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Satakunta policy context

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Sustainability crisis

Regulatory framework in Satakunta region is based on the national legislation

Finland is committed to implement the whole 2030 Agenda for Sustainable Development and its SDGs by 2030.

Via integrated policy actions

- Climate change
- Loss of biodiversity
- Overconsumption

Carbon-neutral Finland by 2035

Emissions-free electricity and heat production by the end of 2030s

Reduction of the carbon footprint of building

Promotion of circular economy

Promotion of a climate-friendly food policy

Taxes:

taxes on environmentally harmful activities, reform of energy taxation

Climate policy plans must be prepared in an open process, including citizen and stakeholder consultations.

https://paastot.hiilineutraalisuomi.fi/#en

AREA

SATAKUNTA

Area choice

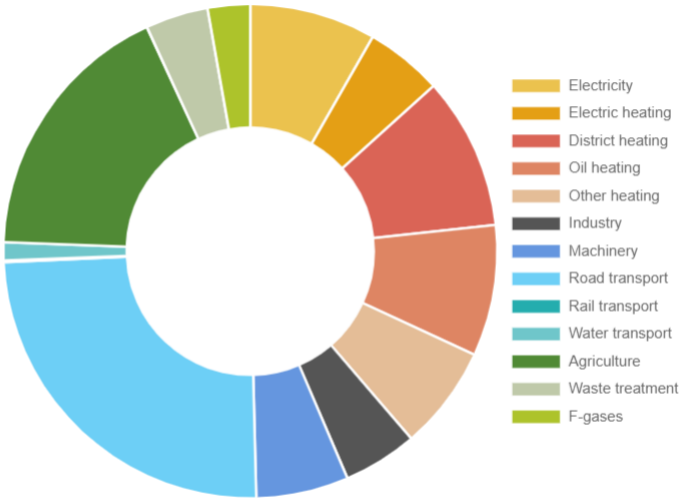
CALCULATION METHOD

HINKU CALCULATION

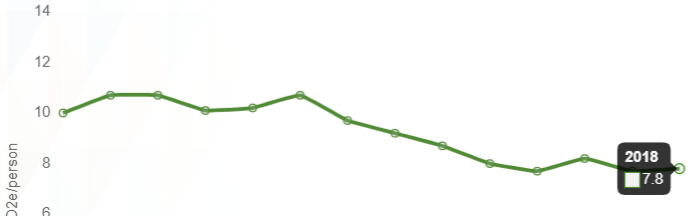
Method choice

Default calculation model for tracking municipal emissions and climate goals. Does not include the fuel use of the industrial plants under Emission Trading System, the electricity consumption of the industry sector, the emissions from the treatment of industrial waste and the pass-through traffic of trucks, vans and buses. Wind power produced in the area yields the municipality an emission compensation calculated by the annual electricity emission factor.

EMISSIONS DISTRIBUTION 2018 — SATAKUNTA



EMISSIONS PER PERSON — SATAKUNTA



CHANGE OF EMISSIONS — SATAKUNTA

ALL EMISSIONS

2005 - 2018

-25%

CHANGE OF EMISSIONS — SATAKUNTA

Government Resolution “More from less – Wisely

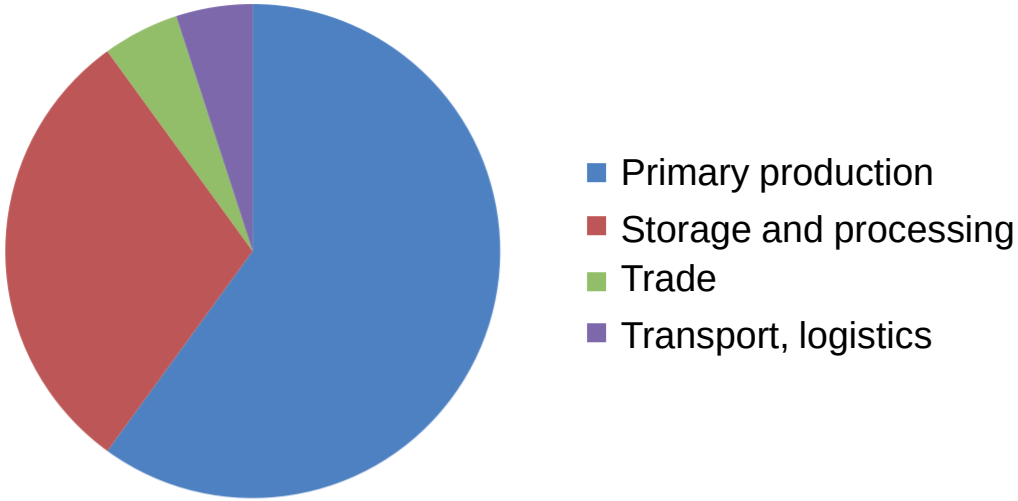
ENVIMAT

An environmentally extended input–output (EE-IO) analysis – environmental impacts of material flows caused by the Finnish economy

- **To improve data on production and consumption in Finland**
- **Help of life-cycle inventory data**

Finnish economy uses imported material resources as much as domestic resources

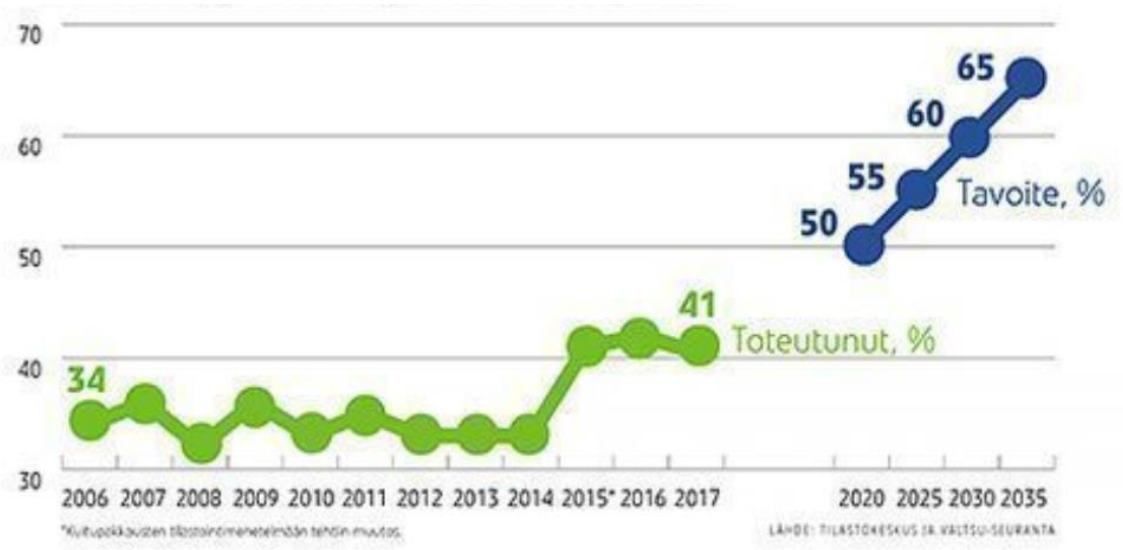
GHG emissions of food production



Virtanen ym. 2009. Elintarvikeketjun ympäristövastuun laaturaportti

Waste

Rate of municipal waste circulation in Finland



Target, %

To improve:
Biowaste and plastics away from the municipal waste

Plastics roadmap 2018

Waste act reform

Finland behind other Europe

Target include

- **End-of-waste criteria reform**
- **Biowaste follow-up update**
- **Producer responsibility system update to support ecodesign**

Bioeconomy Strategy in Finland

Strategic goals

1. **COMPETITIVE OPERATING ENVIRONMENT FOR BIOECONOMY**
   A competitive operating environment will be created for bioeconomy growth
2. **NEW BUSINESS FROM BIOECONOMY**
   New business will be generated in bioeconomy by means of risk financing, bold experiments and crossing of sectoral boundaries
3. **A STRONG BIOECONOMY COMPETENCE BASE**
   The bioeconomy competence base will be upgraded by developing education, training and research
4. **ACCESSIBILITY AND SUSTAINABILITY OF BIOMASSES**
   Availability of biomasses, well-functioning raw material markets and sustainability of the use of biomass will be secured

Implementation and monitoring

Sustainable bioeconomy solutions are the foundation of well-being and competitiveness in Finland

Accessibility and sustainability of biomasses

Biomass Atlas

Support for decision-making regarding investments and policies

The Biomass atlas gathers geographic information on biomasses into one user interface.

The online service is open for all and can be used e.g. for planning investments and raw material procurement, as well as support for environmental and energy policies.

The service can be used for searching for information on

- land use,
- forest resources,
- side streams of fellings,
- production and side streams of field crops,
- manures,
- industrial and municipal biodegradable waste and sludge, as well as ashes from combustion plants everywhere in Finland.

Natural Resources Institute Finland (Luke) offers its expertise for sustainable and productive utilization of biomasses based on the data in the Biomass Atlas.

A USE CASE: Treatment of biodegradable municipal wastes
The aim is to utilize the sewage sludge and biological waste in energy production and their nutrients in plant production.

1. An analysis how much biological waste and sewage sludge forms in the region. Calculation of the methanisation potential of the masses.
2. The summary of fields and crops for evaluation the nutrient requirement. Calculation of the nutrient content of the masses.
3. Comparing the nutrient amounts of the bio-waste and sludge with the requirements of plants.
4. Computation of the transport distances to the fields where the nutrients from the masses can be utilized.
5. Generating a review on which fields sludge can be spread on by selecting suitable plant groups.

Interested? Please contact our specialist:
Eeva Lehtonen, Senior Scientist. +358 295 326 317, eeva.lehtonen@luke.fi.
Contact information for specific biomass materials: www.biomassatlas.fi

luke.fi

Carbon issue and bioeconomy

- Critical views about consumption and material growth are largely absent
- All currently used fossil and other non-renewable resources cannot be replaced with biomass
- Circularity, waste prevention and energy efficiency should be emphasised, and discussion on sustainable lifestyles should be more prominent

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Thank you!

Questions welcome

www.interregeurope.eu/LCA4Regions