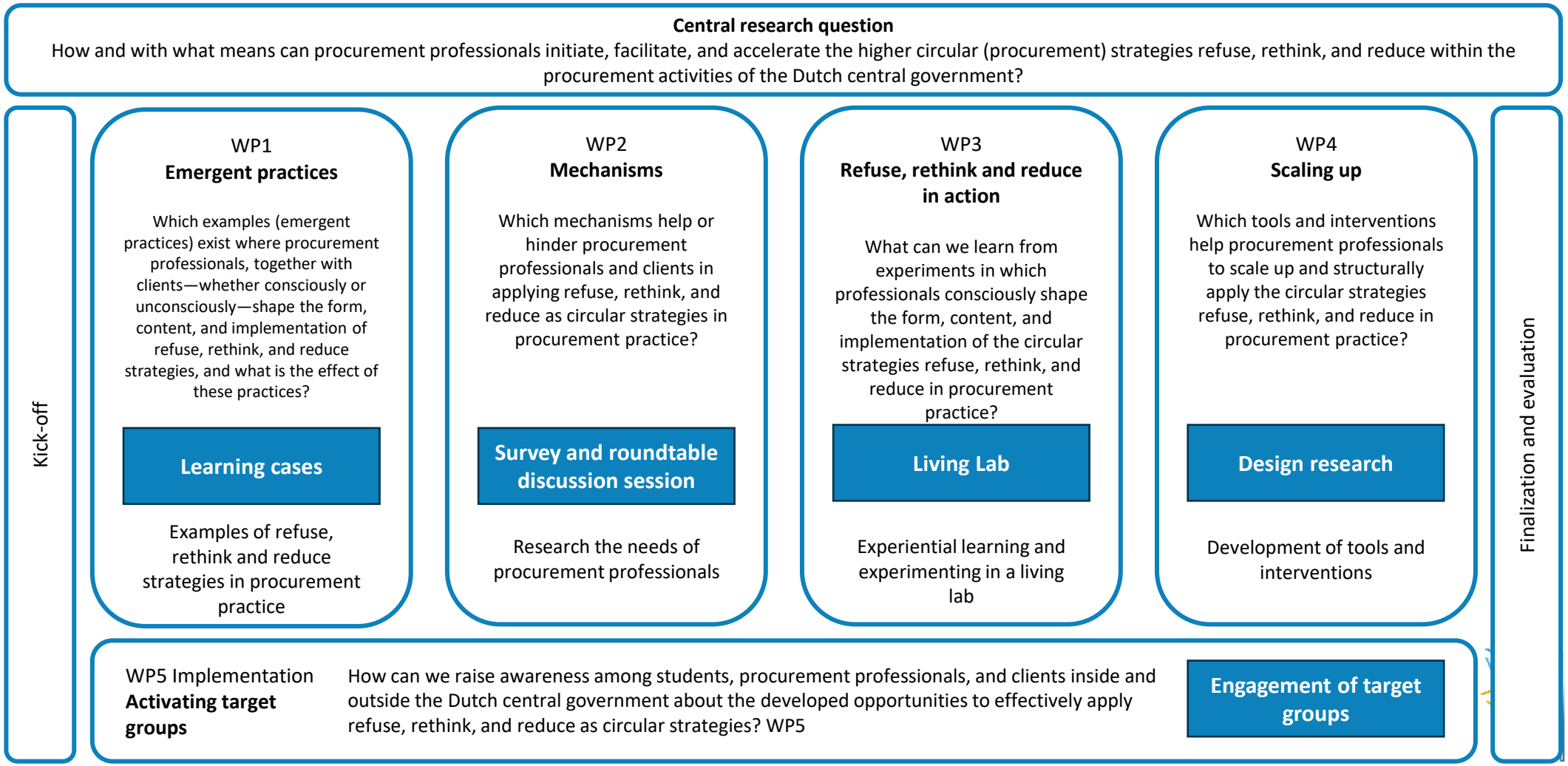
HTTPS://INNERDEVELOPMENTGOALS.ORG/

RESEARCH SEPT. 2024 - SEPT. 2026

REFUSE, RETHINK, REDUCE PROCUREMENT BY THE CENTRAL GOVERNMENT

MIRJAM KIBBELING-THE HAGUE UNIVERSITY OF APPLIED SCIENCES
MAAIKE SNIJDER -THE HAGUE UNIVERSITY OF APPLIED SCIENCES
KARIN VAN IJSSELMUIDE-ROTTERDAM UNIVERSITY OF APPLIED SCIENCES
JOLIEN GRANDIA- ERASMUS UNIVERSITY ROTTERDAM

RESEARCH QUESTION AND METHODOLOGY



WP 1 EMERGENT PRACTICES

Research question

Which examples of emergent practices exist where procurement professionals, together with clients—whether consciously or unconsciously—shape the form, content, and execution of refuse, rethink, and reduce, and what is the effect of these practices?

Sub-questions:

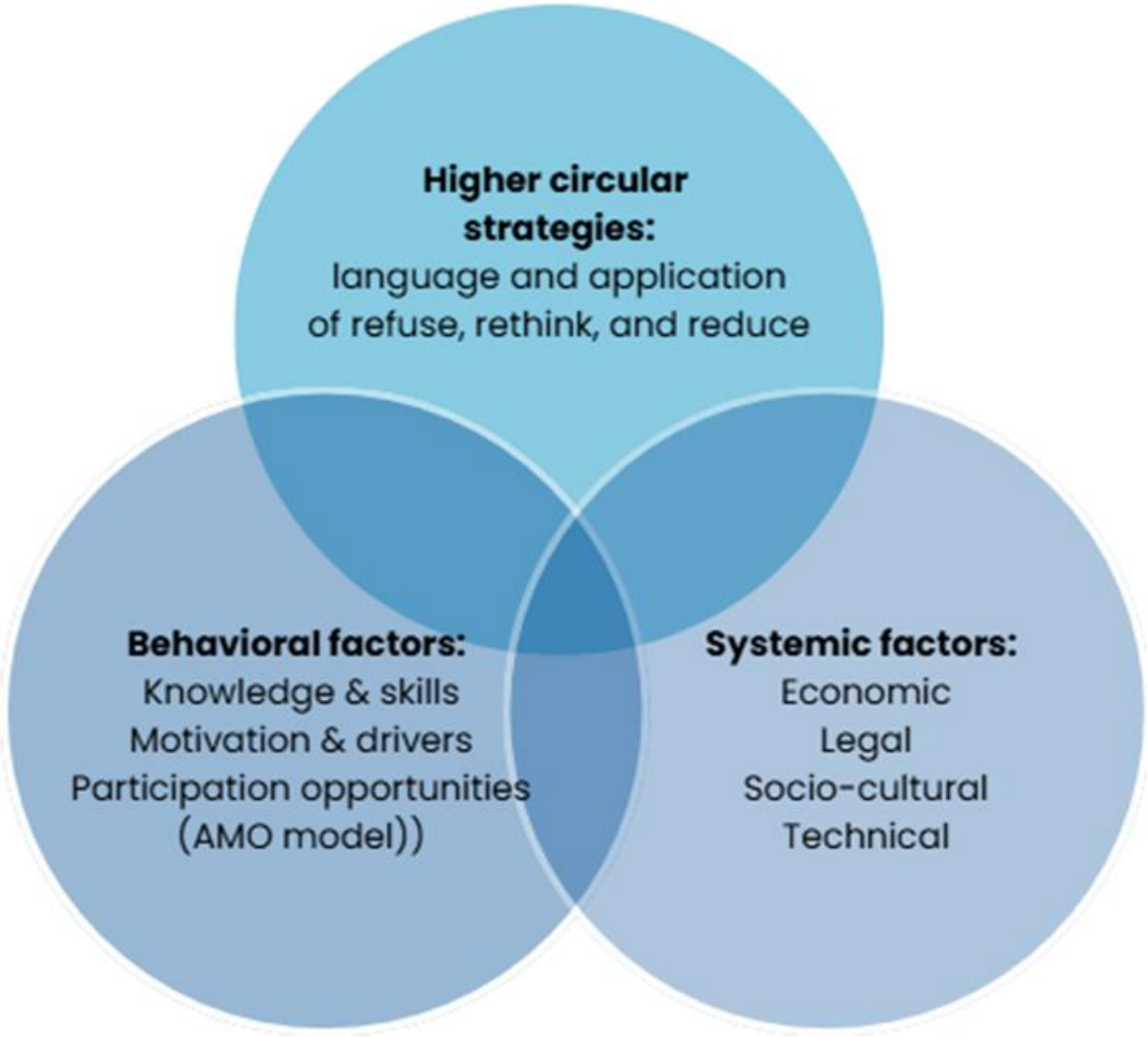
- What drivers lead to the use of the circular strategies refuse, rethink, and reduce?
- How do procurement professionals and clients, together with other stakeholders, shape the form, content, and implementation of these strategies?
- What dilemmas and obstacles do procurement professionals encounter, and how do they handle them?
- What has been the effect of their chosen strategy?

Research methodology

Cases:

- Events
- Osaka Expo
- Office Supplies
- Artificial Turf Fields
- IT
- Wastewater Treatment
- Sanitary Supplies
- Ballots
- Workplace Environment

RESEARCH APPROACH



CONCLUSIONS ON NAMI DEFINITIONS

The research shows that:
NAMI, in general, focuses on reducing raw material usage through procurement..

- **Refuse emphasizes the assessment of needs.**
  Activities: looking at existing solutions within the organization, engaging in dialogue with the requester, understanding usage knowledge.
- **Rethink focuses on asking a functional question.**
  Activities: investigating functional requirements for specifications, requesting functionality instead of a product, innovative procurement.
- **Reduce appears to focus on usage.**
  Activities: influencing behavior, for example through nudging; focusing on the efficiency of the product lifecycle; and considering total cost of ownership and energy consumption.

Conclusion

NAMI is about closing loops and reducing the use of raw materials. That should be the main focus! Not, differently, and less procurement are three distinct procurement strategies that prevent waste and are (always?) preventive in nature.

Case 1 Events

- **What?** Events at over 140 Embassies worldwide
- **Who?** **Ministery of Foreign affairs**
- **Why?** Mission Sustainable + Sustainable Procurement actionplan

- **NAMI?** Several posts worldwide have been working on organizing events in a sustainable way. Examples of tableware, banners, food during the sustainable King's Day

Case 4 – Artificial Turf fields

- **Wat?** Realization of circular artificial grass pitches
- **Who?** **Sport & Bos (City of Amsterdam) and NV SRO (City of Harlem**)
- **Why?** Major replacement task of approx. 270 outdated artificial grass pitches with high environmental impact and stricter regulations

- **NAMI?** Use of fully circular materials;
  - Reduction of microplastics and CO_2 footprint;
  - Reuse of old artificial grass pitches;
  - KPI's focus on measurable environmental performance and scaling up of innovations

Case 9 – Workplace environment

- **What?** Creating a National Marketplace for Furniture
- **Who?** **Category Management Office furnishings, office supplies and paper (entire National Government by Rijkswaterstaat)**
- **Why ?** Purchasing with Impact/part of the category plan

- **NAMI?** By properly labelling furniture in the Furniture Management System (technical spec., service record, etc.) it can be properly repositioned.

  Example: new contract with 3 suppliers who all have their own Furniture Management System (MMS) that create an overall insight

CONCLUSIONS AMO MODEL

- There is a need for knowledge in many areas: technical, legal, economic, about one's own organization, and from external sources.
- Required skills include creativity, showing courage, persuasion, dealing with resistance, project-based working, the ability to experiment and scale up, and being a connecting link.
- Applicable drivers include steering on (personal) goals/KPIs, financial and commercial incentives, appreciation, social pressure, and providing support (taking concerns away).
- Support and conditions are needed from the market, policy, culture, access to innovation/knowledge, organizational freedom (time, mandate, and budget), and having basic data well organized.

In particular, having (established) policy, basic data, and room to experiment are seen as important preconditions to effectively implement not, differently, and less procurement strategies.

WHAT IS ALREADY GOING WELL?

”What is already going well in your organization?”

- Working with the agreement of 100 days without complaining, followed by an evaluation. Experimenting through pilots and experiencing possibilities within them is valuable. This has led to new opportunities.
- Policies have been established with defined goals. As a result, support from management has improved, making it easier to make decisions and take action.
- Having a category plan that is approved provides a solid foundation for carrying out procurement processes.
- Category managers within the Dutch government collaborate well and share the same vision.
- The willingness and motivation to work on it are definitely present.
- In the new version of the National Circular Economy Plan, targets are set for reducing raw material usage, which are translated into product groups.

THE NEXT STEP:
WP 4: INTERVENTIONS AND TOOLS

Method:

- Start in september 2025
- Collecting and inventorying existing tools and guidelines for circular/sustainable procurement
- Based on insights from WP 1, 2, and 3
- Working group with participants from the central government
- Engaging students

Expected result:

- Tested and refined tools and interventions that have been implemented in practice, or a strong foundation towards implementation
- Consolidation of these tools and interventions into a recommendation report
- Publication in a (professional) scientific journal
- Presentations in webinars, congresses, or conferences

OUR NEXT RESEARCH QUESTION?

Submit September 2025, start January 2026

Demand articulation

Insights from NAMI on action perspective, **turning to circular behavior in procurement**

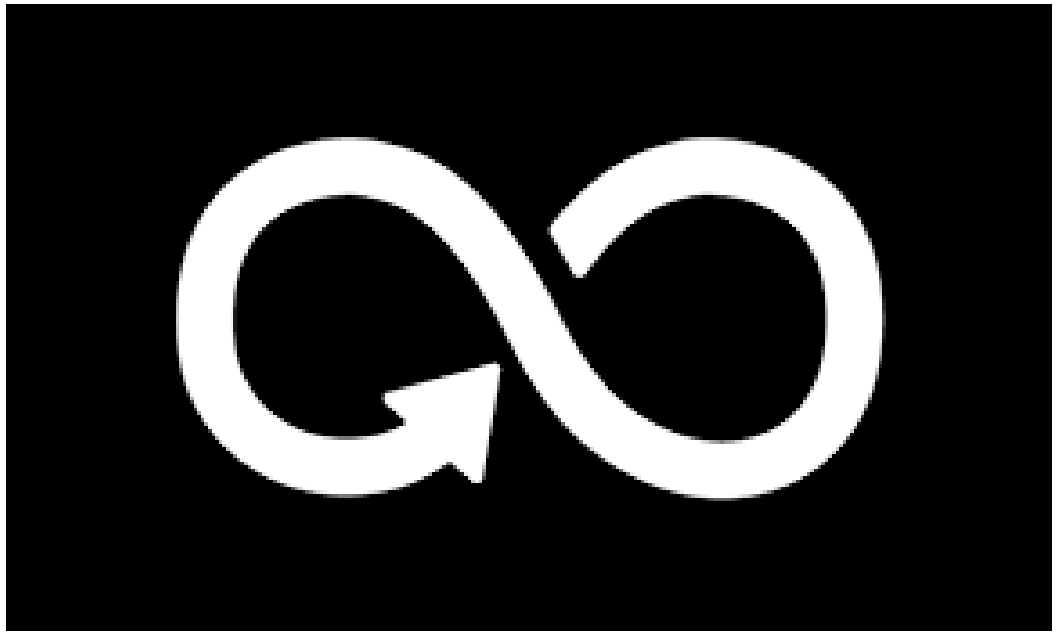
Procurement as a function - what are you going to do differently now?

By Mirella Soyer, Karin van IJsselmuide, Consortiumpartners like Rijkswaterstaat

Thank you!

Questions? Tips or tops? Contact?

https://www.linkedin.com/in/karinvanijsselmuide/



The city of Helsinki’s framework agreement for office and public space furniture

Helsinki

Information of the practice

Object of procurement: office and public space furniture for the use of the city's divisions and enterprises + subsidiarys
Length of contract: 2025-2028 (2029)
Value: 40 million €
Stakeholders: Procurement and Tendering Unit of the City Executive Office, environmental experts, suppliers

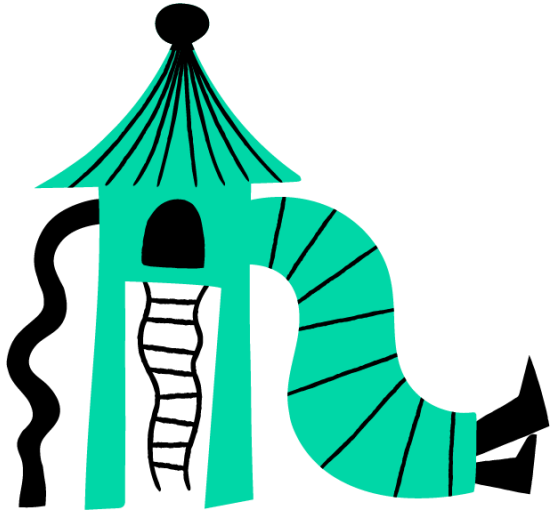
Circular economy goals supported:

- The city of Helsinki's procurement strategy (Impact and responsibility)
- The city of Helsinki's action plan for the circular and sharing economy (Procurement as one of the focus areas)

The results and scaling potential

Circular goals and criteria:

- Used furniture as a mandatory requirement
- Requirements for the share of recycled materials
- Ban or restriction of harmful substances
- Longer guarantees for products
- Requirements for spare parts and repairability
- Repair services for each supplier’s own furniture



Potential for scaling up

- Internal sharing of information, adoption of this model to procurement of other furniture by the city
- Scaling up to other cities is possible

Mindset shift

- Market dialogues with suppliers, communicating the city’s goals
- What still needs work: Internal communication and encouragement of staff to order used furniture from the contract

Potential for learning or transfer

Furniture is a significant product group in municipalities in terms of materials. By transfering to a more circular procurement and management of furniture municipalities can gain savings in emissions, material consumption and money.

Some key lessons:

- Engage the market early: market dialogue was instrumental in understanding the feasibility of sustainability criteria, particularly for used furniture

- Do not assume full traceability for used products – the procurement process highlighted that some sustainability criteria, especially those related to hazardous substances, are challenging to apply to second-hand furniture due to traceability limitations

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Behavioral Science Perspective

Circular Minds

3rd of June 2025

Jarno Tuominen, PhD

Associate Professor of Psychology, University Lecturer

jarno.tuominen@utu.fi

Background

- Climate Nudge and TUIMA projects (University of Turku)
  - Using behavioral sciences to reduce unsustainable behavior
  - Travel mode choice; Agricultural decisions; Climate policy; Co-Creation framework
  - Recently also end-user upcycling
    - **Tuominen, J**. (upcoming). Behavioral Science for upcycling. In P. Mezei & Härkönen, H. (Eds) *Upcycling*. Cambridge University Press.

+ consultant on behaviour change for health for the World Health Organization, Hybrid CoE, etc.

+ member of the Finnish PMO Behavioral Policy team

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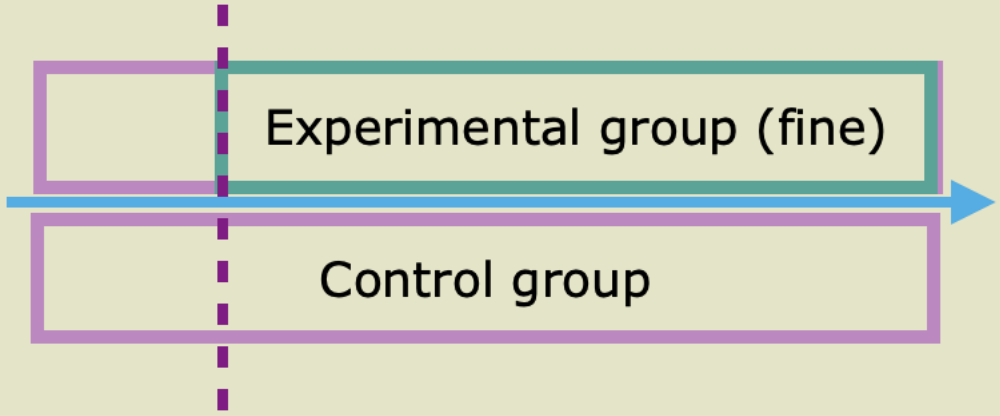
What makes you recycle/reuse/refurbish?

- When designing policy, infrastructure, and systems a key question is: *How do people make choices?*

How to change behaviour?

- A mundane problem: Parents arrive late to pick up their kids
- A late fee of approximately 20 €



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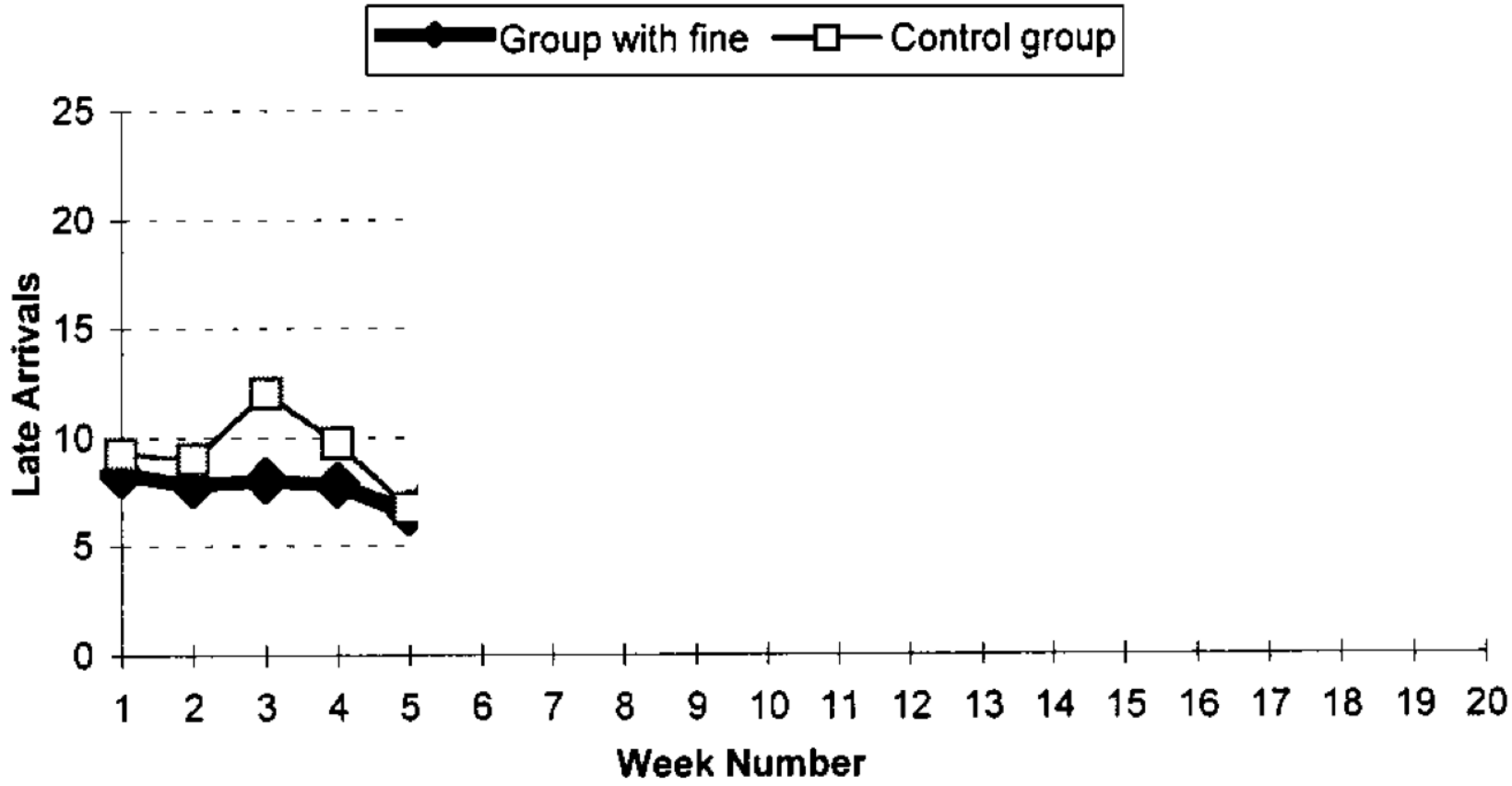

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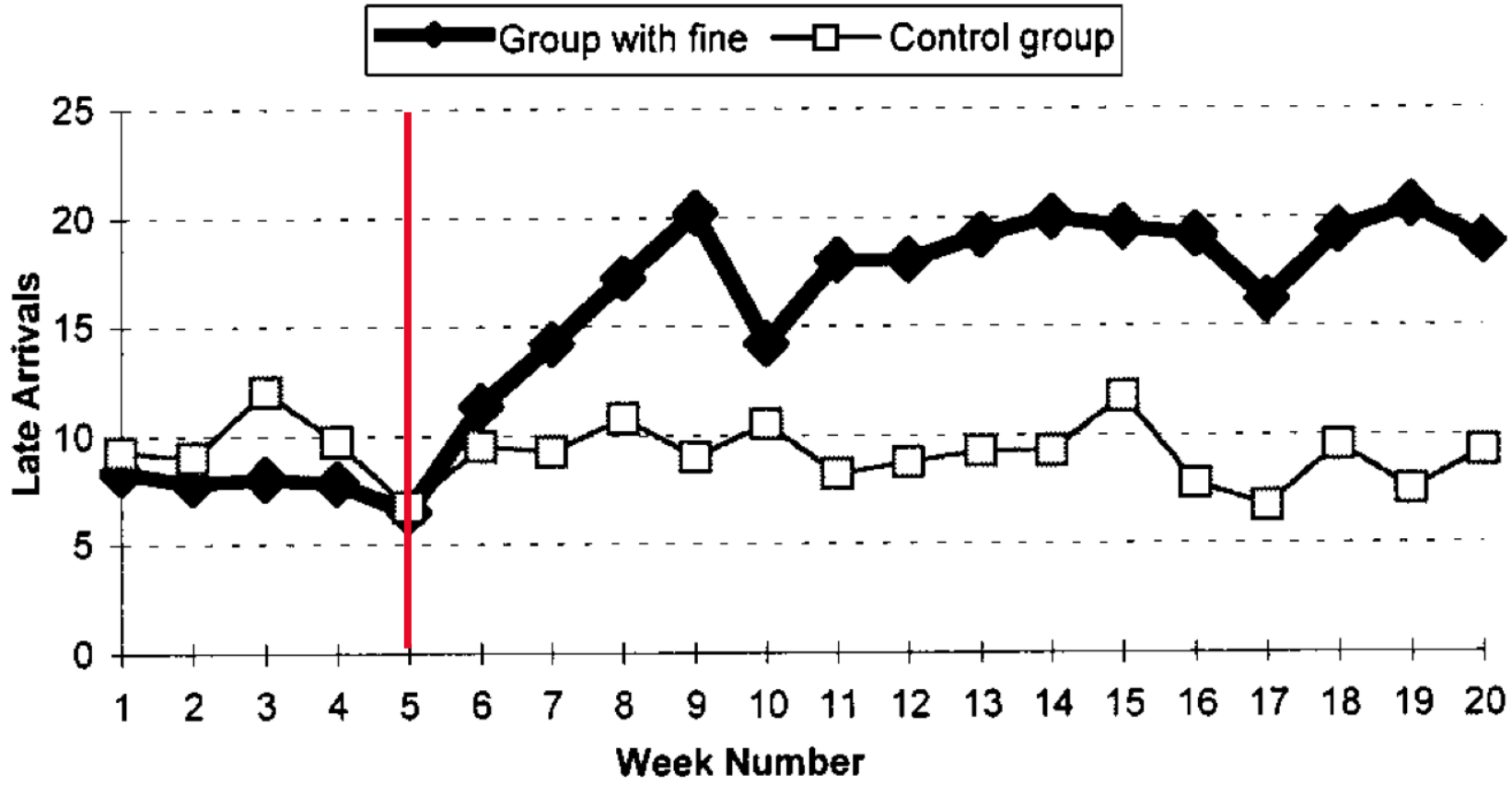

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What gives?

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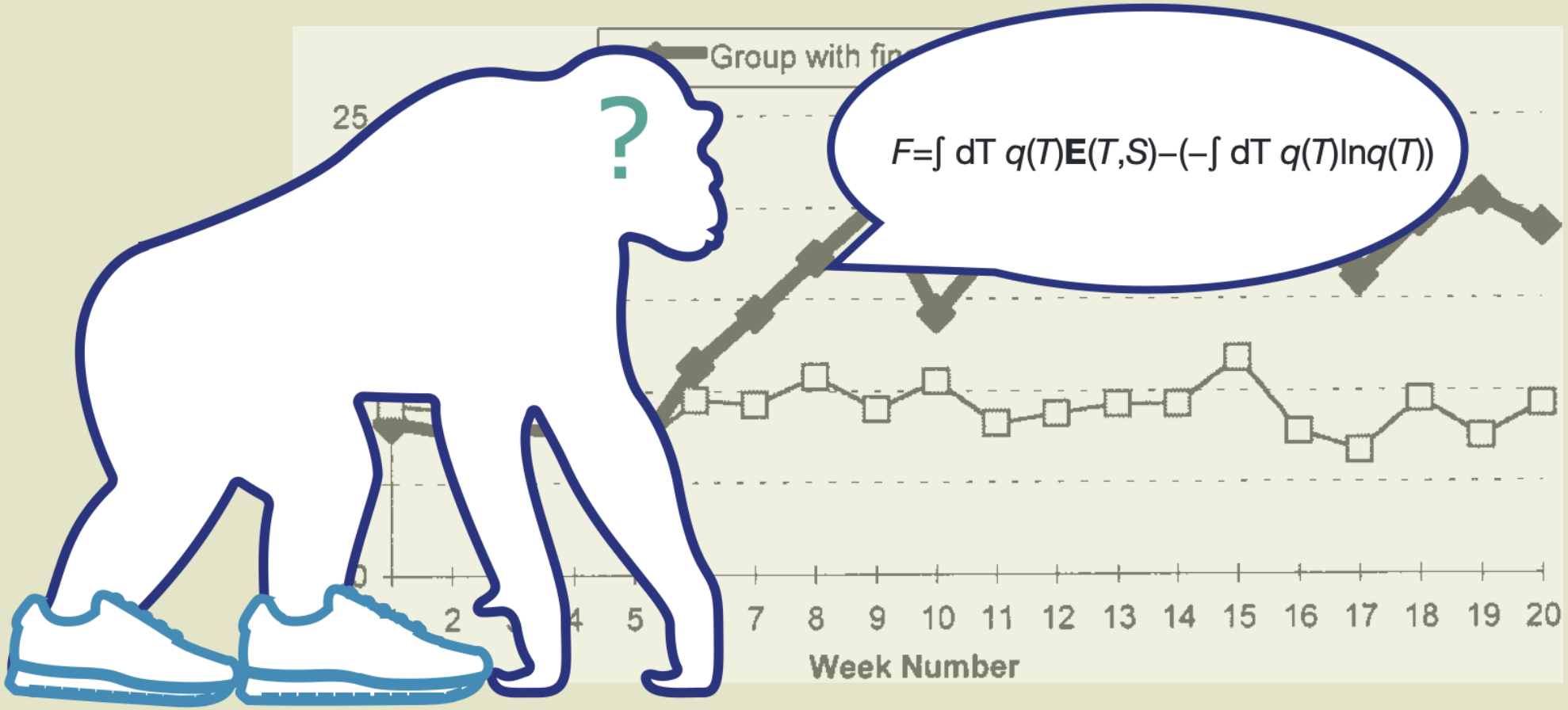

Gneezy, U., & Rustichini, A. (2000). A fine is a price. *The Journal of Legal Studies, 29(1)*, 1-17.

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What gives?

For climate behaviour change social comparison nudges are more effective than financial incentives

Bergquist, M., Thiel, M., Goldberg, M. H., & Van Der Linden, S. (2023). Field interventions for climate change mitigation behaviors: A second-order meta-analysis. *Proceedings of the National Academy of Sciences*, *120*(13), e2214851120.

Gneezy, U., & Rustichini, A. (2000). A fine is a price. *The Journal of Legal Studies, 29(1)*, 1-17.

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Or?

Consider you've decided to go to the cinema. The ticket costs 10 €. At the ticket counter you notice you have dropped a 10 € bill. Would you still purchase the ticket to see the movie?

Or?

Consider you've decided to go to the cinema. The ticket costs 10 €. At the ticket counter you notice you have dropped a 10 € bill. Would you still purchase the ticket to see the movie?

Consider you've decided to go to the cinema. You bought a 10 € ticket but at the cinema notice you have dropped the ticket. Would you purchase another ticket to see the movie?

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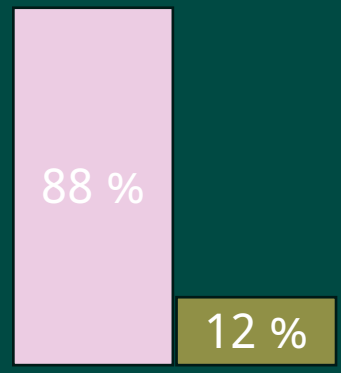

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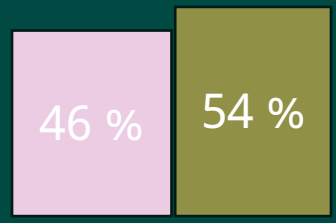

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(4481), 453–458.

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What does it mean for Circular Procurement?

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How does behaviour change?

- To change behaviour we must first understand
  - the context
  - the motivation
  - the barriers

- What is the system within which decision are made?
- What *kind* is the decision?
- What constraints are there?
- Who make the decisions?

- What *kind* is the motivation/barrier?
- What are the *psychological*, *physiological*, *environmental,* or *social* factors?

We must take research on Behaviour *seriously*

- Choices should be FEAST: Fun, Easy, Attractive, Social, and Timely (BIT UK, 2024 + Sunstein)
- **Experts should be literate on behavioral biases in reasoning to inoculate against the effect of unwanted heuristics and biases** (i.e. "Boosts", Grüne–Yanoff 2016)
- When designing policy we should use "behavioral speedbumbs" → stop-and-consider what is the wanted behavior and what are its barriers and motivators
  - "*How do I know this*"?
- Always measure!

Take-home messages for the policy perspective

A. *Consider* the behavioural components that affect decisions
B. *Apply* the extensive behavioural science literature to practice
C. *Collect* continuous and rigorous data to evaluate effectiveness, spillovers, and decay

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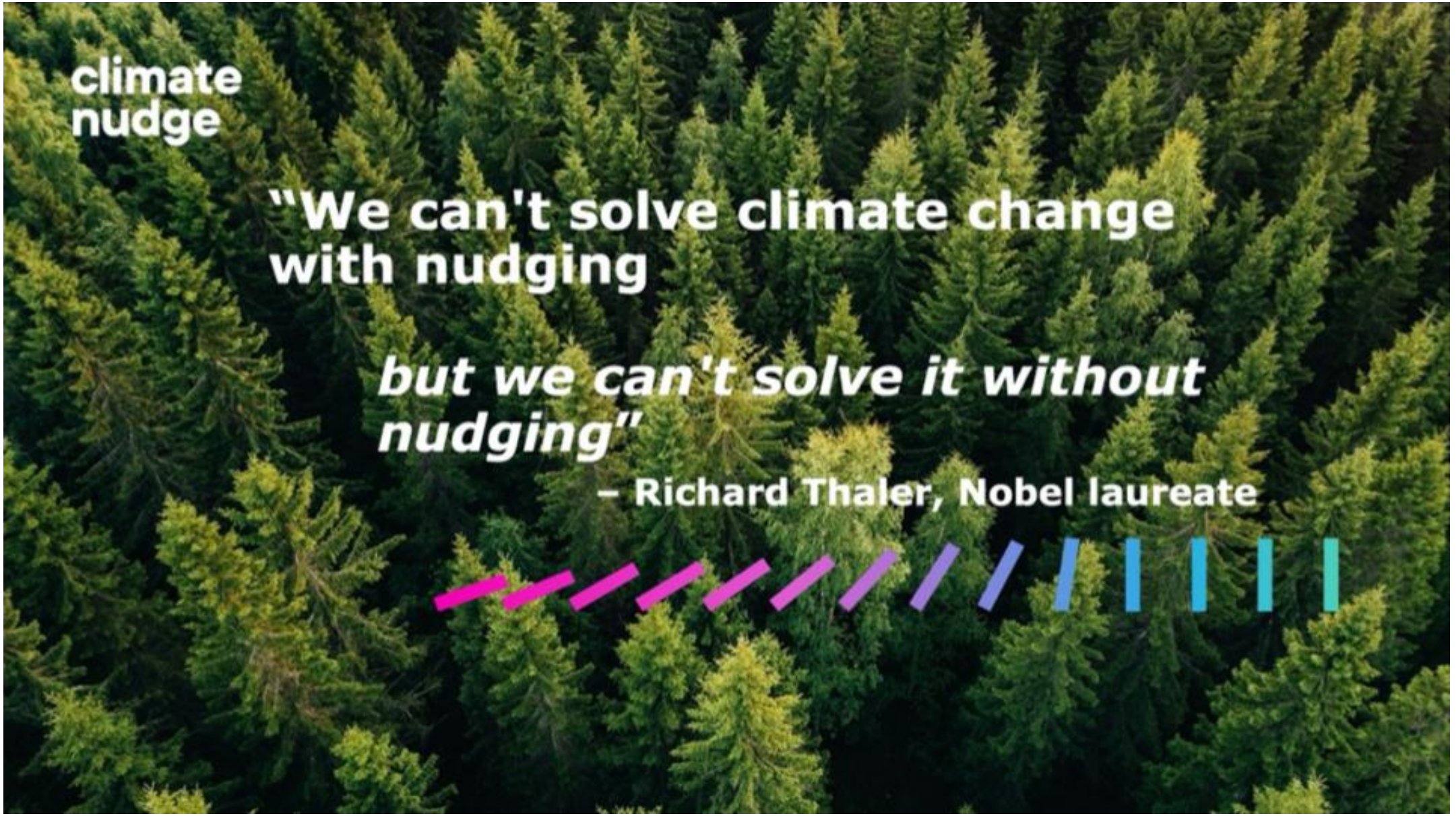
Take-home messages for all of us

A. Behaviour change is difficult but possible: "*Fail, fail again, fail better.*"
B. Small acts can have large systemic consequences
C. Not *either* individual *or* systemic change but *both/and*



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Get inspired.

Thank you!

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HSY 2025

HSY’s waste management and Ämmässuo Eco-Industrial Centre

HSY

Waste management locations

Ämmässuo Eco-Industrial Centre

- Sortti Station
- Composting facilities
- Biogas facility
- Gas power plants
- Waste treatment fields
- Final disposal areas
- Ekomo cooperation

Ämmässuo Eco-Industrial Centre

Area 200 hectares

= 280 football pitches

Biowaste

processing
and soil production

Energy recovery of biogas

produced from biowaste

Waste processing and treatment operations

e.g. crushing, mechanical sorting and transfer

ekomo

Ekomo cooperation

platform for business growth

Waste-to-energy plant ash and slag

reception and processing

Landfill operations for inorganic waste

final disposal areas for ordinary and hazardous waste

Post-treatment of disposal areas

including gas and water management

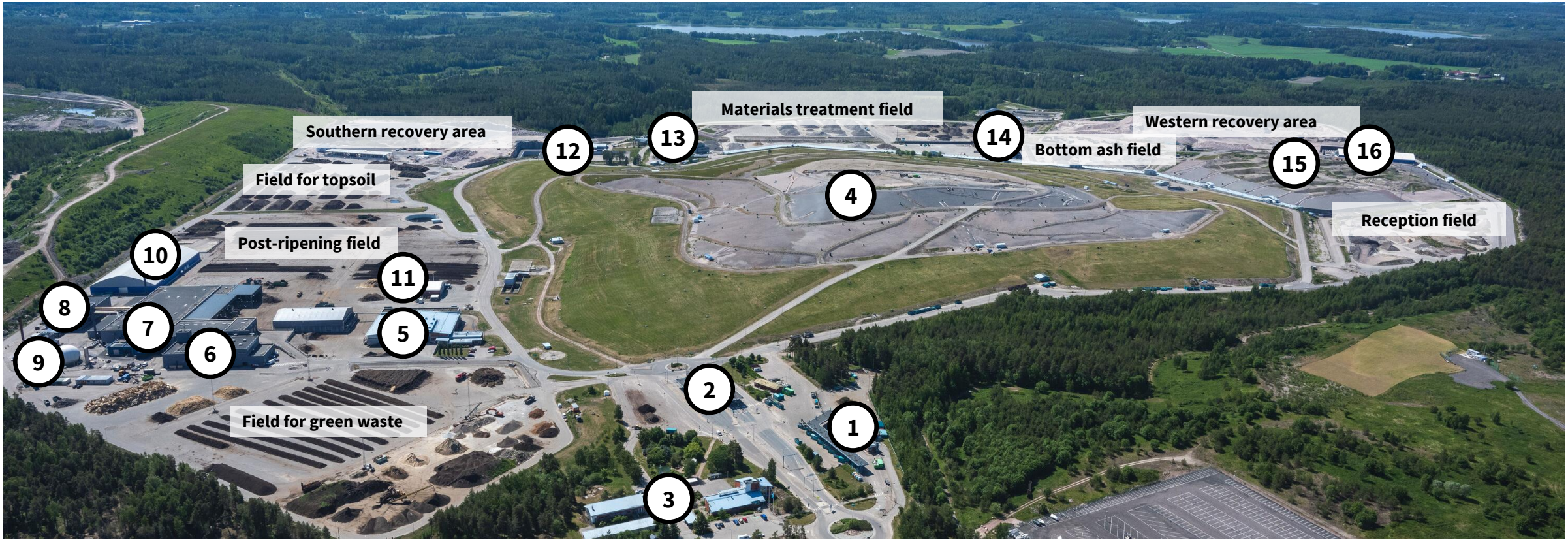
Landfill gas

energy recovery

HSY’s Eco-Industrial Centre in Ämmässuo

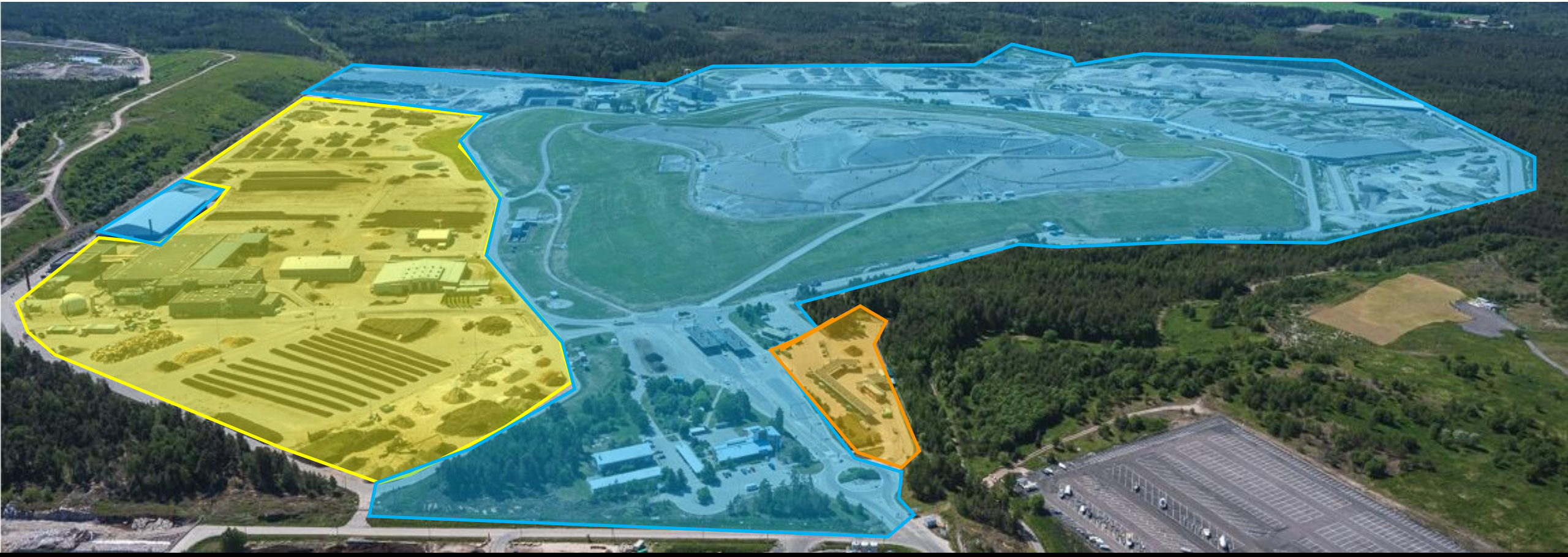
Ämmässuo Eco-Industrial Centre

1. Ämmässuo Sortti Station
2. Scale station
3. Office buildings
4. Old landfill
5. Old composting facility
6. Biogas facility
7. Composting facility
8. Biowasher
9. Biogas power plant
10. PIMA hall and field
11. Pyrolysis pilot plant
12. Water station
13. Gas power plant
14. Sorting station
15. Disposal area
16. Ash compartment



Field operations

Field areas



The operating areas of biowaste recycling are highlighted in yellow, the field in turquoise and the Sortti station in orange. The entire Ämmässuo Eco-Industrial Centre area, approximately 200 hectares, is fenced with protective green areas around.

Waste reception

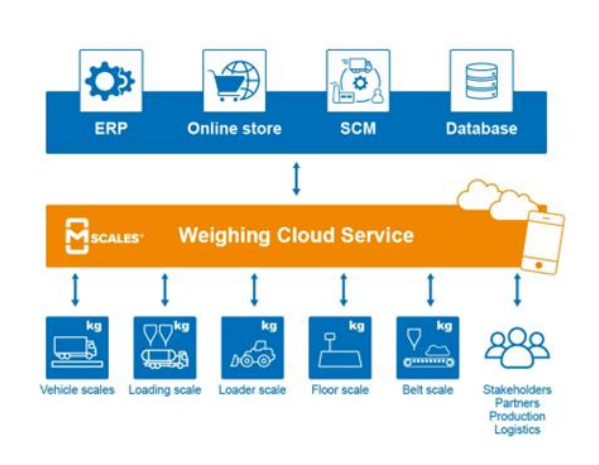
In 2024, the Eco-Industry Centre received 239,500 tonnes of waste.

In addition, the Sortti Station operating at the Eco-Industrial Centre, receives small loads of waste.

Weighings

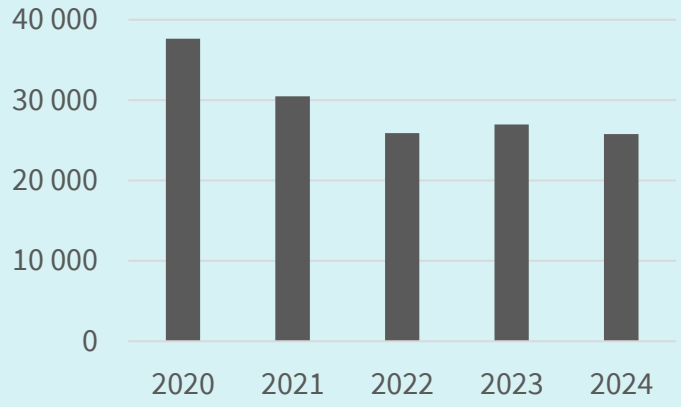
- The mScales weighing service is used with fixed weighing bridges and some of the wheel loaders integrated
- Most weighings are mobile
- Electronic waste transportation document integrated in the SIIRTO register

Cloud-based and browser-based



Code weighings

Number of weighings per year



There has been a transition from final disposal to waste upcycling

Mechanical sorting and processing of waste (crushing, screening and manual sorting) into recoverable fractions

Soil handling, with the material utilised in infrastructure construction and landfill surface structures

Receiving, baling and intermediate storage of mixed waste during maintenance breaks of the waste-to-energy plant

Treatment of residues of the waste-to-energy plant (fly ash, boiler ash and bottom ash)

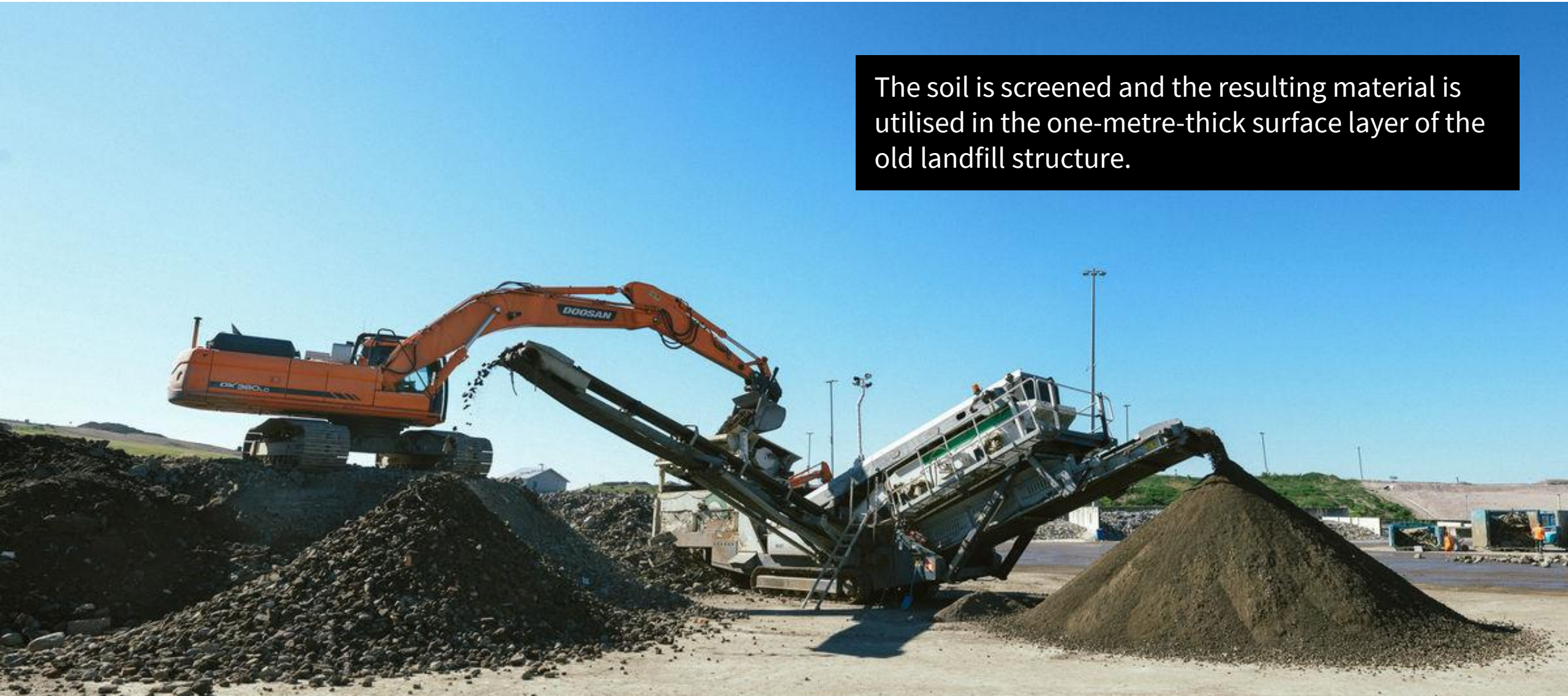
Intermediate storage of waste, e.g. property glass and impregnated wood

Mechanical sorting of waste into recoverable fractions

The sorting facility received approx. 11,300 tonnes in 2024.

Materials are sorted for use as energy and material.

Treatment of soil



The soil is screened and the resulting material is utilised in the one-metre-thick surface layer of the old landfill structure.

Treatment of non-combustible waste and concrete

Sortti Stations mostly supply non-combustible waste and concrete, which also contains a lot of combustible waste, such as plastic and wood.

First, combustible and recyclable components are roughly sorted out of the non-combustible waste by excavator.

In the actual processing, the materials are crushed and screened and waste is removed. The material is used in landfill structures or in sites with environmental permits outside the area.

Intermediate storage and crushing of wood waste

Wood waste is received in four fractions according to cleanliness: 1) clean, untreated wood 2) coated, treated wood 3) stumps and 4) brushwood.

All wood is crushed and any metals are collected with magnets for recovery.

Clean wood, stumps and brushwood are used as structure materials in biorecycling. The surplus wood chips and all coated wood is used outside the area as fuel for energy production.

Impregnated wood is hazardous waste. It is received in an interim storage at Ämmässuo, from where it is sent elsewhere for treatment.

Receiving, baling and intermediate storage of mixed waste during maintenance breaks of the waste-to-energy plant

24,100 tonnes of mixed waste received and baled in 2024.

Intermediate bale storage

The bale storage is emptied during the heating season. In 2024, 14,600 tonnes of waste was transported to the waste-to-energy plant.

Fly ash and boiler ash stabilisation and final disposal

Received 4,600 t/2024

Hazardous waste due to high concentrations of zinc, copper, lead and chloride.

Stabilised with fine aggregate from bottom ash and water. This prevents the dissolution of harmful contaminants.

Disposed of in a hazardous waste landfill.

Bottom slag treatment

Received 69,800 t/2024

Magnetic and non-magnetic metals are separated for recycling.

What remains is aggregate, screened into fractions depending on the grain size, which can be used to replace virgin aggregates according to the Government Decree on the Recovery of Certain Wastes in Earth Construction, also outside the area. Mixtures that have been used in the division structures of the fields in the area have been made from the fractions.

Landfill treatment and final disposal

Final disposal area, 13 hectares (readiness for a 55-hectare area)

- Commissioned in 2007
- The final disposal of mixed household waste in HSY’s collection area ended in 2014 when Vantaa Energy's waste incineration plant was commissioned
- The final disposal of organic waste was prohibited by law in 2015

Approximately 1–2% of the waste received ends up in landfill. The organic matter content (TOC) of landfilled waste must be less than 10%. Only hard-to-recycle materials are disposed of, e.g. asbestos and mineral wool

Landfill treatment and final disposal

Old landfill, 53 hectares

- In use 1987–2007.
- More than 11 million m^3 of final-disposal waste.
- Waste filling height over 40 m.
- In 2023, dense membrane structures with drying layers were completed. The construction of a one-metre-thick top layer will continue until the 2030s.
- Biodiversity is supported by establishing meadows over approximately 35 hectares of the surface structure. Insect hotels have also been built in the area.

A blooming landfill increases biodiversity

The goal of the strategy program is
to create 35 hectares of meadows in Ämmässuo.
The new habitat is significant for declining pollinator populations.

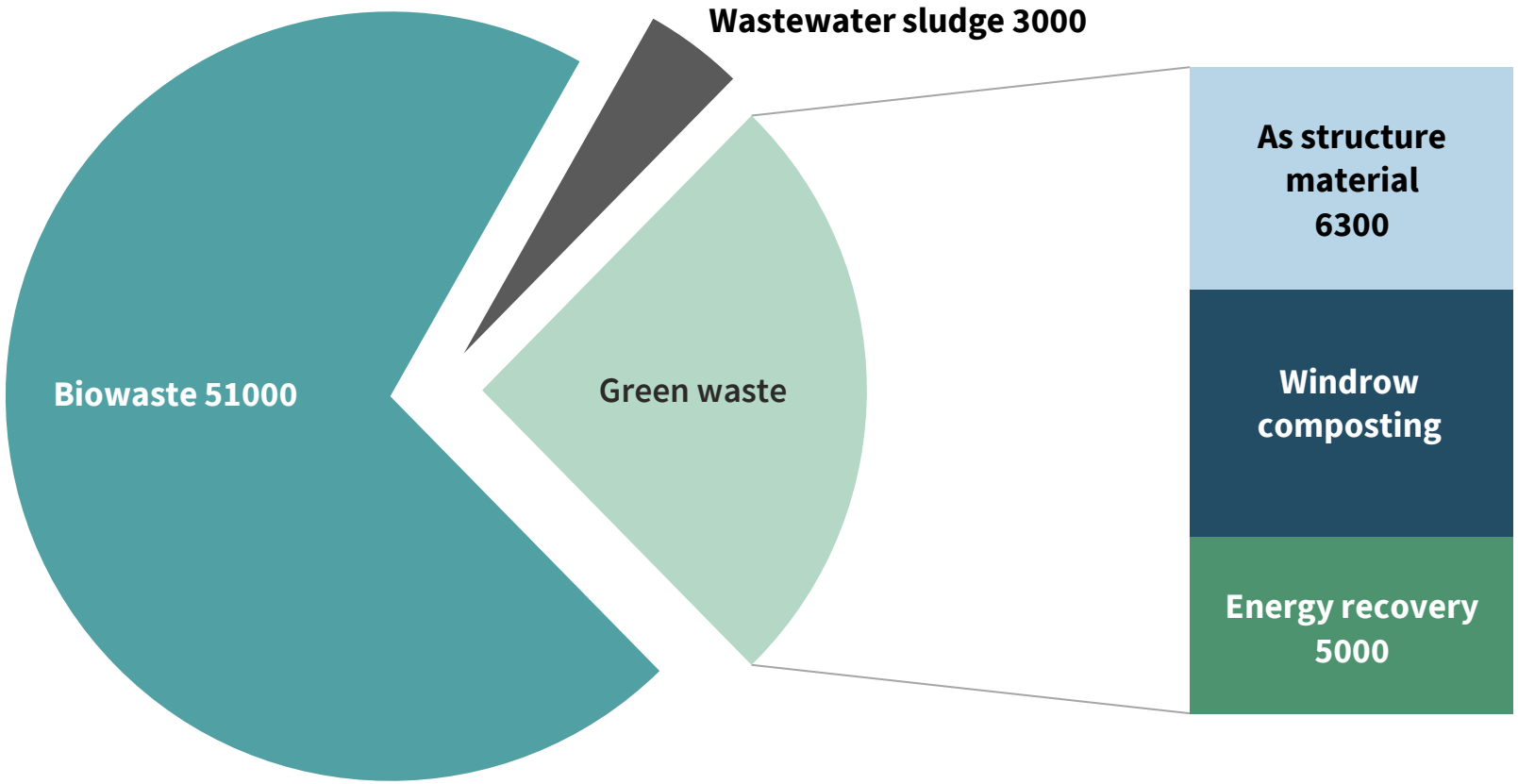
- A management and development plan has been drawn up for the old landfill.
- Various meadows are established in connection with the finishing of the surface structures of the landfill.
- Grassy areas are managed in such a way that meadow plants can spread to the areas.
- Species monitoring began in 2024.
- The eco-industrial centre is actively combating invasive species.

Biorecycling

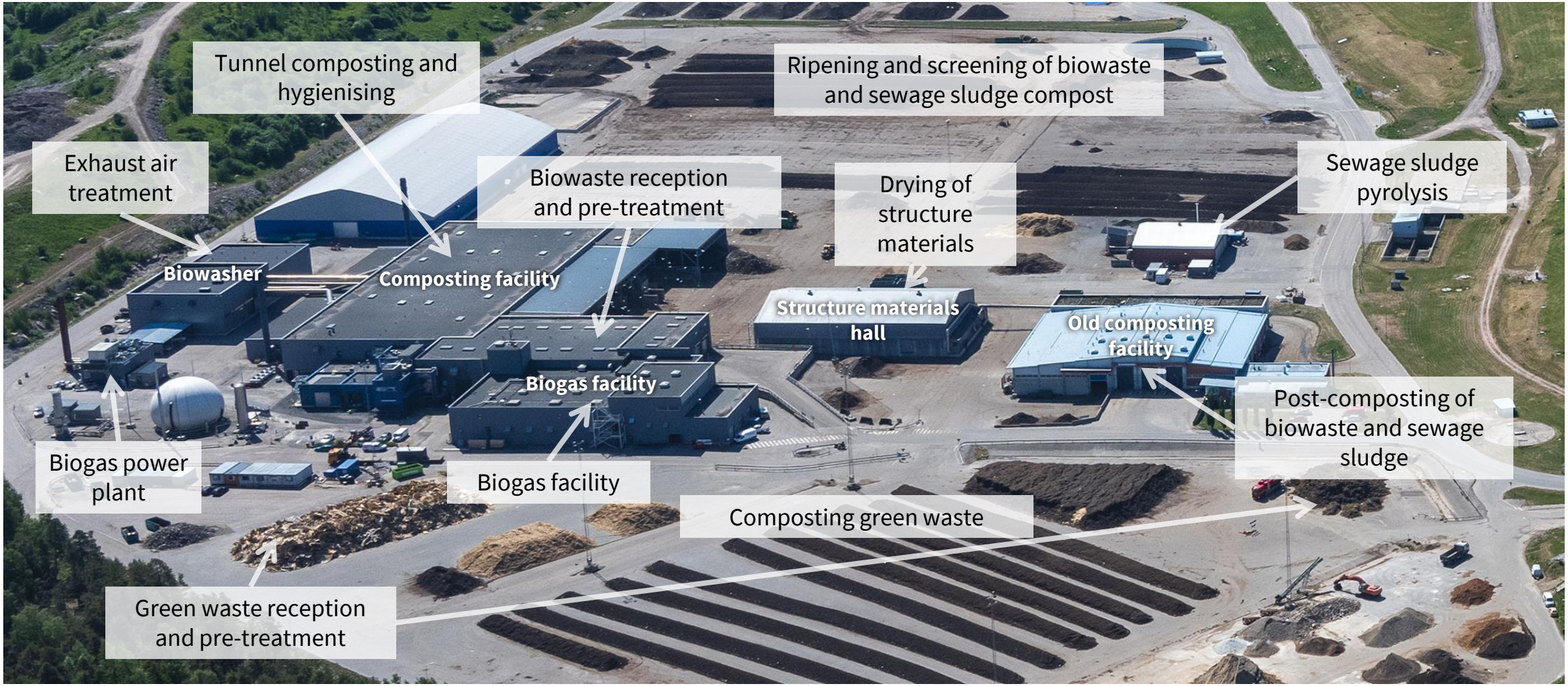
History of biorecycling

- Separate collection started in the Helsinki Metropolitan Area in 1993
- First tunnel composting facility in 1998
- Second tunnel composting facility in 2006
- Biogas facility in 2015
- Biogas CHP in 2016
- Structure material drying hall in 2018
- Pyrolysis pilot plant in 2020
- Digestate processing plant in 2025

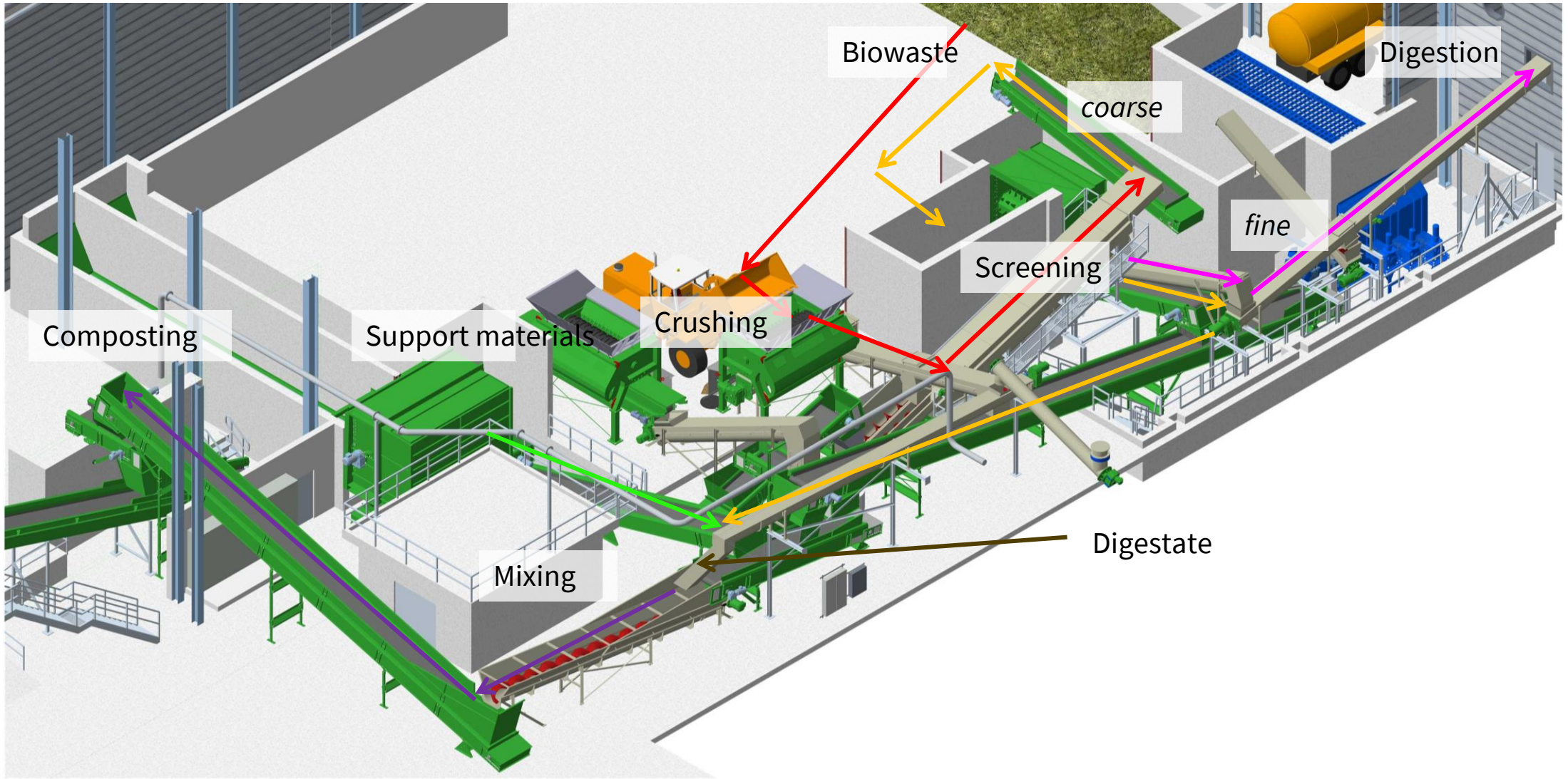
Tonnes of material processed per year



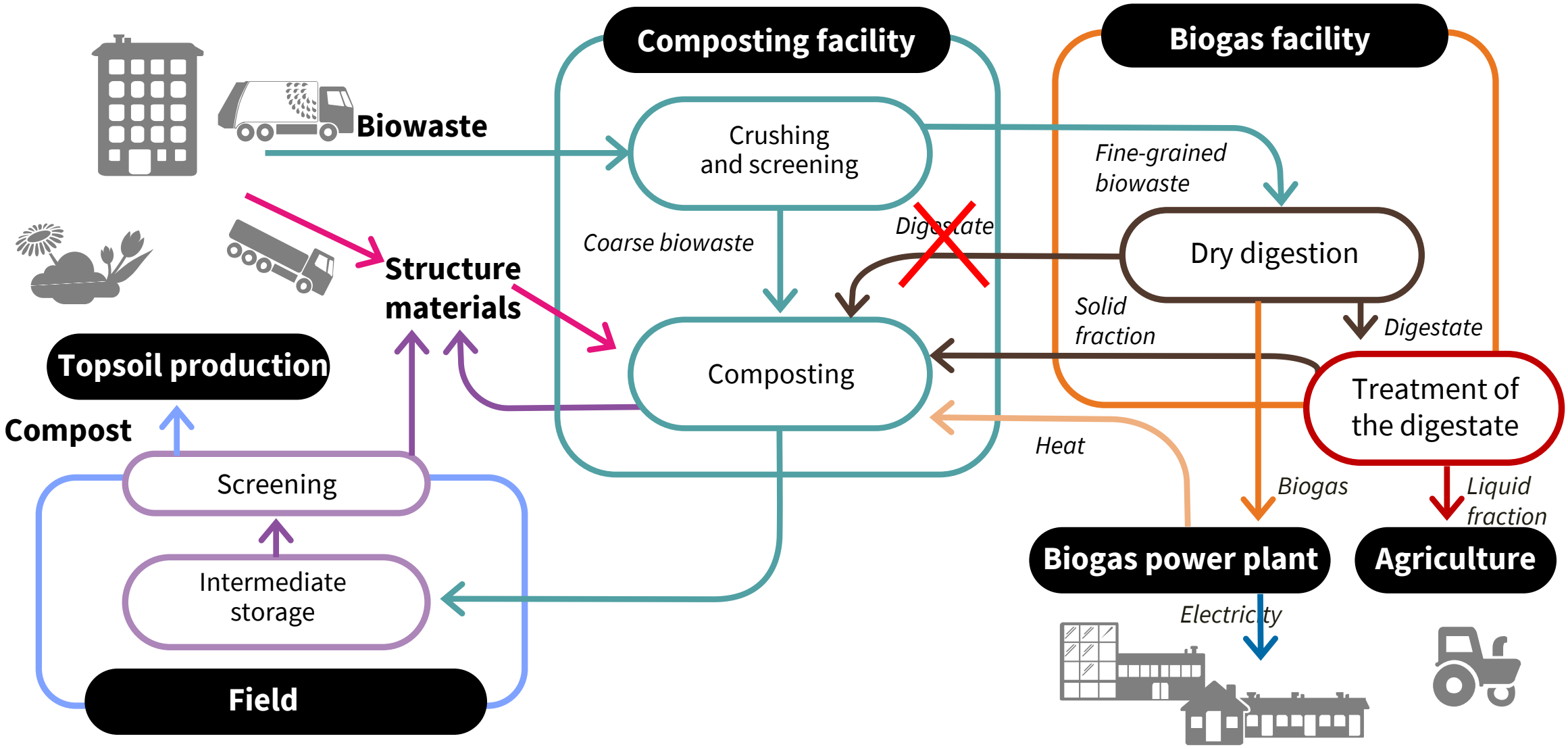
Biorecycling area



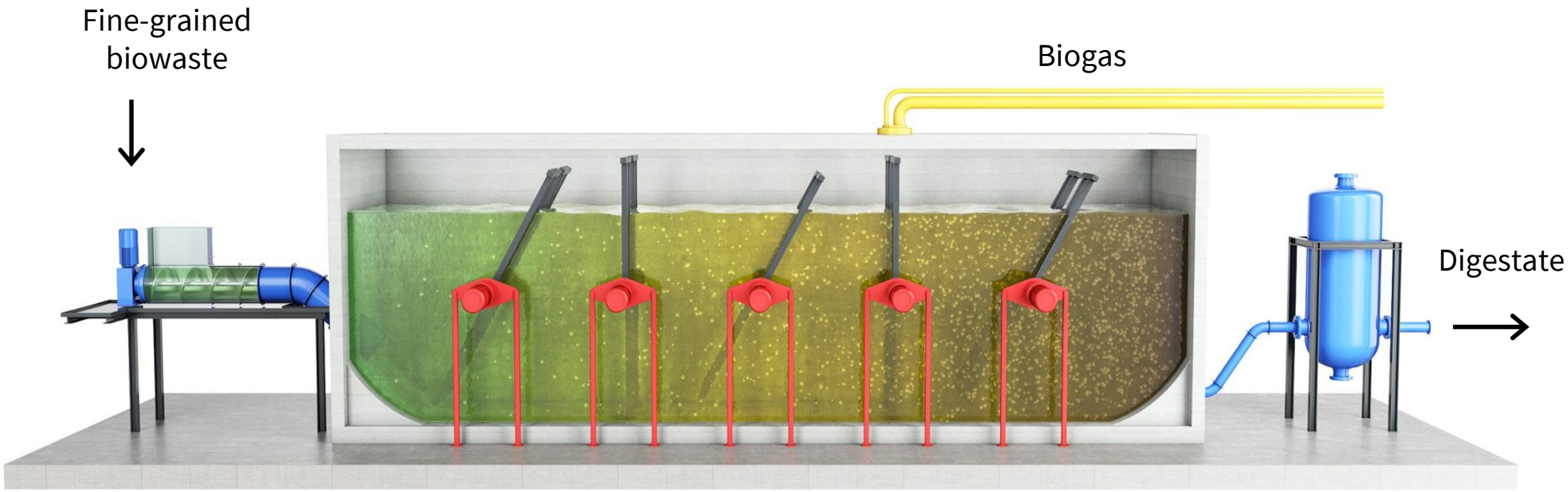
Pre-treatment of biowaste



Overview of biowaste treatment (from 2026)



Biogas reactor



Biogas power plant

Compost quality monitoring and utilisation

Compost quality monitoring and utilisation (15,000 t/a)

Monitoring according to fertiliser legislation (approx. 40 parameters)

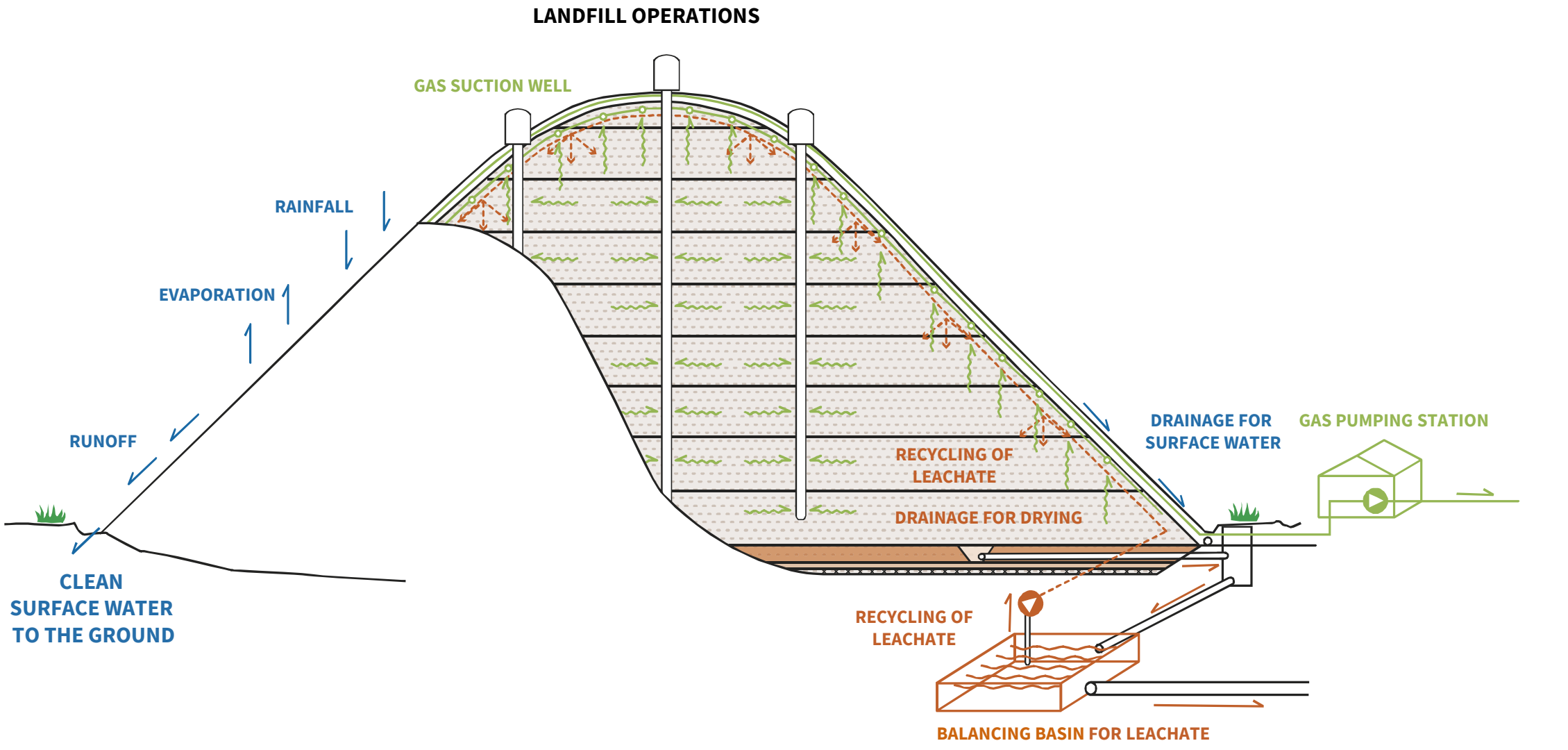
Use of compost mainly in topsoil production

Biogas utilisation (3.9 million m^3/a)

Combined electricity and heat generation with gas engines and ORC

Landfill gas and water management

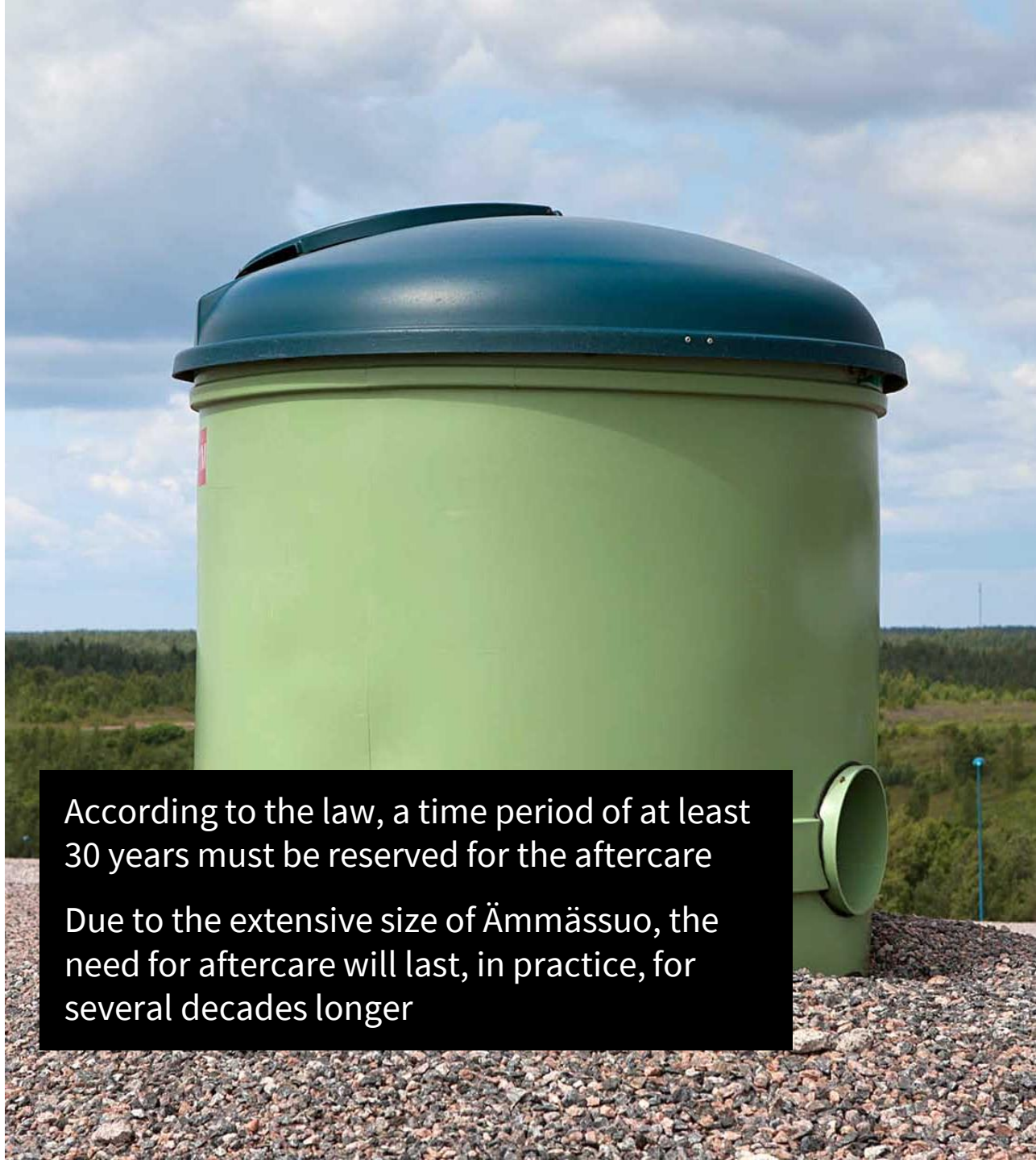
Illustration of a closed landfill



Landfill aftercare

Aftercare includes

- Monitoring of leachate collection and sewer system and prospective maintenance of leachate recycling for maintaining gas formation
- Monitoring of the gas collection system as a whole and pipe by pipe, as well as monitoring of the volume and methane concentration of collected gas
- Monitoring of the surface insulation structures and preparing for remodelling and repairing them due to indentations
- Environmental monitoring

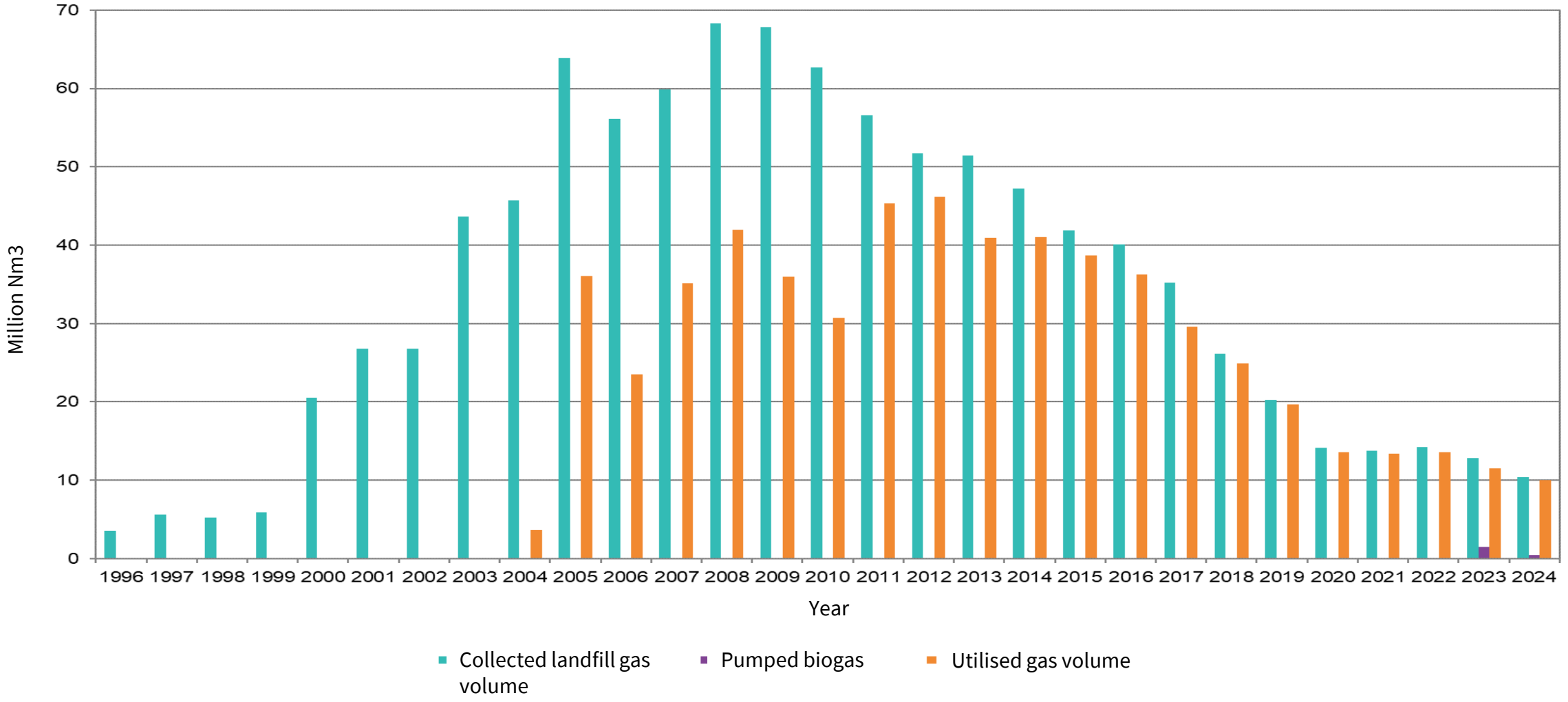


According to the law, a time period of at least 30 years must be reserved for the aftercare

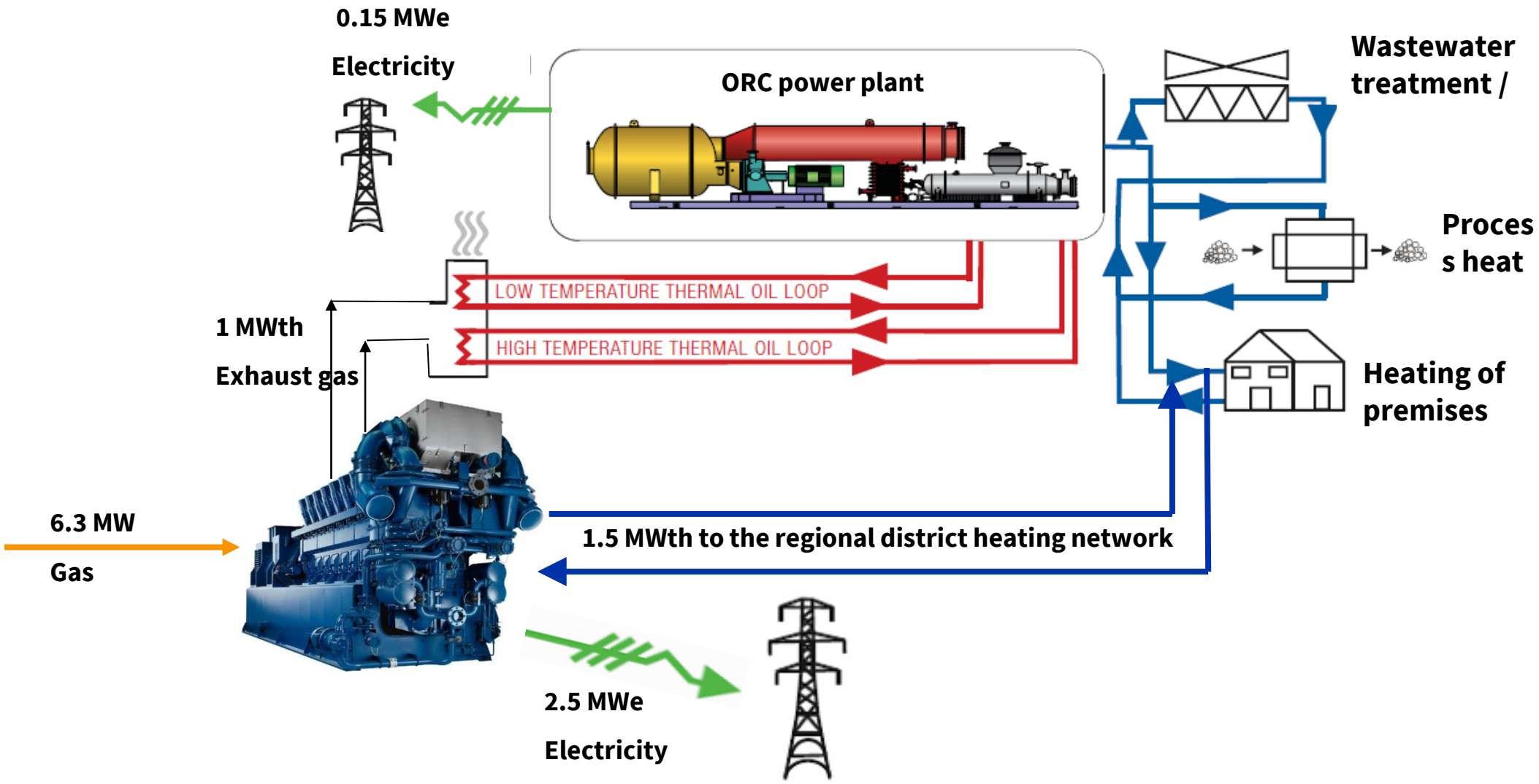
Due to the extensive size of Ämmässuo, the need for aftercare will last, in practice, for several decades longer

Landfill gas treatment

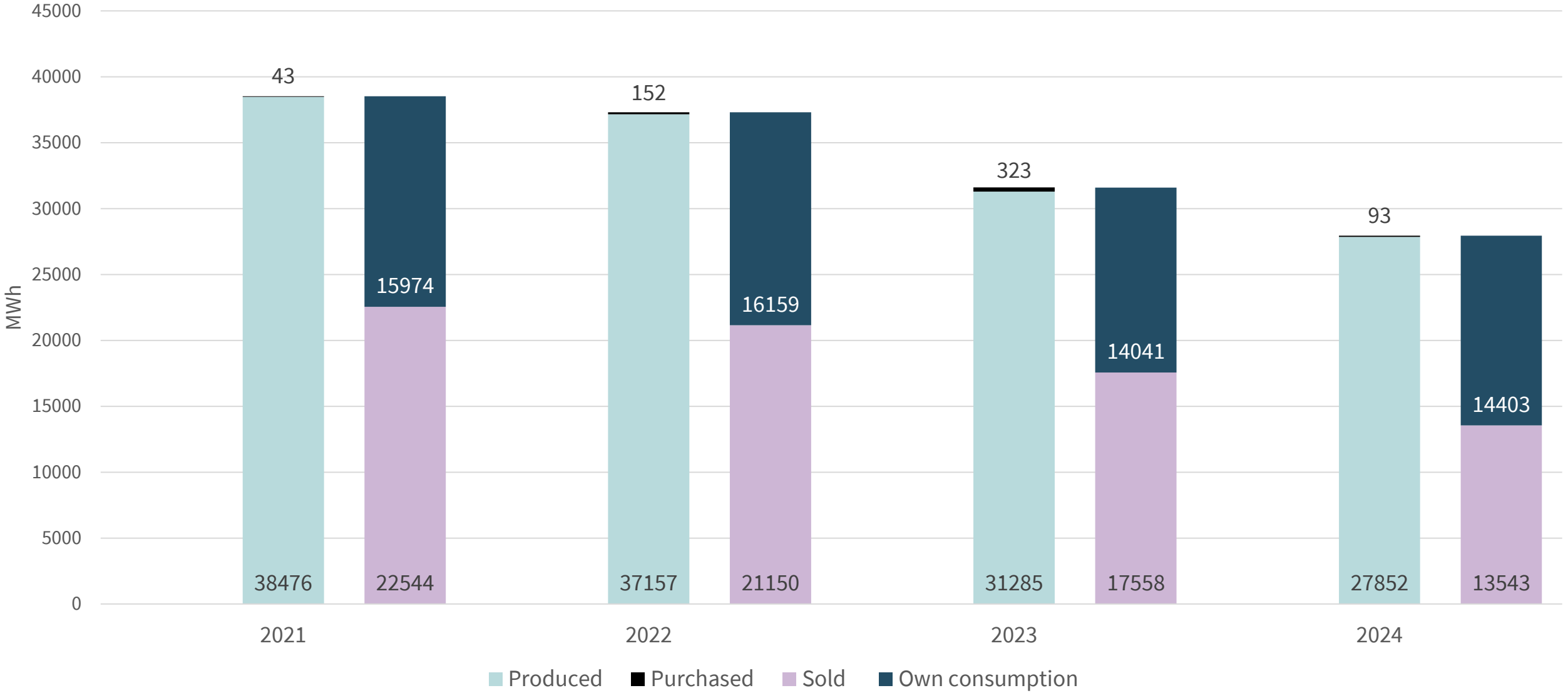
Landfill gas treatment



Power plant energy production and heat utilisation



Energy production and consumption in the Ämmässuo area



Landfill and biogas

Landfill gas collected from the final disposal area amounted to 7.50 million Nm^3 (36 GWh) in 2024.

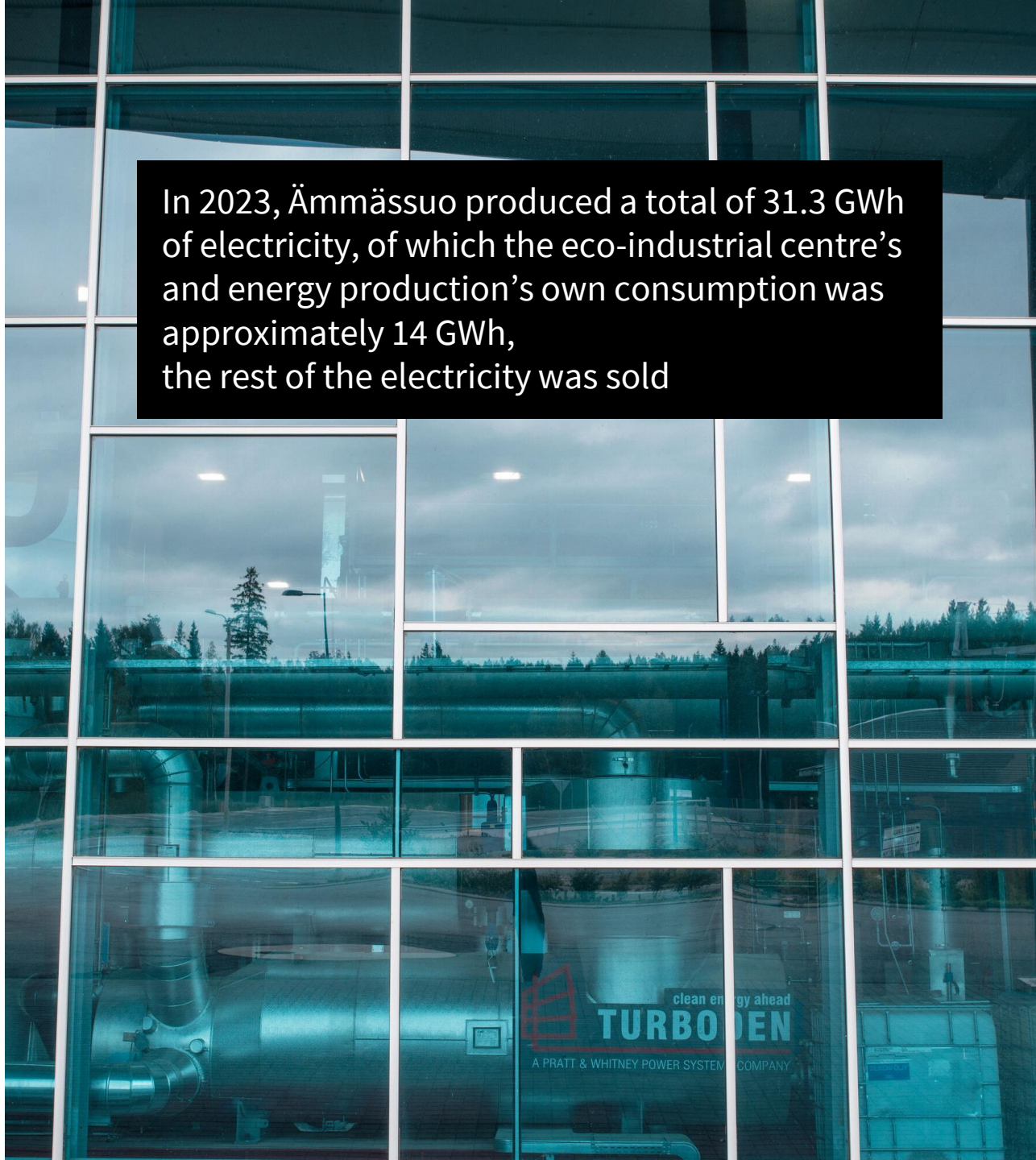
Landfill gas (CH_4 49%) was collected from the old landfill, amounting to 2.88 million Nm^3 (14 GWh)) in 2024.

Of the collected gas, 97 per cent was used in combined electricity and heat production at the gas power plant.

A total of 4,898 MWh of district heat produced by the gas power plant was used to heat various properties in the eco-industrial centre area.

The biogas facility produced 4.3 million Nm^3 of biogas (CH_4 50%) in 2024.

5,878 MWh of heat produced by the biogas power plant was utilised in the area



Water management

Ensures that contaminated water
does not escape into the environment

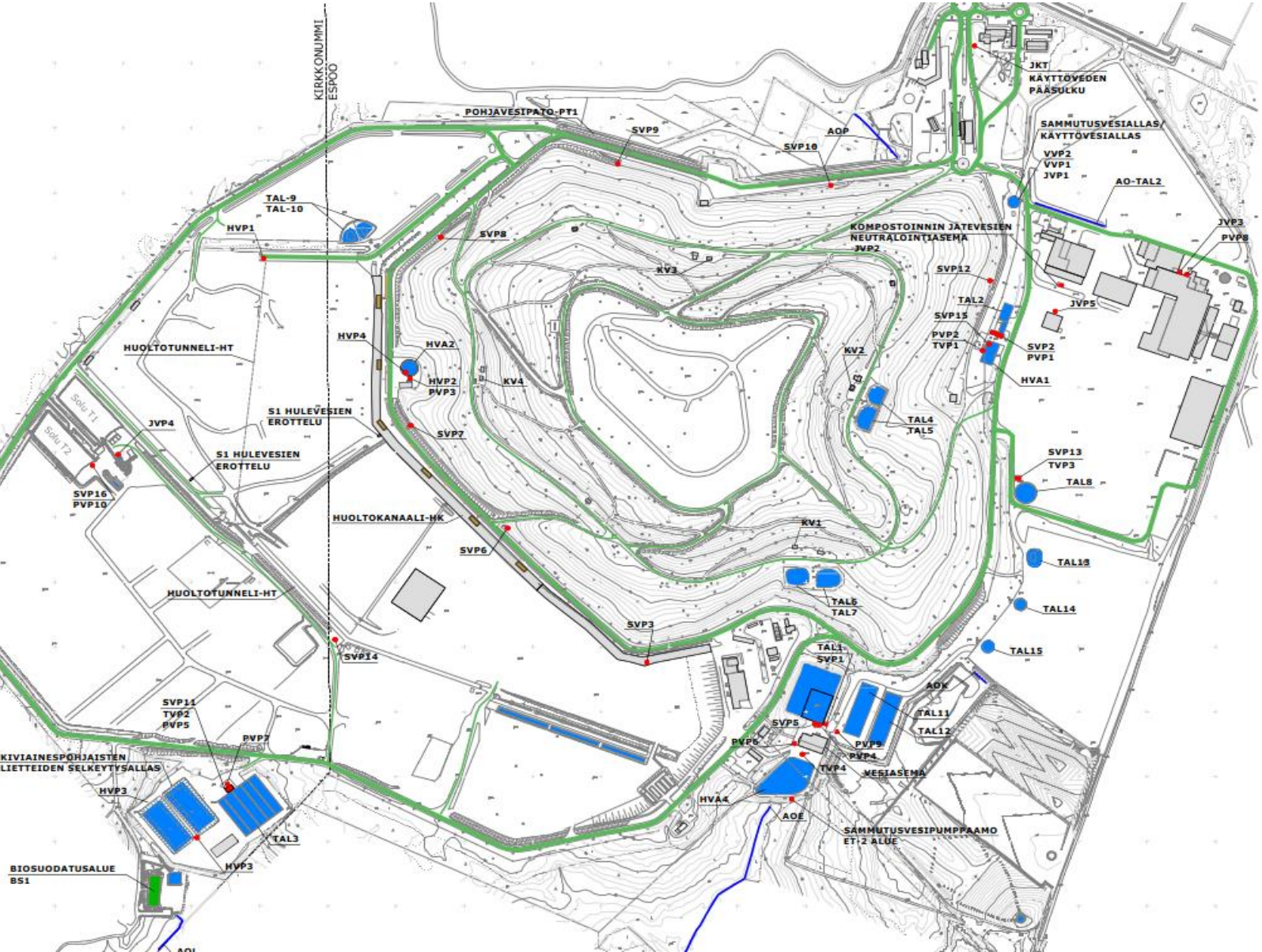
Wastewater:

- Leachates
- Process water from composting
- Sanitary water
- Water from waste treatment and storage areas
- ~ 600,000 m^3/a
- Pumped to Blominmäki wastewater treatment plant

Clean surface water:

- Irrigation, washing, dust binding, fire extinguishing
- Led to open trenches
- Online monitoring
- Field measurements

Water management structures



MERKINNÄT:

Pumppaamo

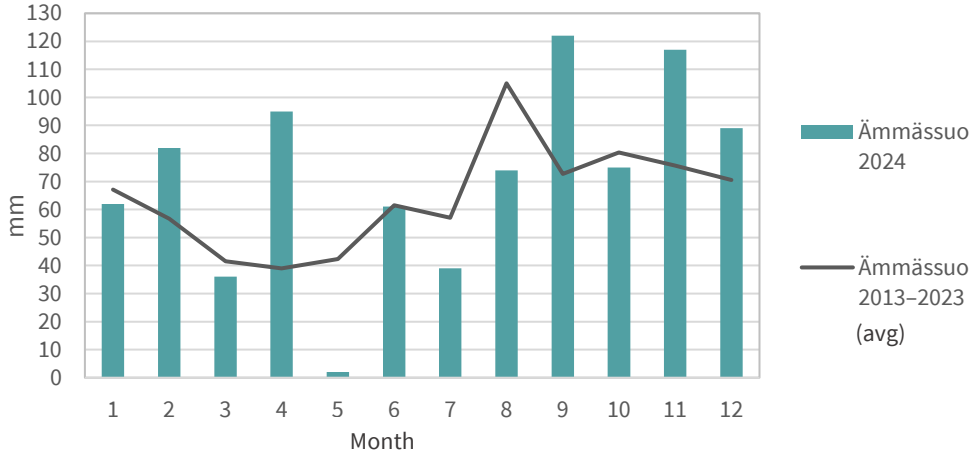
Allas

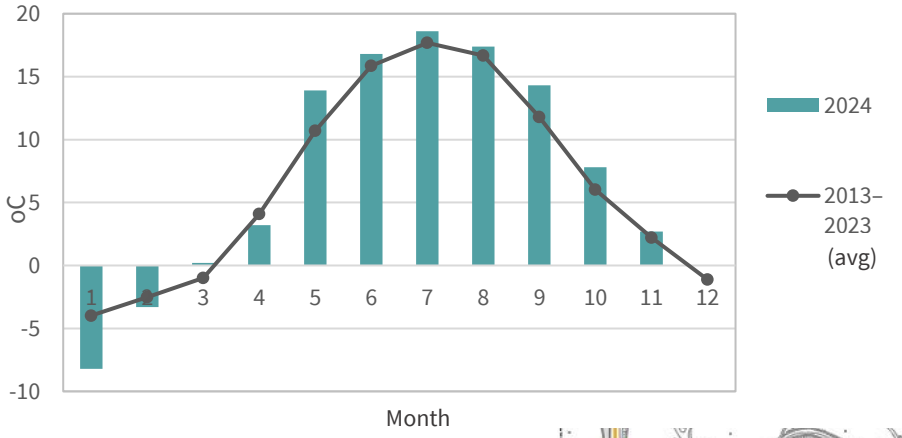
ALTAAT	
TAL	Suotoveden tasausallas
HVA	Hulevesien tasausallas
PUMPPAAMOT	
HVP	Hulevesipumppaamo
JVP	Jätevesipumppaamo
PVP	Perusvesipumppamo
SVP	Suotovesipumppaamo
TVP	Teknisen veden pumppaamo
VVP	Varavesipumppaamo
KV	Kierrätysveden säätöasema
Avo-ojat	
AOE	eteläinen
AOK	kaakkoinen
AOL	luonainen
AOP	pohjoinen
AO-TAL2	koillinen

~100 km of pipelines
20 balancing basins
40 pumping stations

Environmental monitoring

Weather





Ämmässuo air quality and weather conditions on HSY's website: https://www.hsy.fi/en/air-quality-and-climate/air-quality-in-the-helsinki-metropolitan-area/concentrations-of-air-pollutants/ammassuo-air-quality-and-weather-conditions/

Ämmässuo air quality annual report 2024: https://julkaisu.hsy.fi/ilmanlaatu-ammassuolla-vuonna-2024.html

Air quality monitoring

- Thoracic particles 2024 (PM10)
  – Annual average 9 µg/m^3
- Fine particles 2024 (PM2.5)
  – Annual average 4.3 µg/m^3
- Odour feedback 174
- In 2024, the annual average TRS concentrations were 0.2 µg/m^3 (TRS1) and 0.1 µg/m^3 (TRS2)

Fugitive methane emissions at the old landfill were 129 tonnes (fugitive carbon dioxide emissions 313 tonnes) and in the final disposal area 253 tonnes (fugitive carbon dioxide emissions 743 tonnes)

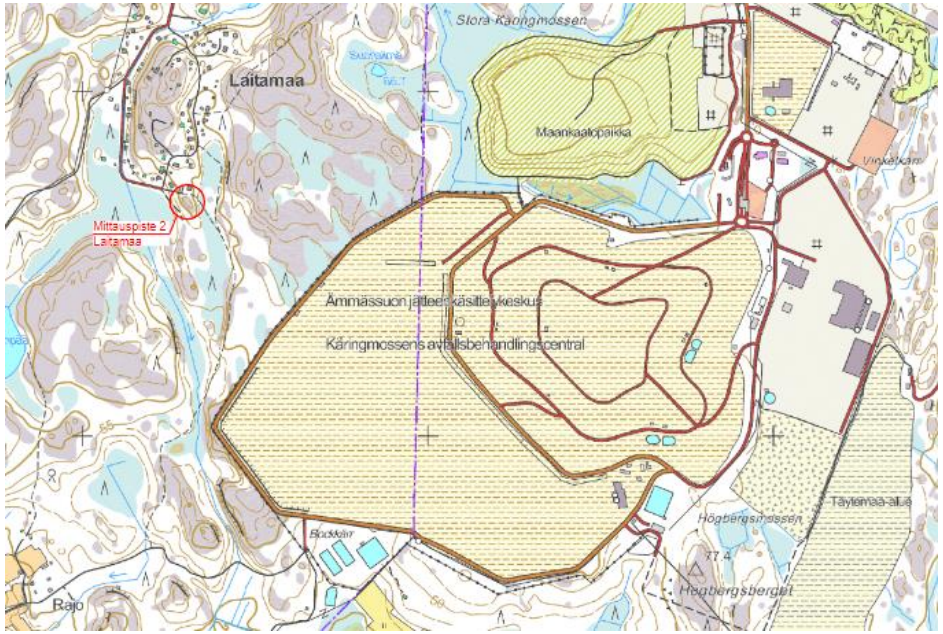
Noise monitoring

Self-monitoring of noise

Measurements 3–4 times a year

3 times during 2024

Equivalent noise level limit value 55 dB (L_{Aeq})



Water monitoring

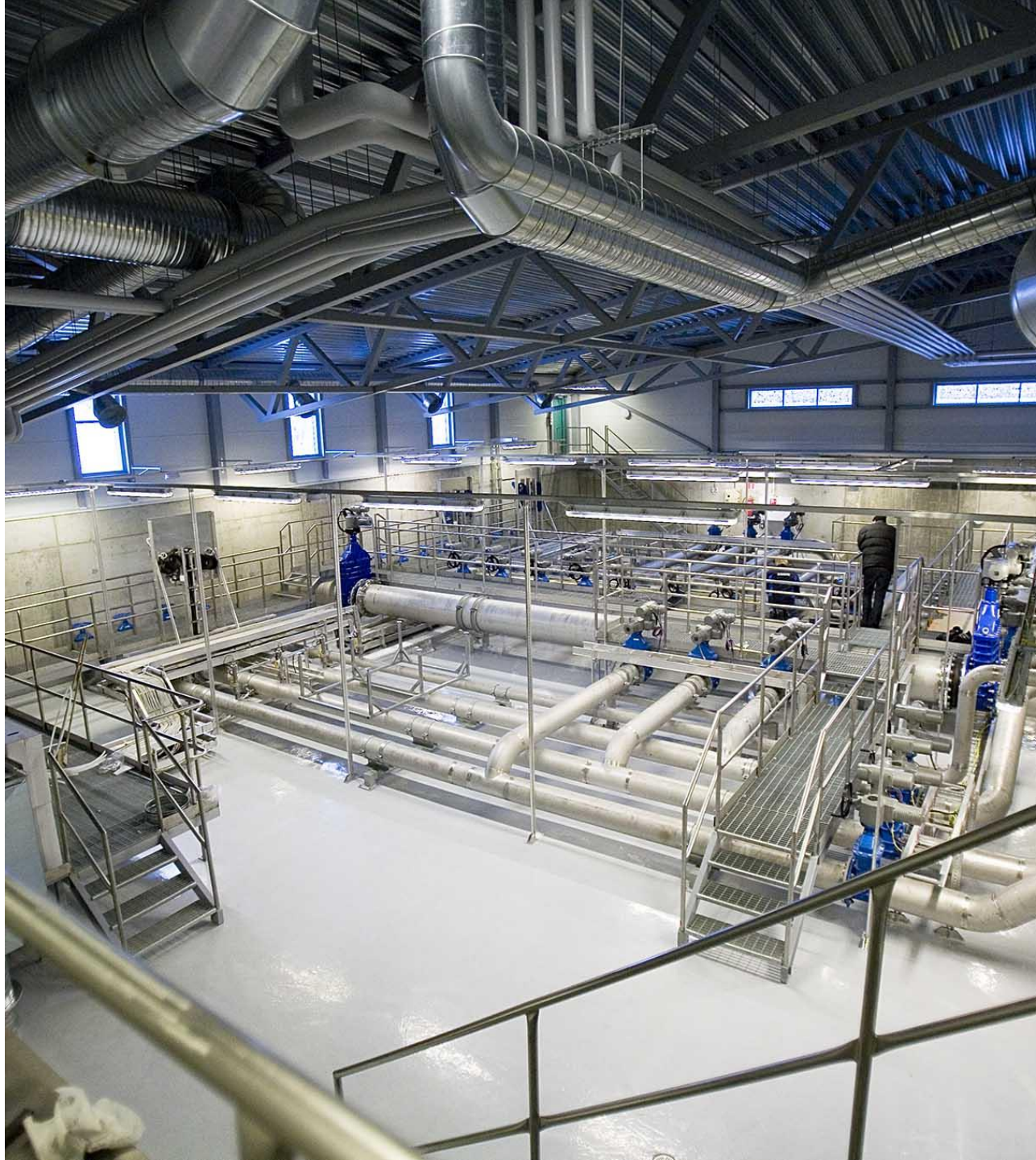
Redirection of wastewater for treatment to Blominmäki wastewater treatment plant

Limit values set in the industrial wastewater agreement

Ensures that contaminated water does not escape into the environment

Clean surface water:

- Led to open trenches
- Online monitoring
- Field measurements



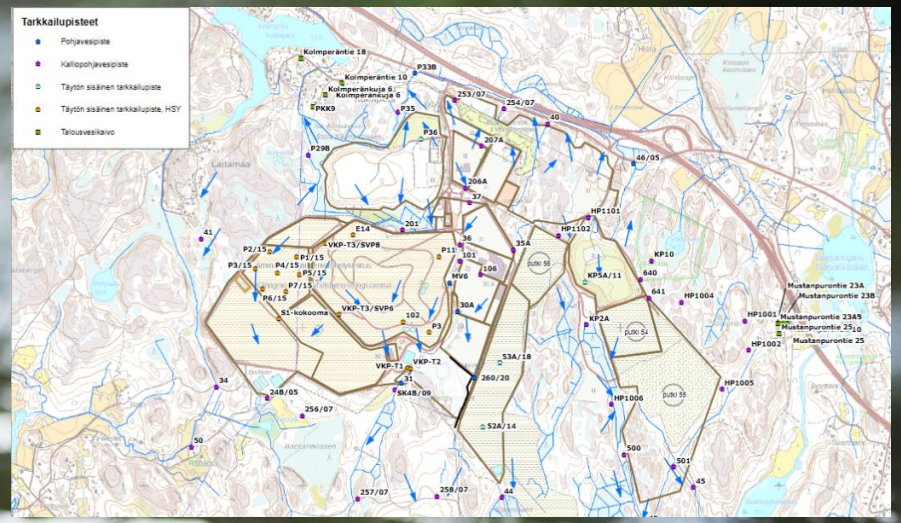
Collaborative water monitoring in the Ämmässuo-Kulmakorpi area

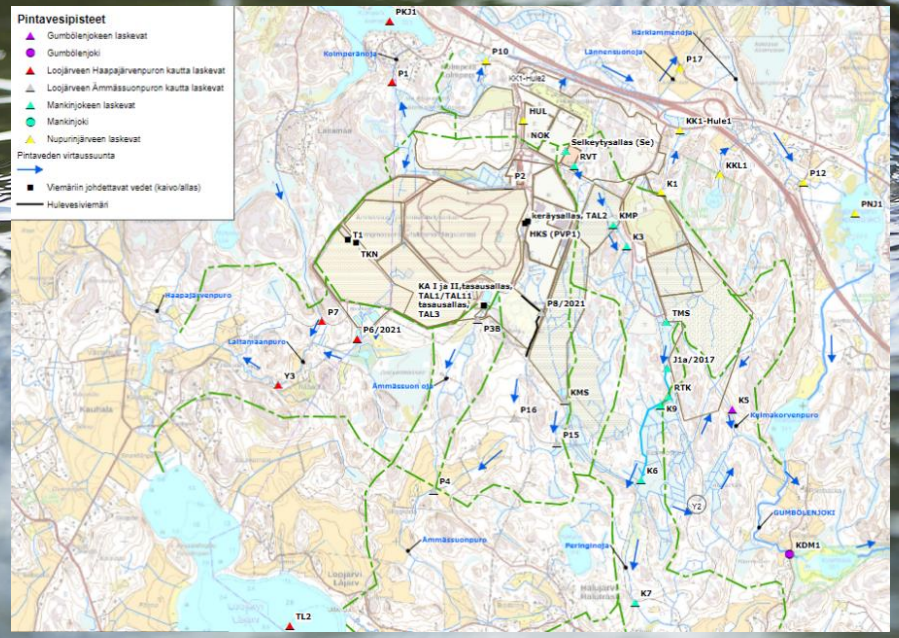
Collaborative water monitoring in the Ämmässuo-Kulmakorvi area in cooperation with other operators in the area – HSY is responsible for this

Surface and groundwaters

- Nearby lakes
- Wastewater
- Domestic water wells

Sampling and laboratory analyses 1–6 times a year, depending on the point





Other environmental monitoring

Methane measurements and emission measurements of power plants

Birds
Counts (2003–)

Micrometeorological measurements of emission (Finnish Meteorological Institute): methane and carbon dioxide emissions

Pests
and littering

Monitoring of landfill structures and processes and settlement monitoring

Environment and green areas
Control of invasive species
Pollinator bar
Meadows

Pollinator bar

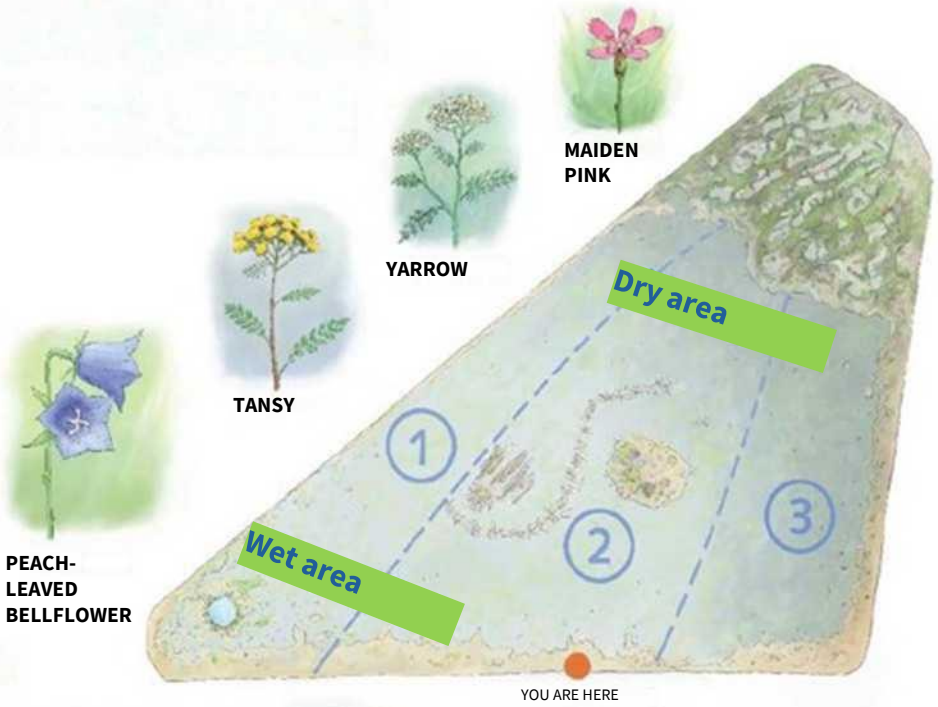
Pollinators need Finnish wildflowers. We have sown about two dozen species of them here.

Invasive species easily replace wildflowers, and we are trying to combat them with stone ash.

It has been applied in layers of varying thickness:

- 10 cm to zone 1
- 20 cm to zone 2
- 30 cm to zone 3

Stumps, rotten wood and canes placed in the area are good nesting material for pollinators.



POLLINATOR BAR'S LOYAL CUSTOMERS

BUMBLEBEES

Big, fluffy
37 species in Finland
Nest in colonies
Important pollinators, pollinating more than 90% of our forest berries, for example

WILD BEES

Small, often fluffy
Approx. 190 species in Finland
Nest individually in ground or wood cavities
Important pollinators

HOVERFLIES

Size and appearance vary, little hair
Approx. 350 species in Finland
Do not sting but mimic aculeatas

WESTERN HONEY BEE

Medium-sized, short hair
Yellowish brown
Nest in colonies
Domesticated

The pollinator bar was founded in 2019.

Cooperation

HSY NCC Viikki vyöhyke ry

Ekomo cooperation

Ekomo cooperation

The Ekomo cooperation is a platform for the circular economy that provides a framework for activities promoting material and resource efficiency.

The aim is to bring together different actors to develop new solutions for the circular economy together.

ekomo

Circular economy platform and enabler

We offer companies, for example, suitable

- areas and infrastructure,
- materials,
- cooperation network and
- services, such as machine and weighing services

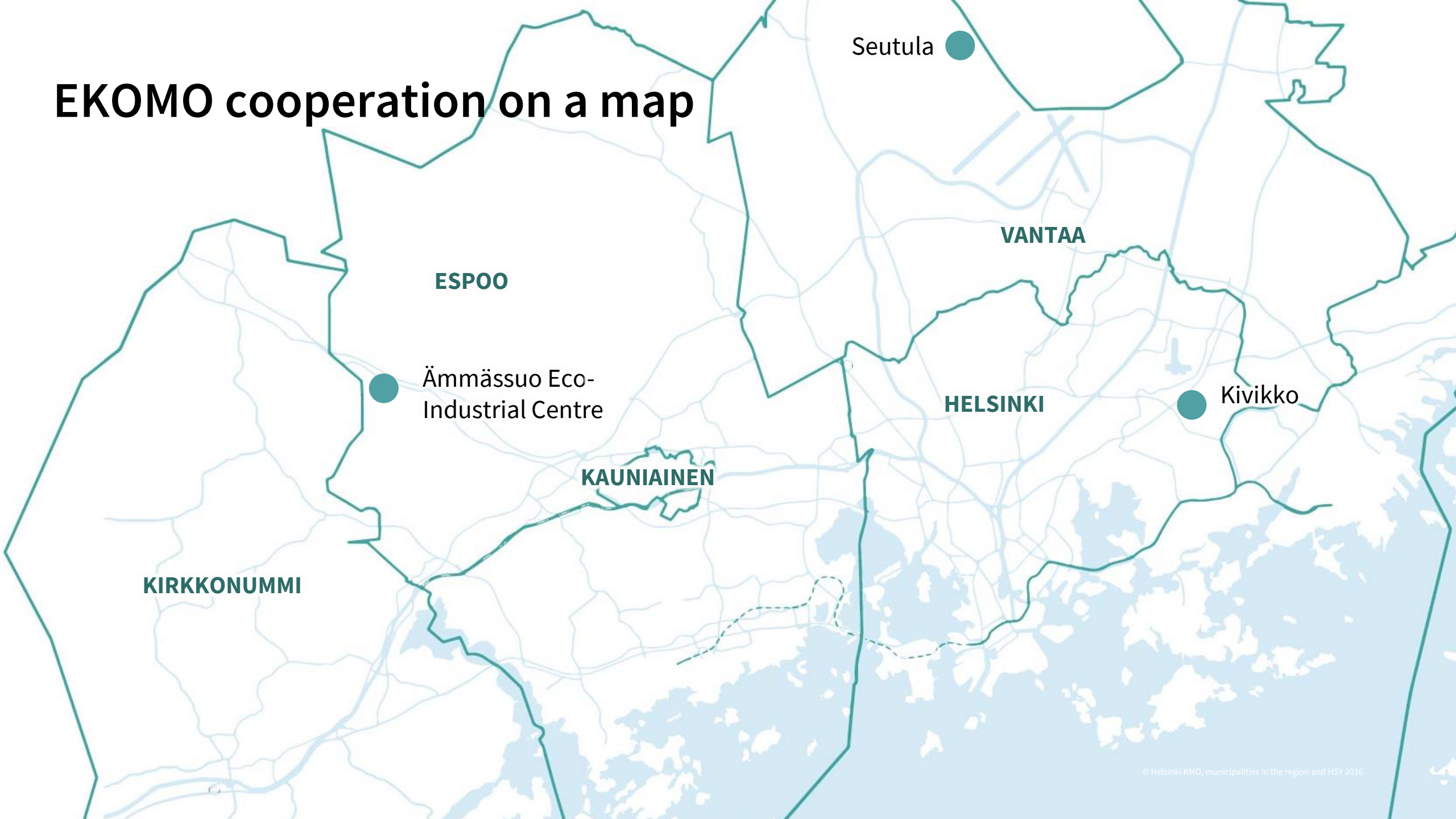
The goal is extensive cooperation

Ekomo operators cooperate with both HSY and each other.

One company's waste or side stream is another company's raw material.

We promote research and development, piloting and testing

EKOMO cooperation on a map



Ämmässuo Eco-Industrial Centre – Ekomo partners

1. Elker Oy
Sorting experiments WEEE

2. Eltel Networks Oy
Intermediate storage of construction materials and supplies of power line sites, such as poles and cable reels

3. Fortum Waste Solutions Oy
Interim storage and processing of bottom slag from the waste incineration of Vantaa Energy Ltd's commercial line (VE2)

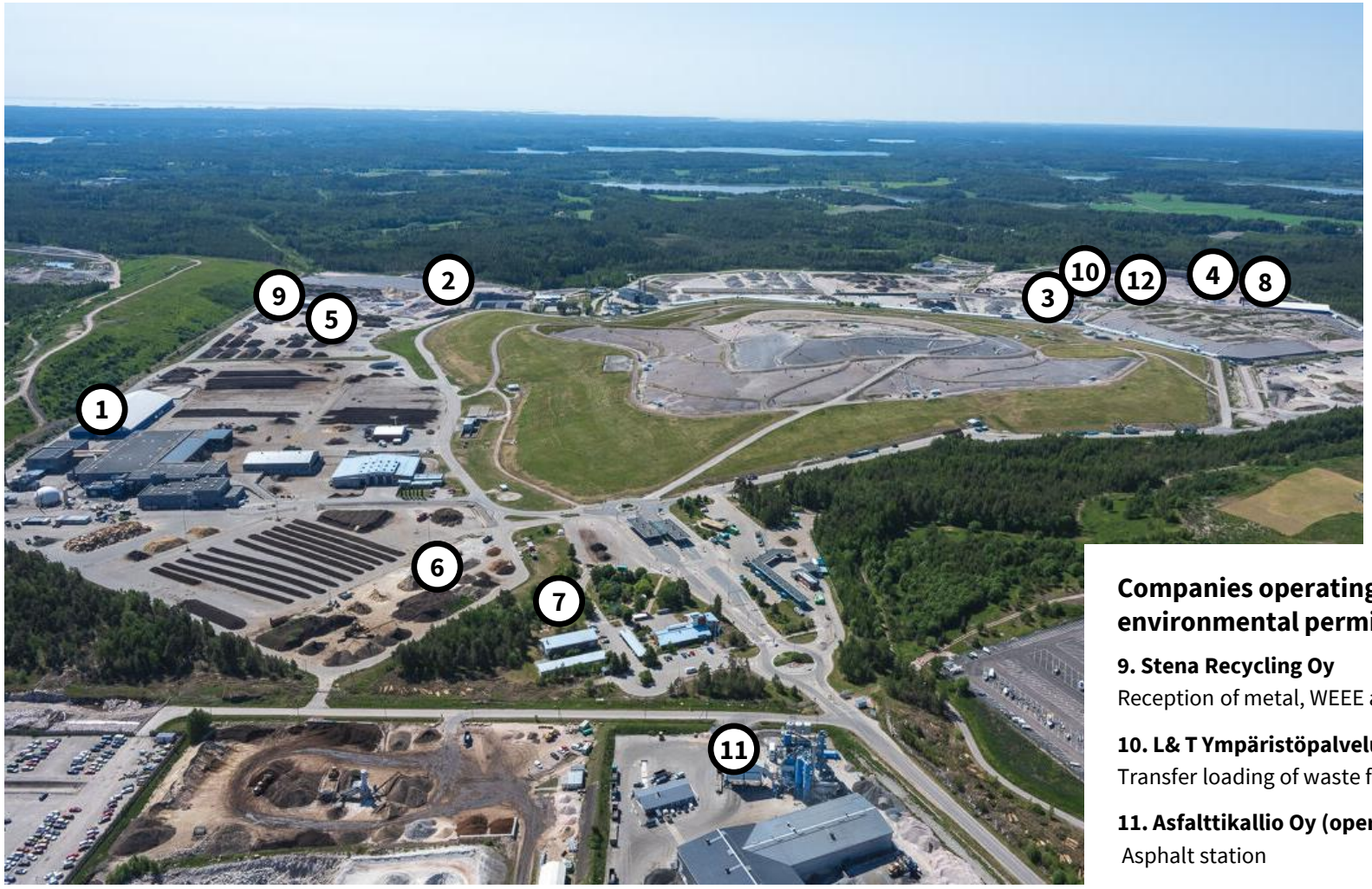
4. Lotus Demolition Ltd
Treatment and interim storage of demolition concrete

5. Neova Oy
Interim storage of horse manure for substrate production

6. Perheyhtiö R. Ajalin Oy
Use of composts and horse litter at the Ämmässuo topsoil station and outside the area

7. Espoon Hunaja
Beekeeping

8. Finnish Transport Infrastructure Agency
Interim storage of clean rock material for a railway project



Sorting studies:

FCG Finnish Consulting Group Oy / KIVO
Separately collected plastic packaging waste sorting study (2023)

Verdis Oy
Mixed waste sorting study (2024)

Suomen Pakkaustuottajat Oy
Metal waste sorting study (2024)

Companies operating with their own environmental permits:

9. Stena Recycling Oy
Reception of metal, WEEE and hazardous waste

10. L& T Ympäristöpalvelut Oy
Transfer loading of waste fractions

11. Asfalttikallio Oy (operates with registration)
Asphalt station

12. Purkupiha Oy
Treatment and interim storage of demolition concrete

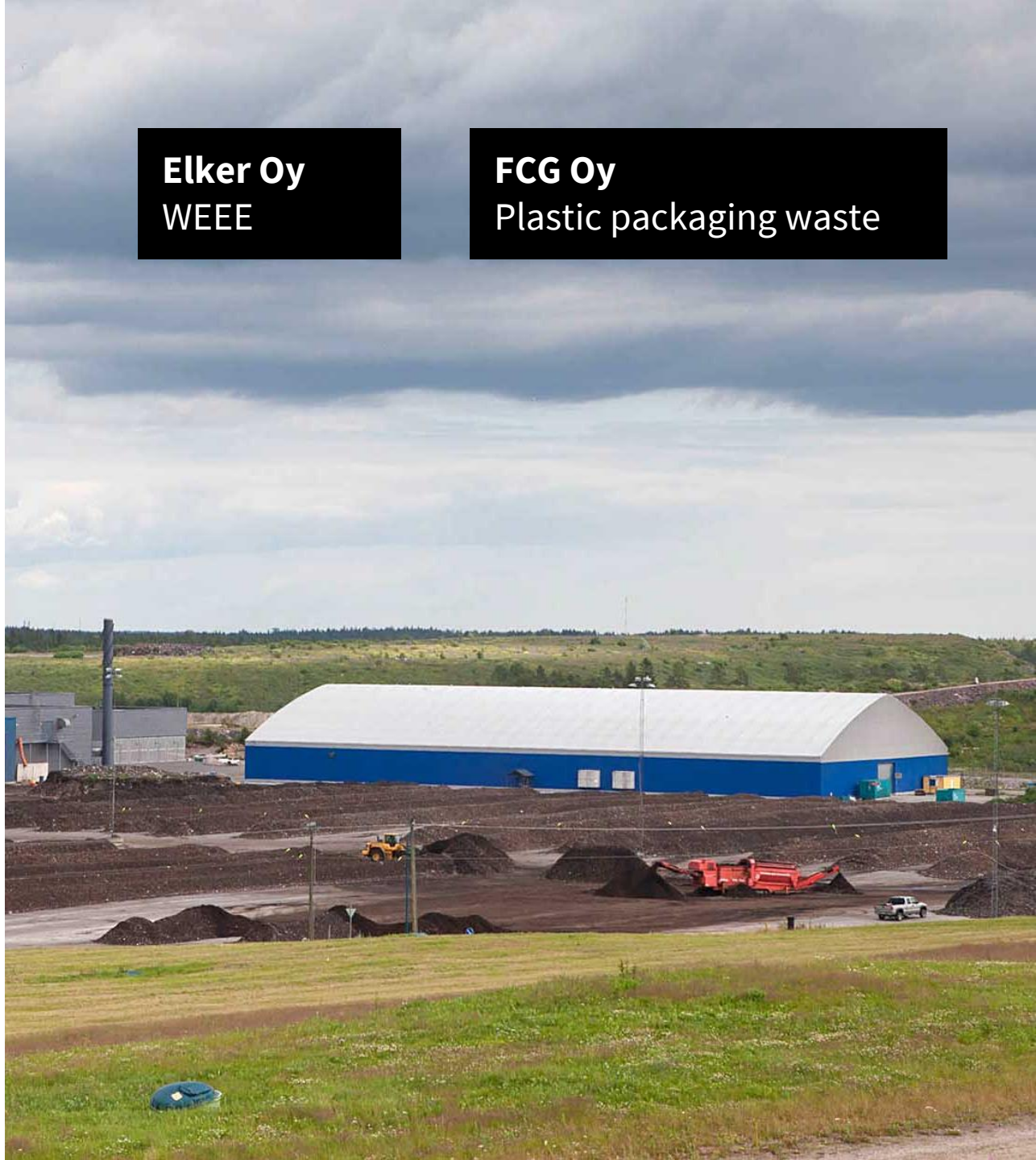
PIMA hall – sorting tests

Heated contaminated soil treatment hall (PIMA hall) originally built for year-round decomposition of contaminants

- Separate VOC hall in the PIMA hall for the decontamination of contaminated soil

The reception of contaminated soil in Ämmässuo ended in 2023, which has also enabled the use of the hall space for sorting tests, for example.

The PIMA hall is heated with waste heat from the gas power plant.



Seutula circular economy area

Seutula circular economy area

- HSY’s circular economy area in Seutula on the border between Vantaa and Tuusula
  - Wood waste processing field
    - Wood waste collected from Sortti Stations is chipped and supplied for use as fuel
  - Waste collection equipment maintenance hall
  - Gas and water management of the decommissioned landfill site in Seutula
    - Landfill in use from 1962 to 1987
    - 16 hectares
    - The collected landfill gas is used in the heating of the collection equipment maintenance hall
    - The landfill leachate is collected and directed to the Blominmäki wastewater treatment plant
  - HSY also has Ekomo partners in Seutula

Resident communications

Resident communications for local residents

Hopealuoti SMS system

Video of the Ämmässuo Eco-Industrial Centre
https://youtu.be/RyKS-5WrSkk

Stakeholder meetings in the Ämmässuo-Kulmakorpi area

HSY biowaste treatment pages
www.hsy.fi/biojatteenkasittely

HSY Ämmässuo website
www.hsy.fi/ammassuo

Sortti Station

Ämmässuo Sortti Station

Recycling service for residents and companies. We make sure that all suitable material is recycled and turned into something new and useful.

For safety reasons, asbestos is only received at the Ämmässuo Eco-Industrial Centre

Carton and cardboard

Hazardous household waste

Wood waste

Construction and demolition waste

Paper

Mixed waste

Gypsum

Metal

Glass packaging

Garden waste and brushwood

Waste electrical and electronic equipment

Thank you.

Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

Scaling Circular Impact through Green Deal commitments and agreements

- Circular Economy Green Deal
- Zero Emission Construction Sites –green deal agreement
- Non-Hazardous Chemicals in Day-Care environment –green deal agreement

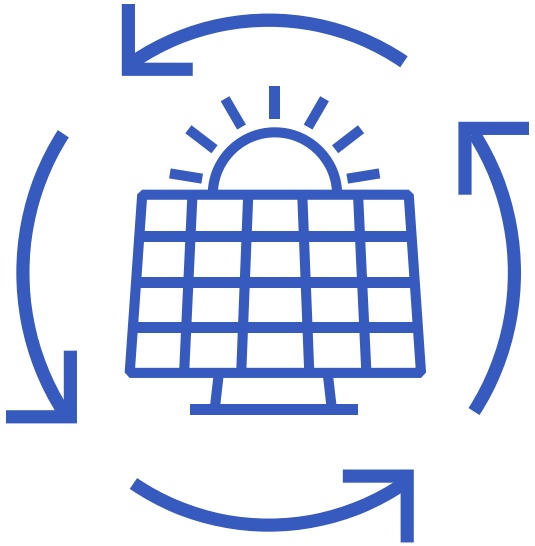
Salla Koivusalo
Senior Expert,
Circular Economy Unit, Climate and Environment Protection Department
Ministry of Environment

kiertotalouden green deal

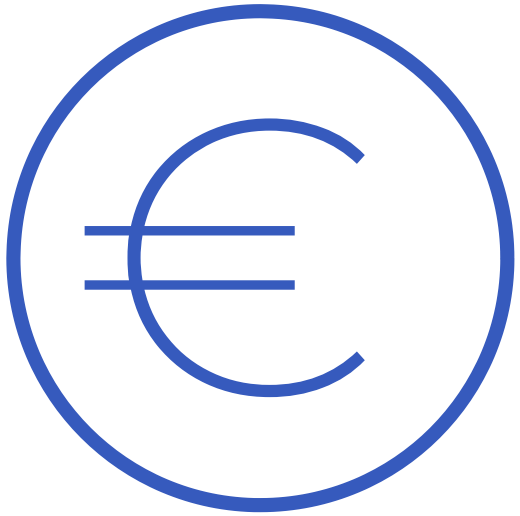
Circular Economy Green Deal

2024 - 2035

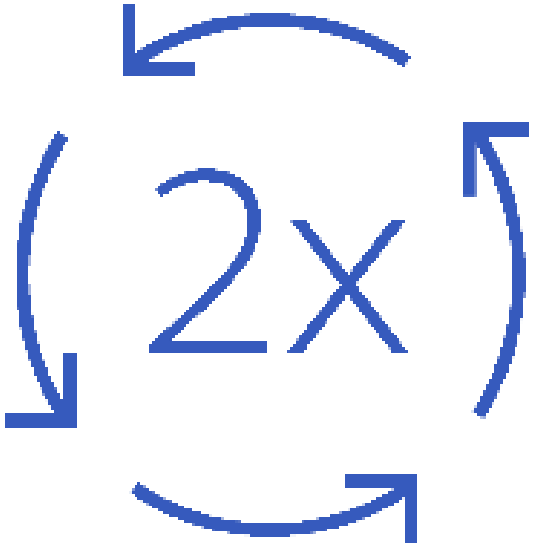
Finland has set goals for CE



Raw material consumption (RMC) in 2035 will not exceed the level in 2015.



The productivity of resources (GDP/RMC) **will double by 2035.**



The circular material use rate (CMU) will double by 2035.

The Circular Economy Green Deal aims to achieve natural resource targets

Scenario work

- in cooperation with main research institutes and over 80 stakeholders (businesses, industries, NGOs, regions and municipalities) committed to the process
- data collection (literature, interviews)
- expert reviews
- modelling (ENVIMAT = input-output model of the national economy extended with environmental variables)

Better understanding of the use of natural resources in the Finnish economy, the circular economy objectives (2015 vs. 2035), and the circular economy measures.

Workshops among participants in scenario work

Regional and industry-specific interviews and meetings

Circular Economy Green Deal

- Joint development of goals and measures
- The information produced in the scenario work supports the creation and evaluation of the concrete measures.

uden
green deal

Phases of the Circular Economy Green Deal and scenario work

Green Deal on a low-carbon circular economy

Key actors in different sectors, Ministry of the Environment and Ministry of Economic Affairs and Employment

Interested parties brought together

- Ministries invited municipalities, cities, regions, sectoral organisations and companies to join in.
- More than 80 organisations committed in the scenario work and in the development process of the Green Deal.

Ground rules, goals and measures for the Circular Economy Green Deal

- Ministries drew up criteria and rules for commitments based on feedback from key actors.
- Co-creation based on scenario work: a selection of measures and indicators to be chosen for the commitments.

Drafting and implementation of commitments

- Scenario work and commitment model ready (04/2024).
- Participating actors draw up their commitments and implement them until 2035.
- Monitoring and reporting of results.

Scenario work

Research institutes and key actors

Analysis of material flows in Finland

Scenario work

- Information and support for creating effective commitments
- Workshops and round table discussions

SPRING 2022

AUTUMN 2022 - AUTUMN 2023

SPRING 2024 - 2035

Transformation themes of the Circular Economy Green Deal

5.

Increasing nutrient recycling and utilisation of side streams

Increasing soil carbon sequestration

Promoting the use of domestic vegetables and fish to improve resource efficiency

Reducing food waste and the amount of natural resources used for packaging

4.

Promoting new energy solutions and production that is not based on combustion

Utilising waste energy to reduce the need for energy production

Designing properties and communities as part of a resource-saving and smart-energy system

1.

Planning and preparation of built-environment projects guides towards circular economy

Preserving the existing built environment and making it more efficient

Growing the market for reuse and recycling of products in construction

2.

Sustainable product design and business models at the core of strategies

Circular economy renews production processes and benefits from electrification

Increasing the value of side streams, recycled materials and bio-based raw materials in production

3.

Increasing the number of circular economy products and services in the market

Developing circular economy services for everyday life

Circular Economy Green Deal commitments

- **18 commitments completed**, around 30 in preparation;
- **Designated 'Home Bases' support** actions related to the commitments, provide mentoring, and promote cooperation and identification of funding sources;
- Commitments are **evaluated by a research institute evaluation group** (VTT, Luke, Syke);
- **A strategic LIFE SIP project** on the circular economy is in preparation - serve as a support mechanism for the circular economy transition and the implementation of the Circular Economy Green Deal.

Circular Economy Green Deal: 18 commitments

March 2025

SANDVIK

TAMPERE

NOKIAN KAUPUNKI

Väylävirasto
Trafikledsverket

KUOPIO

orthex GROUP

GRK

ECO SCANDIC
CLEANTECH OF TOMORROW

Metsä

KESKI-SUOMEN LIITTO

BOREALIS

SKANSKA

A-INSINÖÖRIT

SWECO

YLVA

vantaan energia

FYRA

PORVOO BORGÅ

Commitments available (in Finnish): *sitoumus2050.fi/kiertotalouden-green-deal-sitoumukset#*

Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

Zero Emission Construction Sites – green deal agreement

2020 - 2030

1. Zero Emission Construction Sites green deal Agreement

- Greenhouse gas emissions from machinery were in 2023 2,4 Mt CO2-ekv. (un-official)
  - 9 % emissions from the burden-sharing sector
  - **The commitment has been signed by the cities of Helsinki, Espoo, Vantaa, Tampere and Turku, Senate Properties, Helsinki Region Environmental Services (HSY), the Finnish Transport Infrastructure Agency (Väylä), Helsinki City Transport and Helen.**
  - The goal of the agreement is that the participating public actors' own construction sites will be fossil-free by the end of 2025, meaning they will not use fossil fuels. The goal is that all construction sites of those committed to this will be fossil-free after 2025.
  - From 2025, at least 20%* of the machinery/equipment used on construction sites and internal site transport will run on electricity, biogas or hydrogen.
  - From 2030, at least 50%* of the machinery and equipment used on construction sites will be powered by electricity, biogas or hydrogen. In addition to internal transport on the construction site, transport to the construction site will be included.
  - The agreement is valid until the end of 2030 and is the first green deal signed between the public sector to promote sustainable procurement.

*The share of alternative driving forces (20% & 50%) is aggregated across all construction sites and does not apply to each individual construction site.

Zero Emission construction sites Green Deal goals

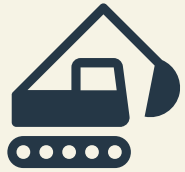
The targets apply to acquisitions after the target dates.

06/2021

- **Zero-emission construction site concept created**
- **New construction sites:** Stage IIIB, Euro V

2022

- Zero-emission construction site concept in useTracking system (equipment list) in operationFossil-free: Self-implemented construction sites
- **New construction sites:** Stage IV, Euro VI



2025

- **Fossil-free: All construction sites**
- **Machinery and equipment: 20% electricity, hydrogen, biogas**
- **Only operations taking place within the construction site**

2030

- **Fossil-free: All construction sites**
- **Machinery and equipment: 50% electricity, hydrogen, biogas**
- **Including transport to construction site**

The share of alternative motive forces (20% & 50%) is aggregated across all construction sites and does not apply to each individual construction site.

2. Results

- **Achieved goals:**
- Emission-free construction site concept in use and serves as a general framework for operating methods used on construction sites.
- An action plan and implementation have been made in all organizations and are part of the organization's operations.
- The minimum requirements for machinery and transport equipment (Stage IV, Euro VI as a minimum requirement) and energy use have been implemented in almost all organizations.
- Half of those who have joined are already fossil-free on their own construction sites on 2023
- The emphasis has remained on biofuels instead of switching to electricity.
- However, half of those who have joined are already demanding alternative power sources and electric tools in the tender on 2023 (analysis and summary of year 2024 is underwork)

Practical measures

Functional criteria groups:

-Infrastructure construction, maintenance, asphalting and building construction

- Working groups have drawn up common guidelines for the use of procurement criteria in different procurement areas, and the groups have monitored the use of the criteria and provided peer support

Development of a monitoring system has begun for fleet and fuel monitoring:

- Data is collected manually and maintained mainly in Excel spreadsheets

- The work requires a lot of resources and is done as part of site supervision

Practical continues

Development of an emissions calculation tool,

- One of the contracting parties has decided to test the functionality of the IHKU calculation service developed by the IHKU alliance for emissions calculation.

Market dialogues,

- Are part of the activities of all organizations and are organized themselves as much as possible.

- The market dialogues organized by Motiva have been found to be very effective and it is hoped that they will continue in the future.

- These events are also partly seen as opportunities to increase the competence of contractors.

How to reach the new goals 2026-

- In achieving future goals, prevailing conditions in the operating environment must be taken into account.
- The terms of the agreement should be flexible if, for example, suitable low-emission equipment is not available on the market as deadlines approach.
- **Things to consider in the operating environment:**
  - Availability of biofuel
  - Availability of alternative power sources
  - Electrification targets for different types of work machinery
  - Setting targets for new parties to the agreement
  - Origin of electricity

3. Next steps

- A clear indication from all parties to the agreement that the goals will not be changed.
- Together, the planning and the obligations of the agreement in the background provide the opportunity for consistent action also towards contractors.
- The content of the agreement creates a good framework for joint development, so that each party does not have to plan and resource everything themselves.
- The cooperation promoted by the agreement has created valuable networks between the largest customers.
- 2026 - 2030 new target period begins, need to coordinate with the 2nd contract period of the construction machinery sector green deal and implement market dialogues and develop procurement criteria
  - Fossil-free: All construction sites
  - Construction machinery and equipment: 50% electricity, hydrogen, biogas
  - Including transport to the construction site

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Non-Hazardous Chemicals in Day-Care environment –green deal agreement

1. Non-Hazardous Chemicals in Day-Care environment –green deal agreement

- The Green Deal for the Reduction of Hazardous Substances aims to minimize chemicals in early childhood education environments through procurement and thus reduce children's overall exposure to chemicals.

- The commitment has been signed by the Ministry of Social Affairs and Health, the Ministry of the Environment, the cities of Helsinki, Tampere and Vantaa, and the procurement organizations Tuomi Logistiikka Oy and Monetra Oulu Oy.

- The state and the public authority have signed an agreement for the years 2020–2025.

Goals of the Agreement

- Reduce unnecessary antimicrobials, fragrances and dyes.
- Apply stricter chemical restrictions from the Toys Directive and Act to the procurement of all toys and childcare products.
- Increase information reported by suppliers on substances of particular concern in procurement and encourage municipalities and other purchasing organizations to actively require the provision of information in calls for tenders.
- Develop common procurement criteria and contract terms for procurement contracts to reduce harmful substances in early childhood education environments and apply them to procurement by municipalities and other purchasing organizations.
- Increase the procurement of products and services with the Nordic Ecolabel.

2. Results

- The understanding of those involved about the effects of harmful substances and how to make purchases without them has been strengthened. In many product groups, the effects also extend to age groups other than children.
- Supplier cooperation has been systematized and joint market dialogues have promoted mutual understanding.
- The market is perceived to have changed in a short time with the involvement of several significant purchasing units
- Advice, communication and training play an important role in implementation, assisted by, for example, instructions for various parties, webinars, training videos
- Common criteria and instructions have been produced to support procurement planning.

Criteria bank for supporting the reduction of harmful substances

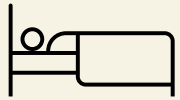
Cleaning Services and Chemicals 2021

In-door playground equipment and toys 2022

Instructions for subscribers and suppliers, as well as for early childhood education, Self-assessment form

Outdoor play equipment and furniture2021

Instructions for designers and contractors 2022

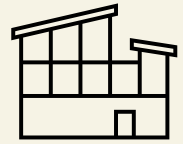


Textiles 2024

Instructions for using the criteria

Indoor furniture and mattresses2022

Use of environmental labels and certificates in verification



Acquisition of new daycare centers, interiors-> 2025 (under work)

3. Next steps

- Final evaluation in progress, to be completed in 10/2025
- Utilize information generated in research projects (including NonHazCity) in developing criteria for construction procurement, plan to pilot with the Construction Information Product Information service.
- Participate in current events, including the update of the Toy Directive and an event regarding the Ecodesign Directive.
- Committed parties share experiences from tenders with each other and develop their methods of operation.
- Based on experiences, update criteria and instructions for the service.
- Develop verification and verification process.
- Develop the ordering system.
- Provide training and communication internally and to stakeholders, such as daycare management and the construction industry.
- Encourage other procurement units to utilize the developed criteria in their procurement.

Thank you!

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Learnings from the Circular Economy Academy

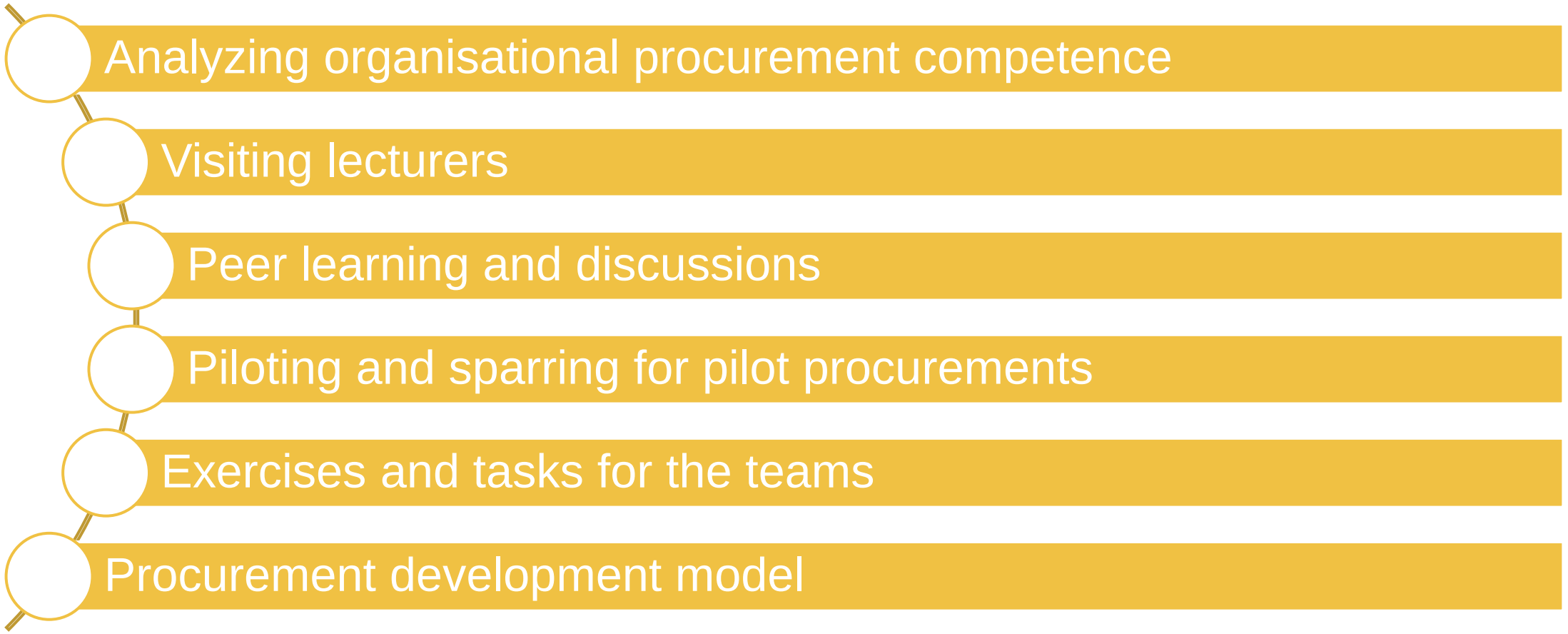
Suvi Sippola, Motiva Oy

- 6 months peer-training program, implemented in 2022 and 2023
- 5-8 participating organisations and 2-4 participants from each organisation
- Focus on construction procurement
- The concept was develop in KEINO in cooperation with Motiva, Environmental Institute of Finland (SYKE) Hansel, and Local procurement advisors

Circular Economy Academy

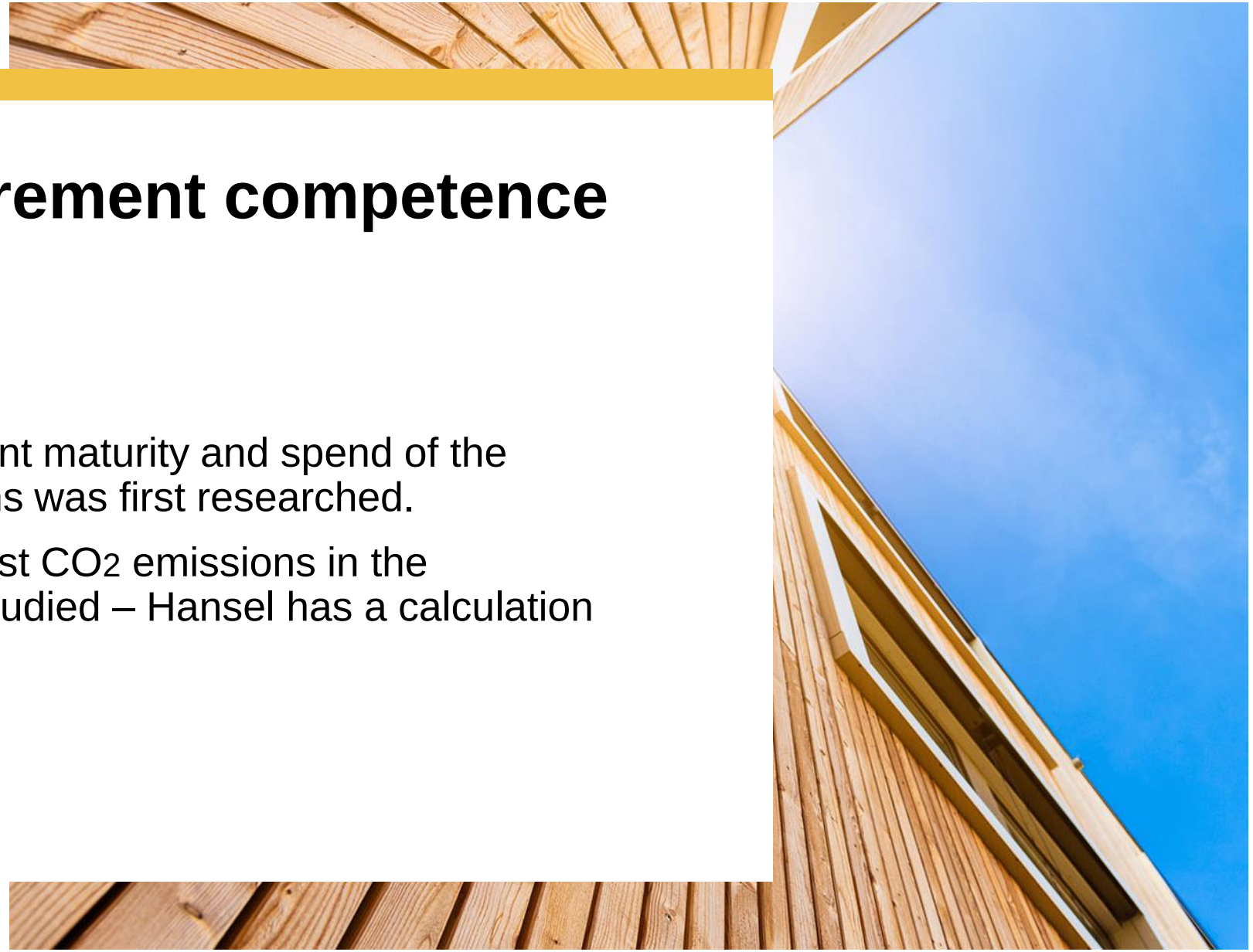
1. **Learning in practice:** All participants were preparing a construction procurement and testing how they could take circular economy aspects into account there.
2. **Preparing organisational development plans:** Participants developed management model for their organisation that ensures that circular economy aspects are taken into account in procurements that have the biggest circular economy potential.

Structure of the training program



Status of procurement competence

- Procurement management maturity and spend of the participating organisations was first researched.
- Procurements with biggest CO_2 emissions in the organisation were also studied – Hansel has a calculation tool for this.



Examples of circular procurement pilots during the Academy

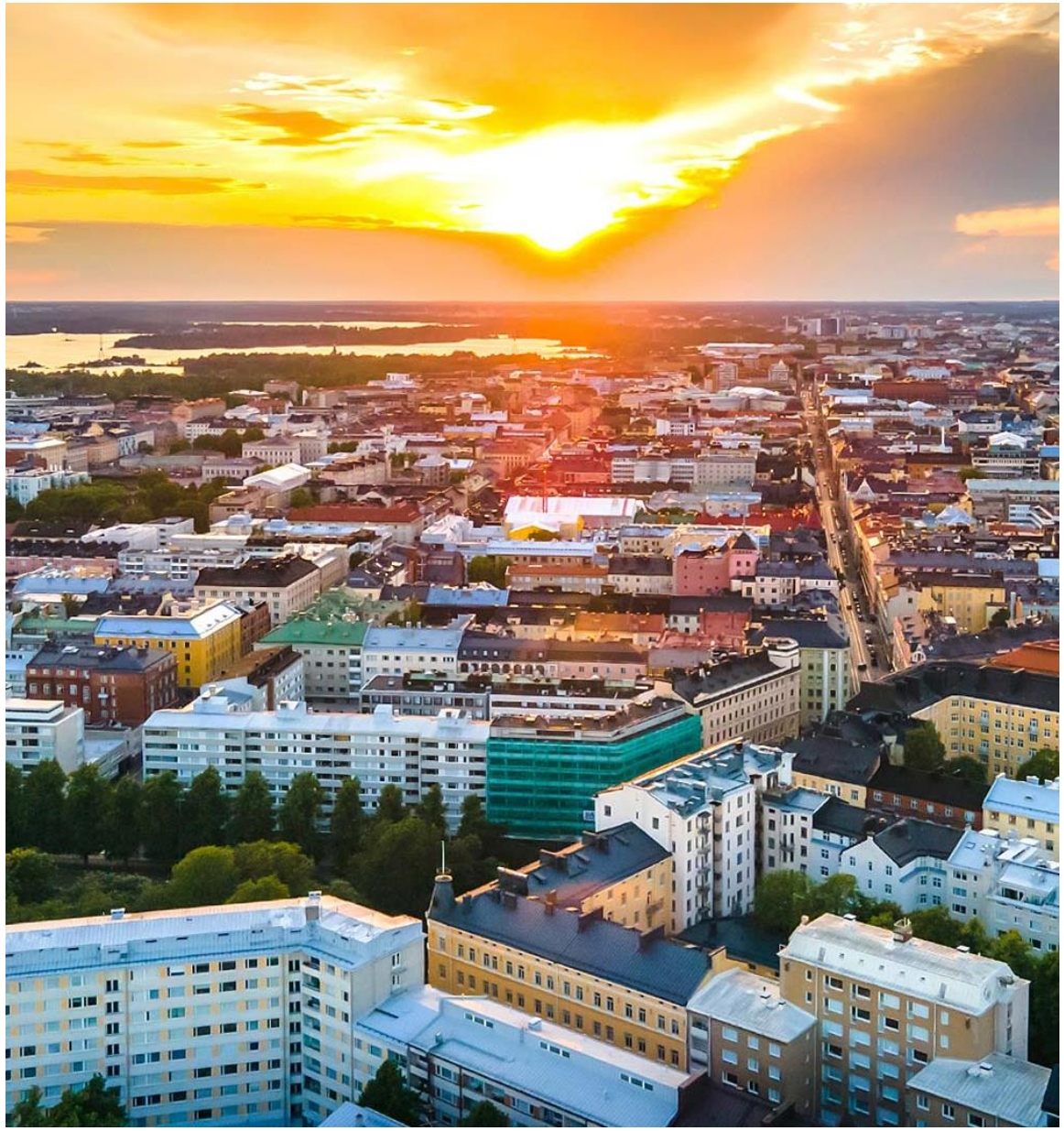
- ✓ Procurement of recycled asphalt
- ✓ Demolition procurement old school and hospital buildings and reuse of demolition materials
- ✓ Space change with modular solutions
- ✓ Reuse of building materials in new buildings
- ✓ Circular economy considerations in the planning and implementation of the park area and riverbed
- ✓ Consideration of the circular economy in the construction of a highway and a new bridge

Building competence for circular procurements

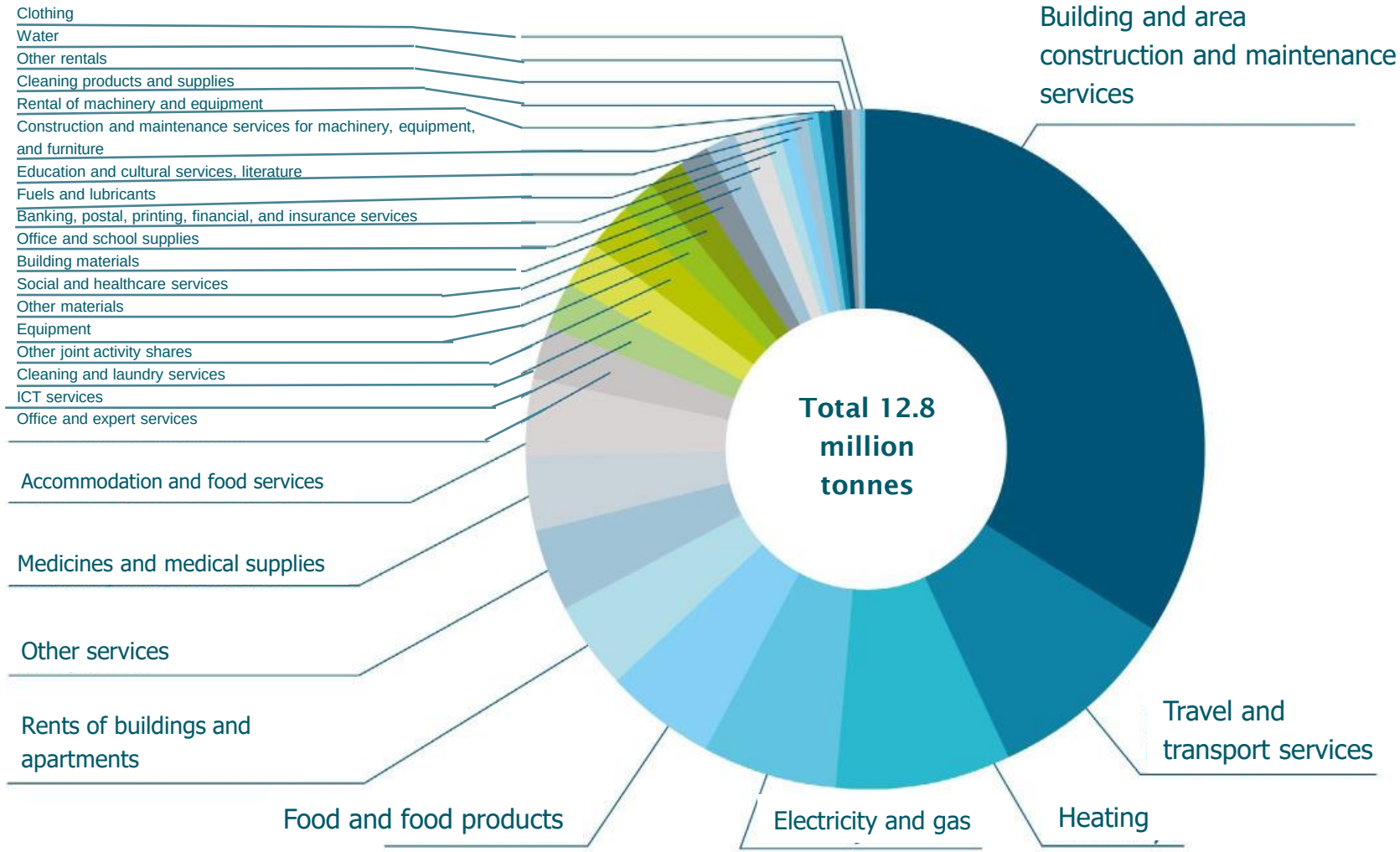
A lot of in-depth information was given about circular economy aspects in construction procurements:

- timing
- suitability of reused materials and reuse of building components
- environmental permits and discussions about the importance of land use planning
- demolition procurements and processes
- circular criteria
- ways to extend the life cycle of buildings

Circular economy potential in public organisations



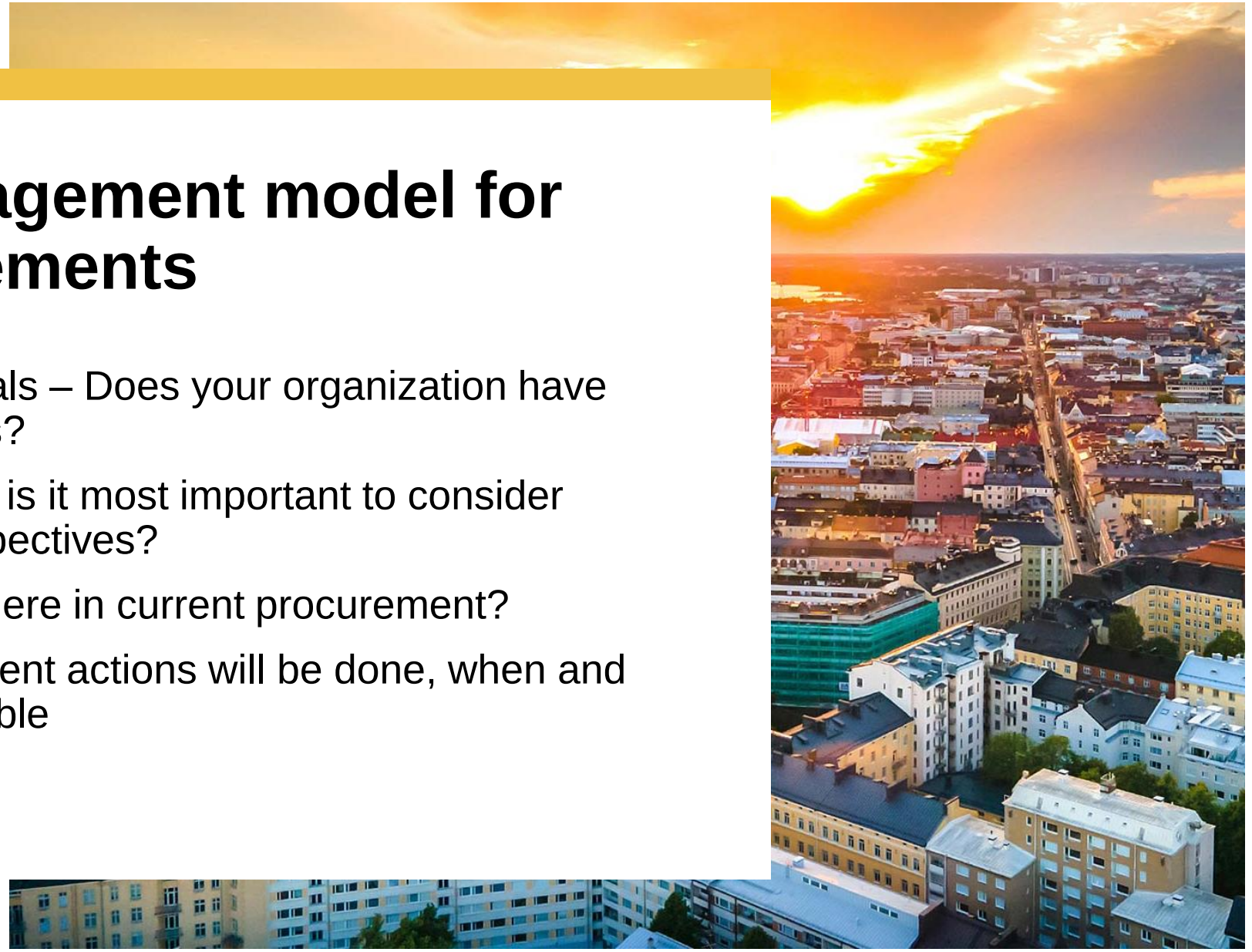
Raw material use of municipal and joint municipal authorities' procurements by type of procurement expenditure (kg)



Adapted from: Alhola, K., Lankiniemi, S., Popova, M. & Yliruusi, H. (eds.) 2021. *Handbook for Circular Economy Procurement.* Circwaste – Towards Circular Economy project. Based on data by Nissinen & Savolainen 2019.

Building a management model for circular procurements

1. Start from strategic goals – Does your organization have circular economy goals?
2. In which procurements is it most important to consider circular economy perspectives?
3. What challenges are there in current procurement?
4. Decide what development actions will be done, when and who will be in responsible



Learnings of the Academy:

1. Strategic guidance and policies

- Develop strategic policies and action plans for circular economy procurement.
- Incorporate circular economy into the organization's responsibility goals and budgeting.

2. Proactive procurement planning and resourcing

- Create and maintain a procurement calendar that supports anticipation and preparation.
- Identify procurements where circular economy can be considered.

3. Development of circular economy criteria and metrics

- Develop and implement circular economy criteria for calls for tenders and contracts.
- Define metrics for progress in responsibility and the circular economy.
- Create templates, checklists and examples for use in different industries.

Learnings of the Academy:

4. Market dialogue and cooperation

- Increase and systematize market dialogues, especially on the circular economy theme.
- Develop market surveys and market information days (e.g. for builders, consultants).

5. Monitoring and continuous development of implementation

- Monitoring the implementation of circular economy requirements during the contract period.
- Developing feedback and monitoring processes and analyzing completed procurements.

6. Strengthening competence and communication

- Increase the circular economy competence of personnel and stakeholders.
- Bring visibility to successful circular economy solutions and reward innovations.
- Ensure internal and external communication on the circular economy aspects of procurement.

Key findings

- **Timing is the key in enabling circular economy solutions!**
  - The circular economy may require consideration already at the land use planning stage, also more time needed for checking permits and suitability testing of reused materials.
- More cooperation between procurement, environmental and construction experts were needed
- Utilise market dialogues to understand how market actors can solve your challenges. Also, communication about circular goals in procurements was seen important.
- All participants felt that monitoring the implementation of the circular economy requires development.

Learnings:

“Procurements suitable for promoting the circular economy must be identified as early as possible, so that there is sufficient time for, for example, organizing market dialogue”

“The market is in a developing stage and new solutions are emerging; following the market is important.”

“Active dialogue between design & procurement & construction promotes better circular economy solutions”

“We got courage to use circular economy criteria -> 11 offers for case procurement.”

Nordic cooperation on circular procurement 2022-2024

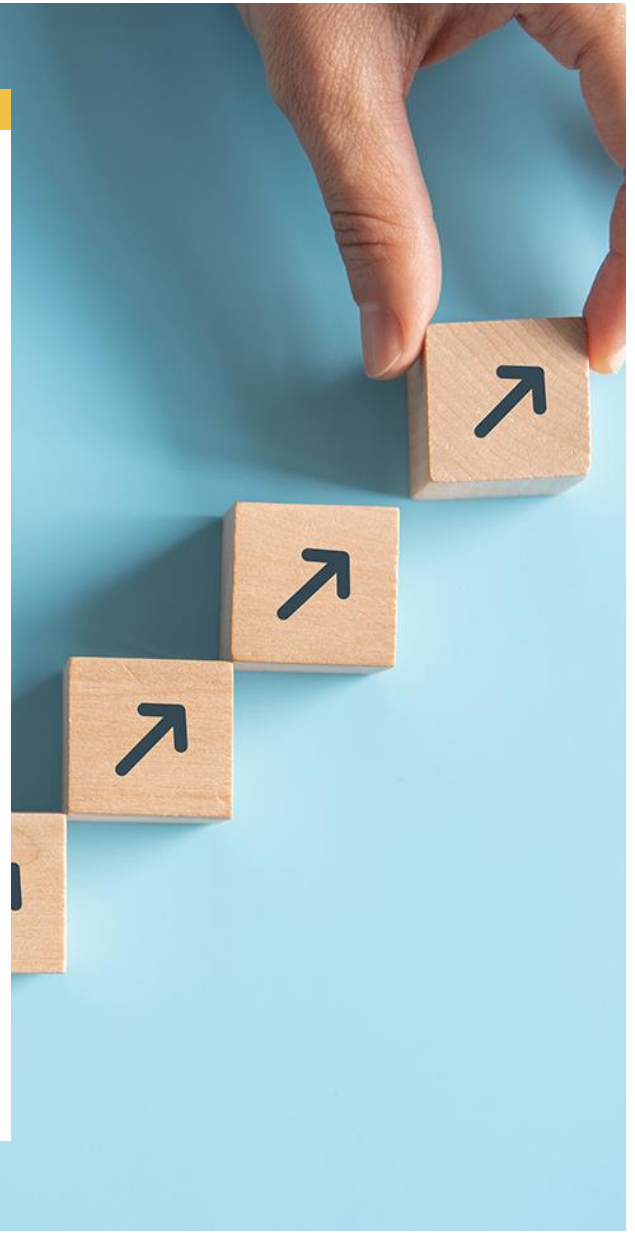
- Focus on circular **furniture** and circular **ICT** + organising Nordic market dialogue events

Developed tools:

- CO_2 calculation tool,
- AI procurement monitoring tool
- Procurers guide for circular and sustainable ICT
- Criteria for used furniture and sustainability criteria for software procurement

The guide provides ideas for procurers, ICT managers and organisations regarding

- How to create a more sustainable ICT fleet
- How to enable a longer lifespan for computers, laptops and phones
- How to procure used and refurbished ICT
- The communication and change in attitudes that are needed to succees with a sustainable ICT policy



Don’t fall for these myths about used and refurbished ICT

Myth

If we buy used devices, we get too many different laptop models which makes it more laborious for IT services to support them.

Truth

Typically, companies selling refurbished devices can supply large quantities of similar devices as long as it is within reasonable lead times. A procurer can set criteria for the devices to ensure the same functionality in the case that all supplied devices are not of the same model.

Myth

Employees feel unappreciated if they get used or recycled devices.

Truth

Refurbished laptops are cleaned and often packed, so they look like new. If employees are aware of the benefits of used ICT devices, they are also more likely to appreciate them.

Do it together with your personnel

Employees appreciate that their organization does its best to reduce its environmental footprint. More sustainable ICT policies and practices are part of this work.

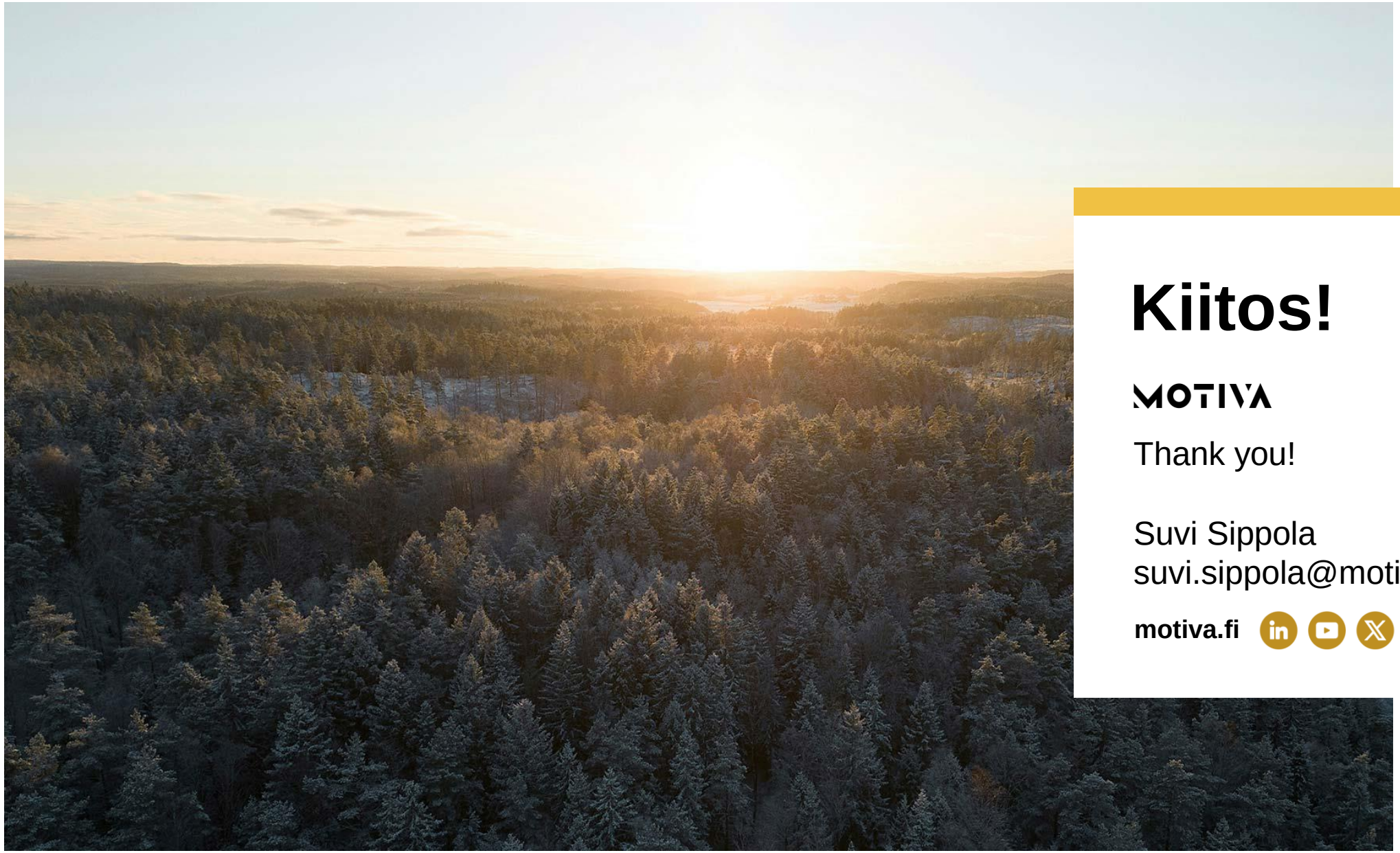
Make sure that your employees know that:

- Most of the CO_2 emissions and environmental footprint of laptops and phones come from the production phase of new devices. For this reason, we need to aim for longer lifecycles for phones and laptops.
- It's better for the environment to use your phones and laptops as long as possible or have used or refurbished devices.

Benefits of buying used or refurbished laptops and phones

- It saves money.
- It reduces CO_2 emissions.
- It reduces the need to mine depleting minerals that also entail human rights risks.
- It reduces e-waste.
- In many cases you could even get better quality per spent euro compared to procuring new devices.

- Define a target for the portion of used or refurbished devices that will be bought.
- Refurbished devices are cleaned , data wiped and often look like new devices.
- Many user groups might even prefer used devices, if they know about their environmental benefits. Communicate the environmental advantages.



Kiitos!

MOTIVA

Thank you!

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Procurement for Building Demolition Projects and Recycling of Demolition Materials

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Procurement for Building Demolition Works and Recycling of Demolition 2024 - City of Espoo

- Tendering in 2024, framework agreement of approx. €4M/yr
- The subject of the tendering was:
  - various demolition works of buildings and related structures (e.g. detached houses, outbuildings, storage facilities, schools, daycare centres, office buildings, parking facilities, residential buildings)
  - the controlled sorting, recycling, and reuse of the resulting demolition and construction materials.
- This procurement specifically aimed to attract new and smaller operators in the sector. Another key target group was the municipality's residents, as the tendering process sought to enable demolition projects to be carried out as swiftly and smoothly as possible. This helps to minimise the negative impacts on nearby residents caused by demolition work and vandalism associated with vacant buildings.

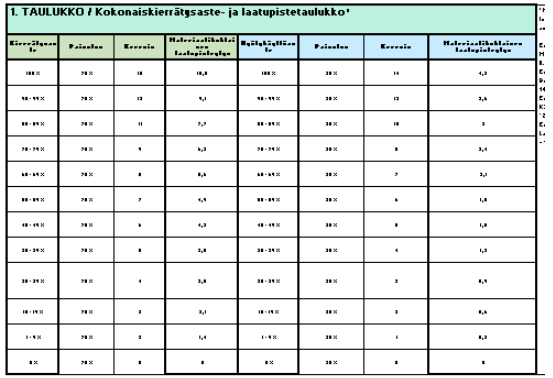
Demolition of old Espoo City Hall in 2022.

How support circular economy goals?

- Particular emphasis was placed on the recycling and reuse of demolition materials, as well as on enhancing cooperation between the parties to improve the overall recycling rate of demolition projects
- Contractors are now committed to the minimum requirement for overall recycling and recovery: a 70% material-specific recycling rate by weight. The target for the combined recycling and recovery rate is generally 100%. The target for the sorting rate is 100%, and efforts to improve it are ongoing.
- Contractors are committed to comply with the provisions of the Green Deal agreement on sustainable demolition
- During the contract period, the general aim is to develop operations in cooperation with the contracting parties so that the overall recycling rate of contracts increases compared to the initial situation.

Reflect on why the example is considered successful

- Two rounds of market dialogue were held with four potential companies to introduce and discuss the planned recycling requirements and to ensure that their implementation would be feasible
- The tender documentation included a comprehensive, material-specific recycling rate calculation spreadsheet, designed to verify the overall recycling rate. The same Excel sheet will also be used to support the monitoring of the overall recycling rate during the contract period.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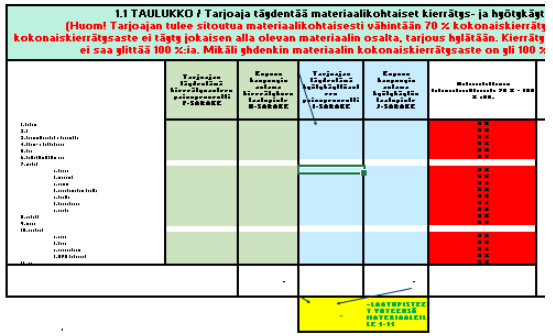
1.1 TAULUKKO / Tarjoaja täydentää materiaalikohtaiset kierrätys- ja hyötykäyt

How has the circular procurement model been scaled up or how could it be scaled up?

- Not yet scaled up but
  - elements of this procurement – such as the calculation spreadsheet - could be adapted and used in other procuments involving recyclable materials
  - the importance of market dialogue and cooperation with the contracting parties during the contract period should be adapted in all procurement

How did a mindset shift contribute to the process, and what kinds of behavioral changes are needed?

- Understanding the importance of the circularity and the market’s capacity to deliver was key to success. The individual responsible for subject-matter expertise in this procurement, within the Department of Construction, even dedicated his M.Eng. dissertation to this topic. Managerial support played a crucial role by allocating resources for the additional work involved—this included engaging a consultant to develop the spreadsheet and allowing extra hours for the preparation of tender documents, beyond what is typically required in standard procurement processes.
- The understanding and commitment of project manager from the centralised procurement unit were also essential. His willingness to go the extra mile made it possible to develop a solution that fulfilled the vision of the subject-matter specialists while remaining compliant with procurement legislation.

Potential for learning or transfer

- The importance of market dialogue as a tool for developing requirements and to enhancing cooperation during the contract period
- The strong position of SMEs as potential suppliers was regocnised and their participation was supported in the tendering process:
  - Dividing the procurement into two separate lots (< 500 m^2, >500 m^2)
  - A guidance video was included in the invitation to tender, covering topics related to submitting a tender and how to complete the recycling rate calculation spreadsheet
  - Suppliers were encouraged to contact the local association of entrepreneurs for support in submitting their tenders
- In the next tendering process, quality points will be awarded for expertise in overall recycling, with particular emphasis on commitment to intact recycling, based on lessons learned.

Reuse of soil and construction aggregate masses in city procurement

3.6.2025

Kimmo Nekkula, City of Vantaa

Potential Circular economy green deal commitment in Vantaa

- Reusing soil and construction aggregate masses (1 of 3 areas)
- Reuse rate of 10% in infrastructure and land construction by 2025
- Minimizing trasport = lower CO_2:s
- Reuse inside project is priority
- Reuse between projects inside Vantaa is secondary goal
- Thirdly reuse inside Helsinki metropolitan area
- Project specific goals as a procurement criteria by 2027

Case: Vantaa light rail

The construction of the light rail line is intended to begin in 2025, and operation is planned to start in 2029.

Criteria and needs for the light rail project

- Procurement was done before green deal
- Resource wisdom as criteria
- Low carbon solutions and products (pre-study)
- Commited alliances in east and west
- Spaces for intermediate storing for different masses
- Suitable materials from other projects
- Crushing stations for rock and concrete material
- Logistic areas to support construction
- Monitoring the performance