



Vantaa's Roadmap to Resource Wisdom

Council term 2021–2025

Approved by the City Council on 28 February 2022



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Roadmap to Resource Wisdom 2021–2025



#Vantaa of Innovations

A carbon-neutral, resource-wise Vantaa is built together!

Vantaa has pledged to reach carbon neutrality in 2030. The city's goals and actions to implement climate and environmental goals, actions and responsibilities were added to the Roadmap to Resource Wisdom in 2018. The roadmap implements the City strategy.

You are now holding the updated roadmap for the Council's term 2021–2025. The roadmap is extensive and includes a large spectrum of goals. The journey ahead to implement the roadmap will not be easy, but it is necessary. Sufficient resources for competence development and investments are also needed for implementation. We will build a prosperous and ecologically sustainable Vantaa for us and future residents.

Updating the Roadmap to Resource Wisdom has been directed by the cross-administrative strategy theme management group Hiilijory and was coordinated by the city's Environment Centre. The update was drawn up in close interaction with experts in different fields across the city's organisation. Residents and businesses also took part in considering the goals. Opinions were mapped through surveys consultation rounds and workshops. A huge thanks to everyone involved in the work. Let's build a carbon-neutral, resource-wise Vantaa together!

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Mayor of Vantaa

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Background

The **Vantaa City Strategy** has been built on six focus areas, one of which is a resource-wise, carbon-neutral Vantaa.

The key goals that will be promoted during the Council term have been added to the focus area.

The **Roadmap to Resource Wisdom** is a programme to implement the city's strategy and to take the city towards eco-sustainability and carbon neutrality in 2030.

Openness
Courage
Accountability
Sense of community



Roadmap to Resource Wisdom in brief



Figure 1: Implementation and monitoring of the Roadmap to Resource Wisdom in Vantaa



- The updated Roadmap to Resource Wisdom gives greater prominence than earlier to protecting biodiversity and the circular economy
- It brings together the goals to curb climate change, adapt to a changing environment, make the city resource-wise and maintain and promote biodiversity.
- The roadmap and strategy goals become actions in the city departments' implementation plans.

Environmental challenges are changing and expanding



Change drivers are the:

- alarming speed of climate change
- rapid loss of biodiversity
- mutually reinforcing development of climate change and loss of nature
- emphasis on the circular economy to promote the sustainable use of natural resources

Vantaa acts as a guide and enabler by:

- setting guidelines for land use planning
- directing plot conveyance and construction
- coordinating nature conservation and environmental monitoring
- influencing residents, businesses and organisations through communication, education and awareness-raising
- itself acting as a leader through pilot projects and by presenting new solutions
- providing opportunities for innovations
- influencing the work of its subsidiary entities through ownership steering
- engaging in cooperation with the state and other actors to reach the goals of the Roadmap

Vantaa's agreements, pledges and networks



- **UN 2030 Agenda for Sustainable Development**
Promoting sustainable development and eliminating extreme poverty
- **ICLEI**
International non-governmental organisation that promotes sustainable development
- **Eurocities**
A network of major European cities
- **Covenant of Mayors for Climate and Energy**
Pledge by cities and regions with the European Commission to reduce climate emissions and promote adaptation
- **CDP reporting**
International reporting on environmental and climate work
- **European Commission's Green City Accord**
Environmental management of air and water, nature and biodiversity, circular economy and waste, and noise
- **Energy Efficiency Agreement for Municipalities (KETs)**
For 2017–2025
- **Green deals between municipalities and the State**
Reduction of harmful substances in early childhood education and care procurements, zero-emission construction sites, sustainable demolition
- **Hinku network – Towards Carbon Neutral Municipalities**
Promotion of climate goals in cooperation with other municipalities
- **CIRCWASTE network**
The goal is to recycle 55% of municipal waste, recover at least 70% of construction and demolition waste and to reduce overall waste production
- **Avia network**
A network of businesses, organisations and public sector actors operating around Helsinki-Vantaa Airport to promote the goal of carbon neutrality and the circular economy

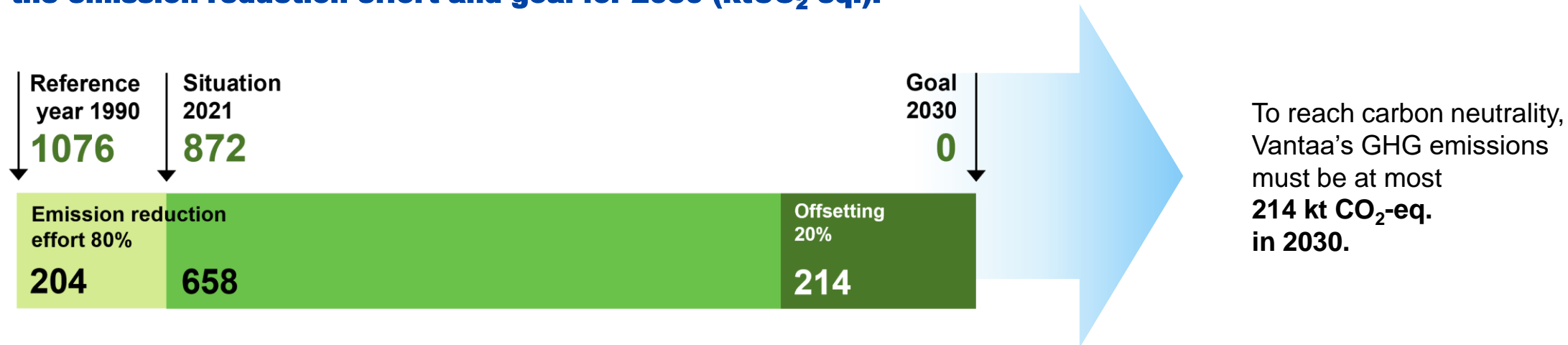
Vantaa responds to the challenges of climate change

The goal of the Paris Agreement is to limit the increase in the global average temperature to 1.5°C above pre-industrial levels. Reaching the goal requires global carbon neutrality by 2050 and for emissions to be halved before 2030. The world's cities act as drivers in mitigating climate change. Vantaa is responding to these challenges by implementing the measures in the Roadmap to Resource Wisdom.



Emissions trend in Vantaa

Figure 2: Total emissions in the Vantaa region in the reference year 1990, the emission reduction effort and goal for 2030 (ktCO₂-eq.).

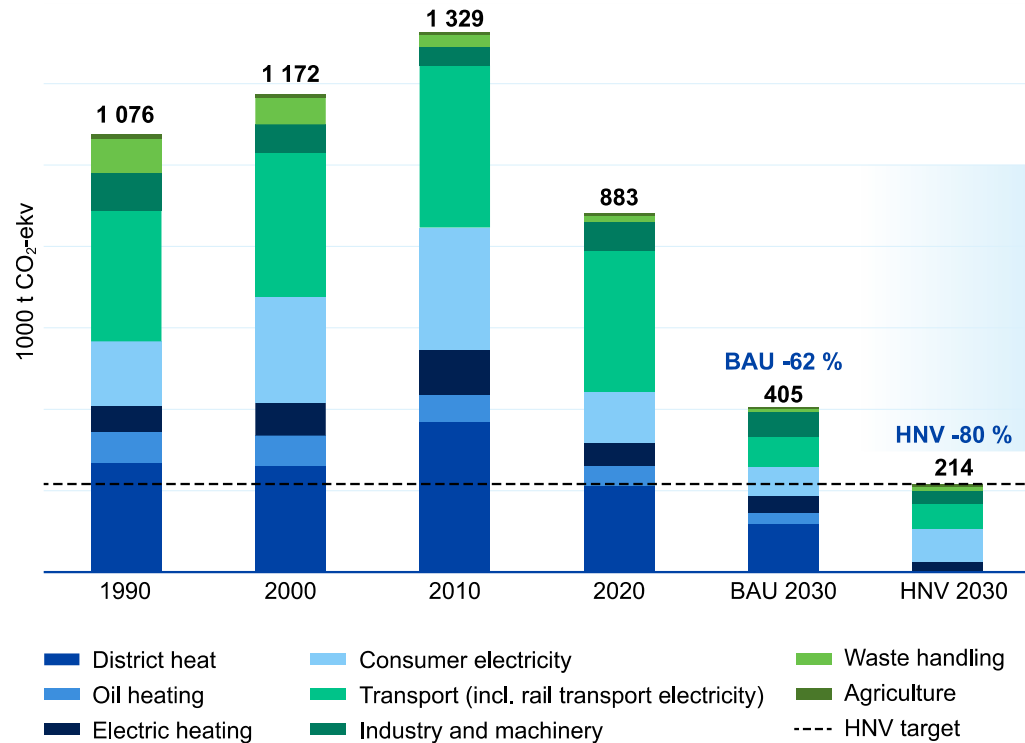


- Whereas the direct emissions of the City of Vantaa's organisation account for less than 10% of emissions generated in the urban area, the indirect effect is many times that through companies belonging to Vantaa City Group and through land use steering.
- GHG emissions in the Vantaa region must be reduced by 80% compared to 1990 levels and the remaining emissions must be offset.
- Sequestering carbon in the forests and soil in the Vantaa region and, for example, carbon capture and processing or the funding of low-carbon projects can offset any emissions remaining after mitigation measures.

Vantaa's greenhouse gas emission study examined two emission scenarios



Figure 3: Vantaa's emissions 1990–2020 and scenarios to 2030 (1000 t CO₂-eq)



Business as usual scenario (BAU): emissions -62% compared to 1990

The business as usual (BAU) scenario calculation includes the impacts of those means already decided at the government level and in the city.

Carbon-neutral Vantaa 2030 scenario (HNV2030): emission -80% compared to 1990

The carbon-neutral Vantaa 2030 (HNV2030) scenario includes the additional efforts needed for carbon neutrality which Vantaa's Roadmap to Resource Wisdom acts as a guide.

Sources: Helsinki Region Environmental Services (HSY), Sitowise Oy.

Consumption emissions in Vantaa 1/2



Figure 4: Examination of emissions / Scope 1, 2 and 3

Carbon neutrality target is founded on the GHG emission calculation by the Helsinki Region Environmental Services (HSY). The calculation is limited to emissions produced within the City of Vantaa and emissions of bought heat and power (Scope 1 and 2). Calculated per resident, emissions in 2020 amounted to 3.7 t CO₂-eq. (2021: 3.6 t CO₂-eq).



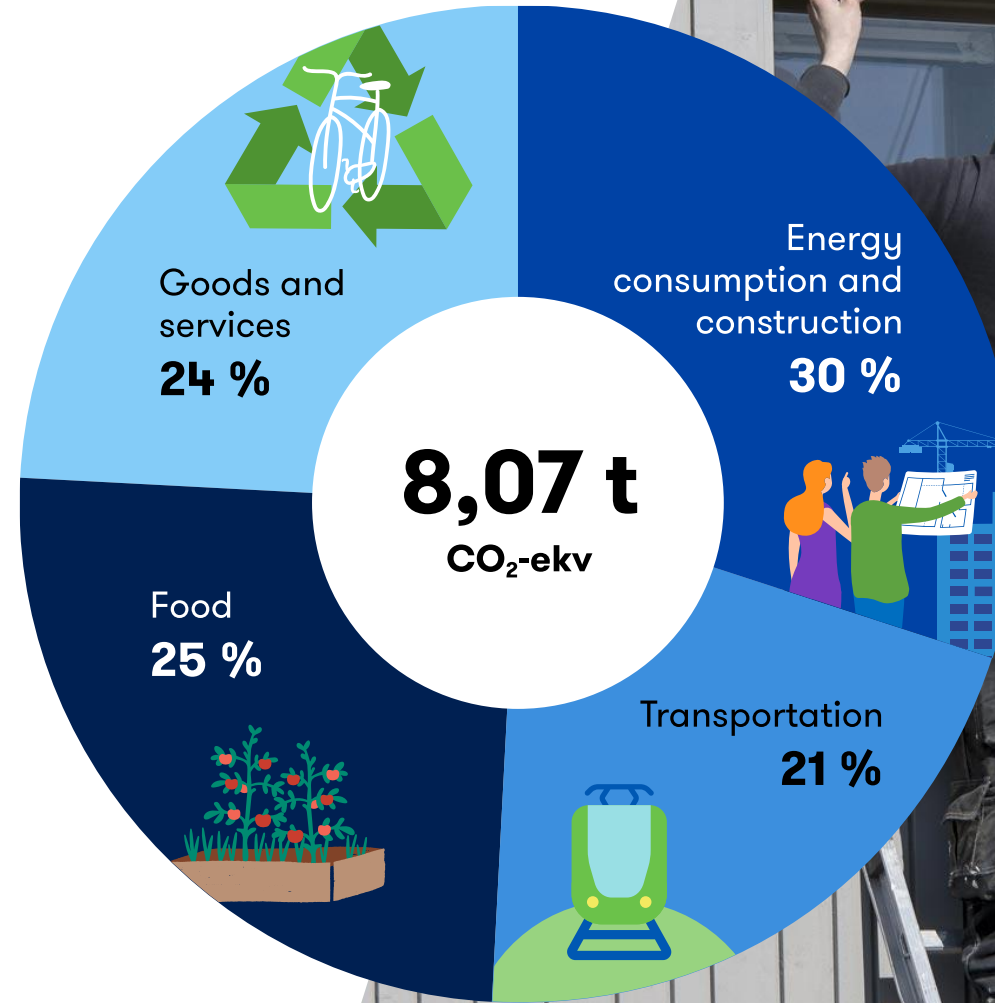
Consumption emissions in Vantaa 2/2

Figure 5: Consumption GHG emissions per resident in Vantaa in 2020 totalled 2020 8.07 t CO₂-eq.

Actions to reduce consumption emissions have been included in the Roadmap to Resource Wisdom. The consumption emissions consist of products, food and services generated outside the Vantaa region (Scope 3).

Consumption emissions per resident in 2020 amounted to 8.07 t CO₂-eq.

Source: Sitowise, Luke 2022.



Roadmap to Resource Wisdom

Vantaa's Roadmap to Resource Wisdom guides the development of the city's environmental responsibility. The target in 2030 is a carbon-neutral Vantaa, where the city's planning and implementation is resource-wise, nature is diverse, natural resources are used sustainably, and residents, businesses and communities operate responsibly.

Progress towards the target is through six lanes in the Roadmap to Resource Wisdom: Urban structure and mobility, Carbon-neutral energy, Lifecycle of materials and the circular economy, Biodiversity, Responsible Vantaa and Carbon sinks and compensation. Indicators have been defined for the lanes to monitor the achievement of the goals.



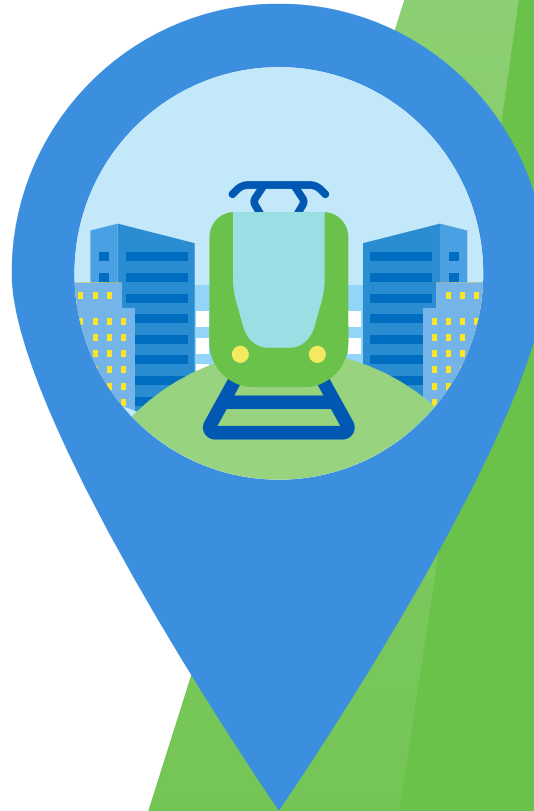
ROADMAP TO RESOURCE WISDOM VISION 2030



Urban structure and mobility

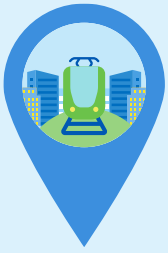
A resource-wise urban structure will enable Vantaa residents to have a sustainable, low-emission way of life, sustainable modes of mobility and safeguard nature's values.

Land use solutions can significantly reduce GHG emissions by, for example, impacting the energy use of buildings, use of renewable energy and transport solutions. The impacts arise after years of delay and are long lasting.



Goals of the lanes:

1. Land use planning and implementation are based on carbon neutrality and resource wisdom.
2. The city will integrate climate change adaptation measures into planning, construction and maintenance.
3. Green structure supports health and creates wellbeing. Preservation and improved accessibility of green areas.
4. Creation of good conditions for sustainable, diverse mobility.
5. Reduction in the need for mobility.
6. Promotion of low-emission vehicles and improvement in air quality.



GOAL 1

Land use planning and implementation are based on carbon neutrality and resource wisdom

- Compact land use mostly relying on rail transport.
- Development of centres as functionally diverse urban centres.
- Siting of new housing, jobs and services mostly in the vicinity of stations and public transport zones.
- Development of a unique rail city favouring sustainable forms of mobility in the catchment area of Vantaa Light Rail.
- Implementation of parking flexibly, effectively and centrally as structural parking in the environment of urban centres.

Goal indicators and desired direction of development

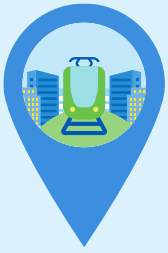
Densely populated areas
(no, % of number of YKR grid cells)

Residents in densely populated areas (residents, % of total population)

Climate/carbon-neutral study done in major zoning sites (no, %)

Availability of services
(No. of residents, % of total population distance of 300 m and 700 m from services)





GOAL 2

The city will integrate climate change adaptation measures into planning, construction and maintenance

- Planning, building and maintaining Vantaa taking into account the requirements of climate change.
- Including adaptation to climate change as part of the city's risk management planning.
- Creating a more pleasant, diverse environment and increased carbon sinks.
- Using green construction in public areas, on privately-owned plots and on roofs to promote the management of stormwaters and temperatures.
- Introducing a plot-specific green factor requirement in all town plans. In addition, piloting of an area-wide green factor requirement.
- Developing the management of climate impacts directed at green areas.

Goal indicators and desired direction of development

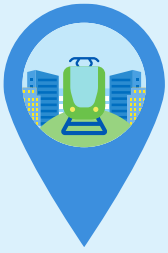
Green factor in plans ratified by the City Council (No, %)

Green factor in accordance with the town plan has been complied with in building permit decisions and green factor is implemented 90% (%)

Development of a management system in preparation for extreme weather events

Design and construction of stormwater structures (No.)





GOAL 3

Green structure supports health and creates wellbeing. Preservation and improved accessibility of green areas

- Enabling easier access to services and preserving extensive green areas through dense urban structure.
- Preserving and increasing biodiversity in planning and construction and safeguarding the functioning of ecosystem services.
- Drawing up a development snapshot of Vantaa's green structure to help to manage the overall development of the green area network and green structure and to pursue new solutions.

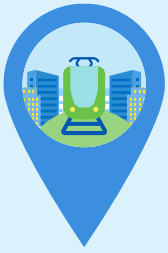
Goal indicators and desired direction of development

Accessibility of local recreation and green areas

(No. of residents, % of population within 300 m and 700 m of areas)

Development of green area adequacy and accessibility metrics





GOAL 4

Creation of good conditions for sustainable and diverse mobility

- Defining the prioritisation of modes of transport in different types of mobility areas.
- Addressing the pleasantness, functionality and accessibility of walking environments and developing cycle traffic in diverse ways.
- Improving connections in line with the target network for bicycle traffic and increasing secure bicycle parking.
- Creating routes for walking and cycling that are shorter than those for vehicles in land use planning.
- Improving the functionality, attractiveness and low emission of public transport in conjunction with Helsinki Regional Transport (HSL).

Goal indicators and desired direction of development

Sustainable modes of mobility
(breakdown of modes of transport, %)

Quality cycling corridors (km)

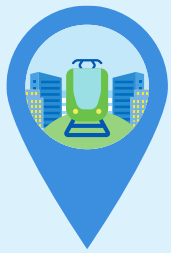
Accessibility of public transport stops
(No. of residents, % of entire population within 300 m and 700 m of stops)

Cycleways that meet the criteria of the target bicycle traffic network (km)

Public transport travellers (No.)

Cyclists (No.)





GOAL 5

Reduction in the need for mobility

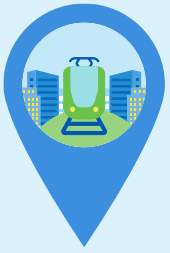
- Diverse, compact urban centres and local services make it possible to access the services needed in everyday life by walking, cycling and public transport, thereby reducing car dependency.
- Development of the possibilities and conditions for remote working will reduce the need for commuting and thus congestion and the need for parking places, which makes the transport system more cost effective.

Goal indicators and desired direction of development

Accessibility to services
(No. of residents, % of population within 300 m and 700 m of services)

- **Child daycare centres**
- **Public transport: public transport stops**
- **City bike stations**
- **Accessibility of local recreation and green areas**
- **Schools: comprehensive school grades 1–6**
- **Grocery stores**
- **Libraries and mobile library stops**





GOAL 6

Promotion of low-emission vehicles and improvement in air quality

- Low-emission vehicles and non-studded (friction) tyres are recommended in the city's own vehicles.
- Taking air quality issues into account in city planning and pursuit of solutions to reduce street dust emissions.

Goal indicators and desired direction of development

E-vehicles and gas-powered vehicles
(% of vehicle stock)

Exceedings of EU air quality standards
(no.)



Carbon-neutral energy

Energy production and consumption account for a large share of Vantaa's climate emissions. We aim to have phased fossil fuels out of heating in the Vantaa area by 2030.

Energy efficiency will be systematically improved in the city's own properties and in all properties across the city area, promoting energy renovations in properties and housing. Municipal residents are encouraged to become active actors in energy production.

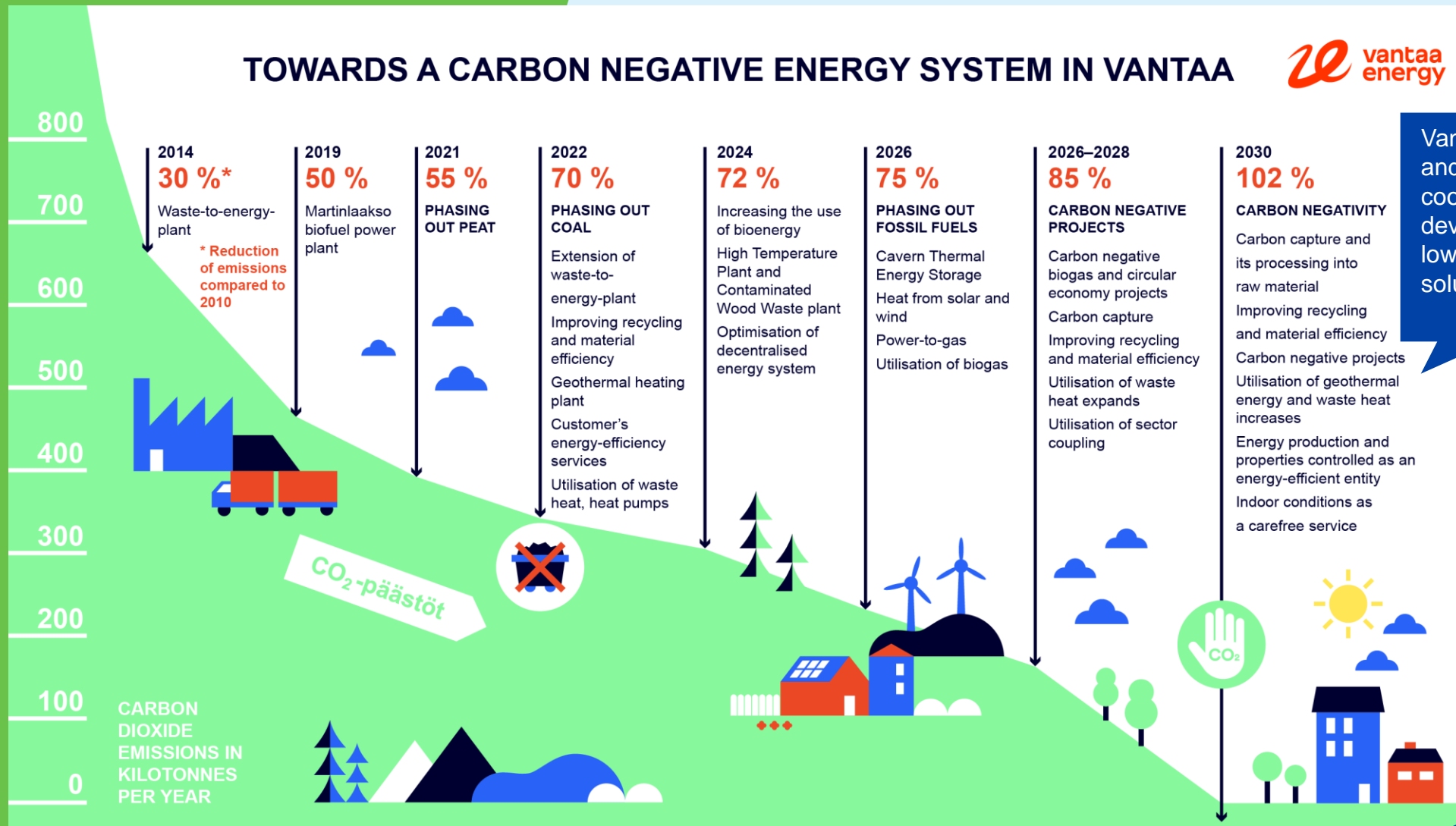


Goals of the lane:

7. Reduction in heating emissions.
8. Reduction in electricity emissions.
9. Increasing the share of renewable energy.



Carbon neutral energy (2/2)





GOAL 7

Reduction in heating emissions

Heating emissions across the entire city area accounted for 36% of all emissions in 2020.

- Reducing emissions by energy saving in new and renovation construction as well as the phasing out of fossil fuels in district heating and separate heating.
- Phasing out oil heating as the main form of heating.
- Recovering local renewable and waste energy as well as making and promoting energy renovation. Guiding construction to energy neutrality using land use means.
- Motivating industry and facilities to energy renovation and introduction of forms of climate partnerships.

Goal indicators and desired direction of development

Heating emissions in the Vantaa area
(1000 t CO₂-eq. and compared to 1990, %)





GOAL 8

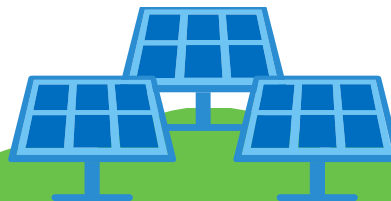
Reduction in electricity emissions

Consumer electricity emissions across the city area accounted for 14% of all emissions in 2020.

- Curbing the increase in electricity consumption except electricity consumed by e-transport where it replaces fossil fuels.
- Reduction in consumer electricity emissions by replacing old devices with more energy efficient ones, producing our own renewable electricity using solar panels and by sourcing zero-emission electricity.

Goal indicators and desired direction of development

Emissions from use of electricity in the Vantaa area
(1000 t CO₂-eq. and compared to 1990, %)



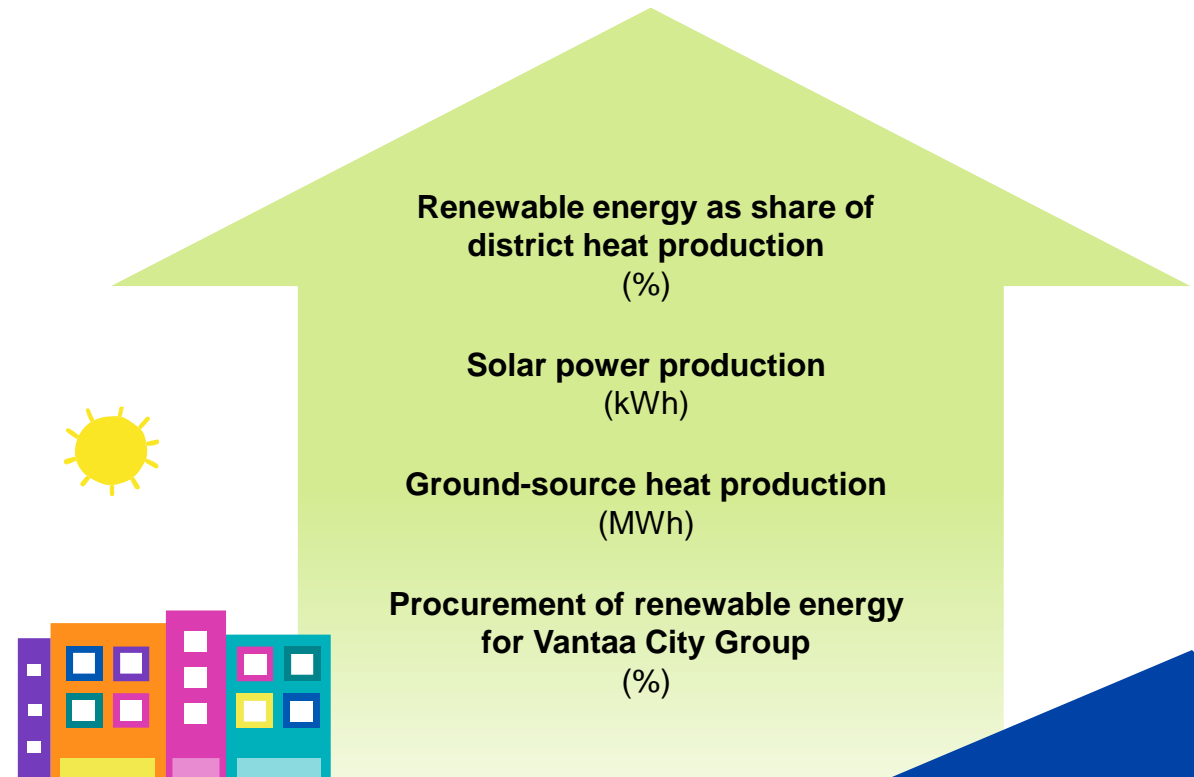


GOAL 9

Increasing the share of renewable energy

- Production of renewable energy as part of district heat and electricity production and supplying it through the district heating and power network.
- Exploration of the possibilities for area hybrid models and separate heating solutions outside the district heating network.
- Promotion of local or property-specific renewable energy such as solar power plants and introduction of heat pumps in planning, plot conveyance terms and conditions and by facilitating the installation of renewable energy.
- Acting as an example in the deployment of property-specific solutions and in energy procurement.

Goal indicators and desired direction of development



Lifecycle of materials and the circular economy

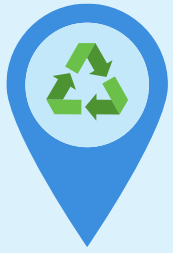
The built environment plays a decisive role in mitigating climate change since buildings account for a third of Finland's climate emissions. Construction materials account for a significant share of GHG emissions in the lifecycle of buildings. Preconstruction also accounts for a major share of emissions.

Vantaa is a growing city where there is much construction and demolition work. Developing the use of demolition material can reduce the emissions caused by transport and reduce costs incurred by the city. The city can also promote the development of the circular economy by acting as an enabler and exemplar in its own activities. The development of waste places greater emphasis on the importance of the circular economy in preventing waste generation.



Goals of the lane:

10. Promotion of low-carbon construction.
11. Promotion of the circular economy in construction.
12. Reduction in the carbon footprint of infrastructure construction and management of soil masses.
13. Development of the prerequisites for the sharing economy.
14. Development of waste management to support the circular economy.



GOAL 10

Promotion of low-carbon construction

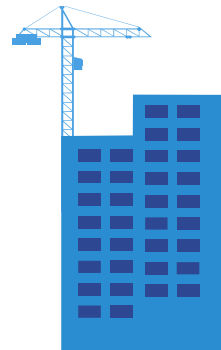
- A review of building guidance under preparation at the Ministry of the Environment has taken into account the manufacturing of building materials, prevention of the generation of construction waste and recycling. The City of Vantaa will gradually start to apply the criteria in its own construction already before legal coercion and through the guidance will also extend application of the criteria to construction by Vantaa City Group and private actors.

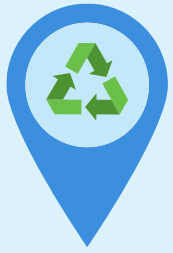
Goal indicators and desired direction of development

City projects where low-emission construction criteria are applied
(no, %)

Development of wood construction
(no. %)

Plot reservations for low-carbon construction
(no, %)





GOAL 11

Promotion of the circular economy in construction

- Promoting the use of recycled materials in construction, the recyclability, dismantlability, modifiability, re-use and long lifespan of building materials.
- Introducing the lifecycle assessment of buildings as a basis for the city's planning guidelines.
- Motivating property owners and developers to prepare a pre-demolition audit in demolition and extensive renovation projects of entire buildings.
- Increasing the use of web-based, nationwide exchange platforms and strengthening the knowledge base related to demolition materials and their utilisation.
- Considering alternatives to demolition, for example by repurposing a building or by renovating and enlarging a building.



Goal indicators and desired direction of development

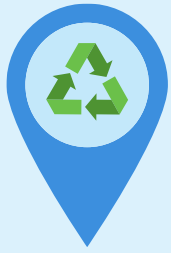
Pre-demolition audits carried out (no, %)

Building components from demolition sites that have been re-used (no, t)

Materials from demolition sites that have been recycled (no, %)

Buildings planned for demolition (no, %)

Buildings planned for repurposing (no, %)

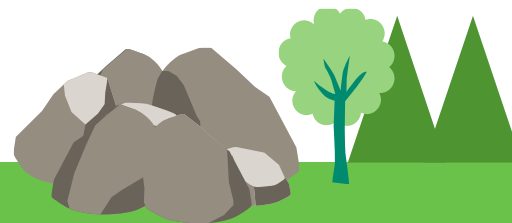
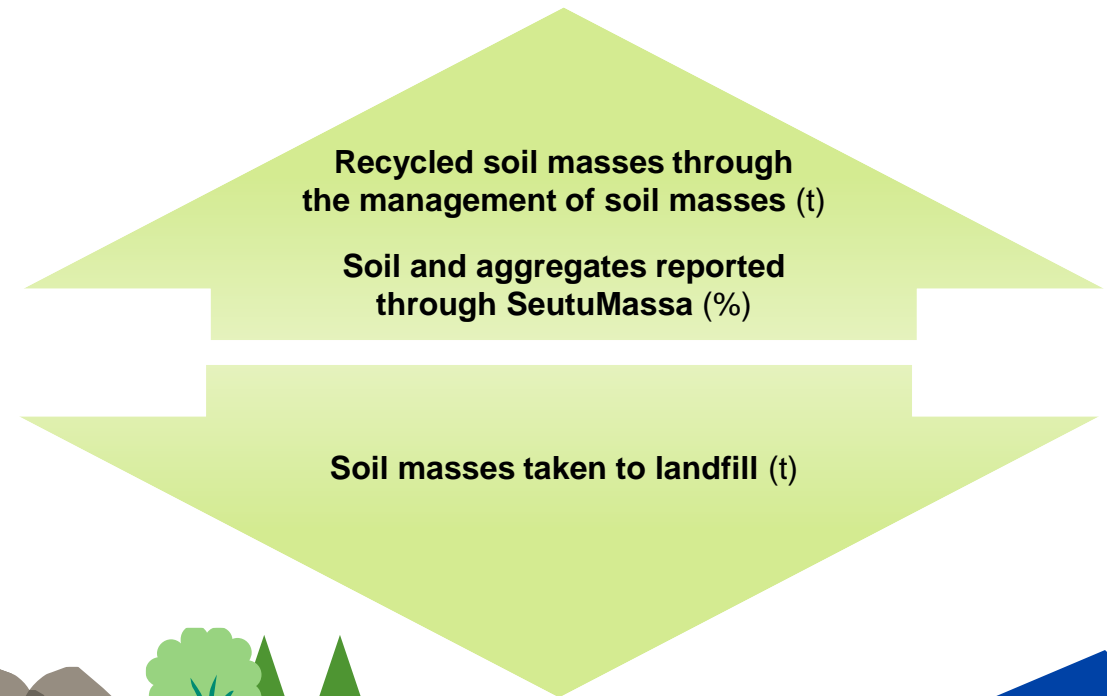


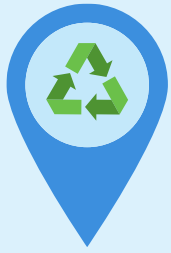
GOAL 12

Reduction in the carbon footprint of infrastructure construction and management of soil masses

- Introducing the sustainable landscape construction (KESY) model which defines how the project client, designer, developer and maintainer can take into account sustainable landscape construction operations in each phase of the project.
- Piloting of infrastructure construction emissions calculation methods that are under development.
- Pursuing cooperation and measures promoting soil and aggregate management in the following theme groups: land use planning, land use agreements, plot conveyance terms and conditions, infrastructure project design, building design, building project management, construction, maintenance and permit services, communication, education and interaction as well as information systems (digitalisation).
- Preferring low-emission materials in design and implementation.
- Planning of Vantaa's Light Rail in accordance with the principles of resource wisdom.

Goal indicators and desired direction of development



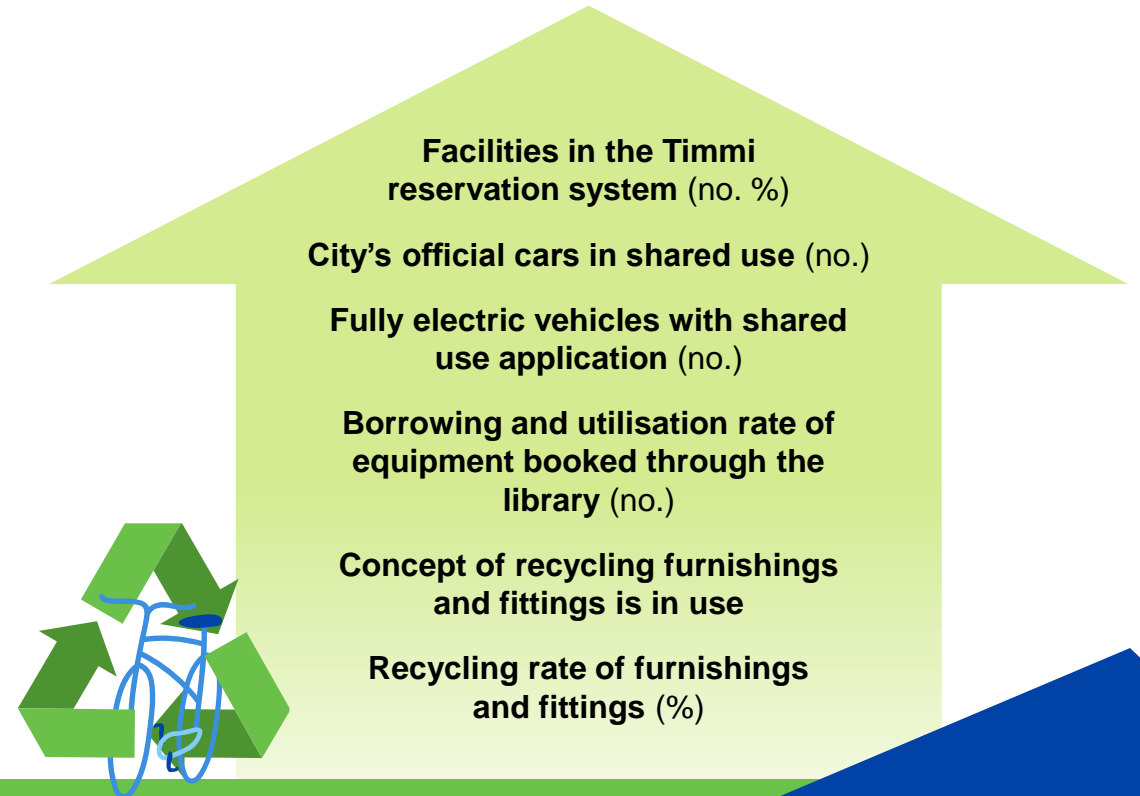


GOAL 13

Development of the prerequisites for the sharing economy

- Developing the Timmi reservation system to promote the efficiency of shared-use of the City of Vantaa's facilities.
- Increasing multipurpose and shared use of spaces in new premises projects and in conjunction with planning renovations.
- The library is expanding its services to support the sharing economy and a sustainable lifestyle by increasing the lending of various tools wherever possible.
- Promoting the shared use of low-emission vehicles and e-cycles by, for example, introducing new applications and by arranging free street parking for vehicles in shared use.
- Promoting the recycling of furniture and fittings in the City's offices.
- Further strengthening of cooperation with the Recycling Centre.

Goal indicators and desired direction of development



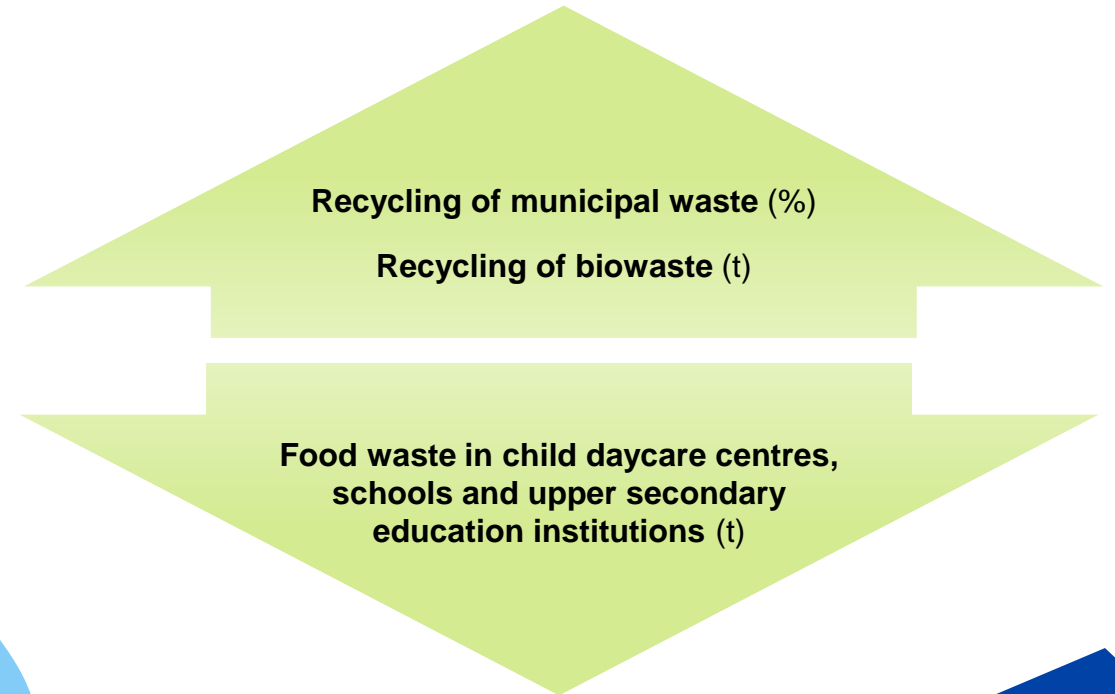


GOAL 14

Development of waste management to support the circular economy

- Waste processing accounted for 2% of GHG emissions in 2020.
- Greater emphasis on the importance of the circular economy in preventing the generation of waste. Solutions that involve sharing economies contribute to supporting this goal.
- Creating smoother waste management systems in own properties. This requires group-level management, coordination and development in the availability of waste containers, facilities and cleaning services. Particular attention given to the recovery of plastic waste.

Goal indicators and desired direction of development



Biodiversity

Biodiversity is vital for the survival of species and is necessary for human wellbeing. A rich natural environment produces important ecosystem services such as pollination, climate regulation and carbon sequestration, clean water, flood protection and recreation services. Vantaa still has extensive forest areas as well as various aquatic environments, especially streams, which are also very valuable for biodiversity.

The greatest threats to biodiversity are the loss and fragmentation of habitats caused by human activity, the breakdown of ecological corridors and the deterioration of the quality of habitats, the competition caused by invasive alien species, climate change, and a deterioration in the functioning of ecosystems. In Vantaa's increasingly compact urban structure it is also important to protect nature from wear and tear..



Goals of the lane:

15. Increasing, protecting and strengthening biodiversity in Vantaa in a systematic way.
16. Strengthening actions to improve the diversity of forest and marsh ecosystems.
17. Improving the natural state and diversity of waterways.
18. Ensuring a comprehensive network of open areas.
19. Intensifying the prevention of harmful invasive alien species.
20. Protecting nature from wear and tear.



GOAL 15

Increasing, protecting and strengthening biodiversity in Vantaa in a systematic way

- Continuing work to safeguard biodiversity by drawing up a nature conservation implementation plan. The plan examines and schedules the protection and preparation of management and use plans which include the implementation of nature reserves, the restoration of nature areas, and the nature area network as a whole.
- Drawing up an inventory plan to increase information on habitat types and species in Vantaa to support ecologically sustainable urban planning.
- Providing information on the state of habitats and species - as well as changes that occur in them - for decision-makers, planners and citizens.
- Preparing a plan for ecological networks (VIVA) which comprehensively examines forest, meadow and blue networks and identifies means to develop them and strengthen their operations.

Goal indicators and desired direction of development

Share of nature reserves share of City's urban area
(%, m²/resident)

City-level nature investments
(no.)

Confirmed connections in accordance with the specifications and validation needs clarified in VIVA work
(no.)

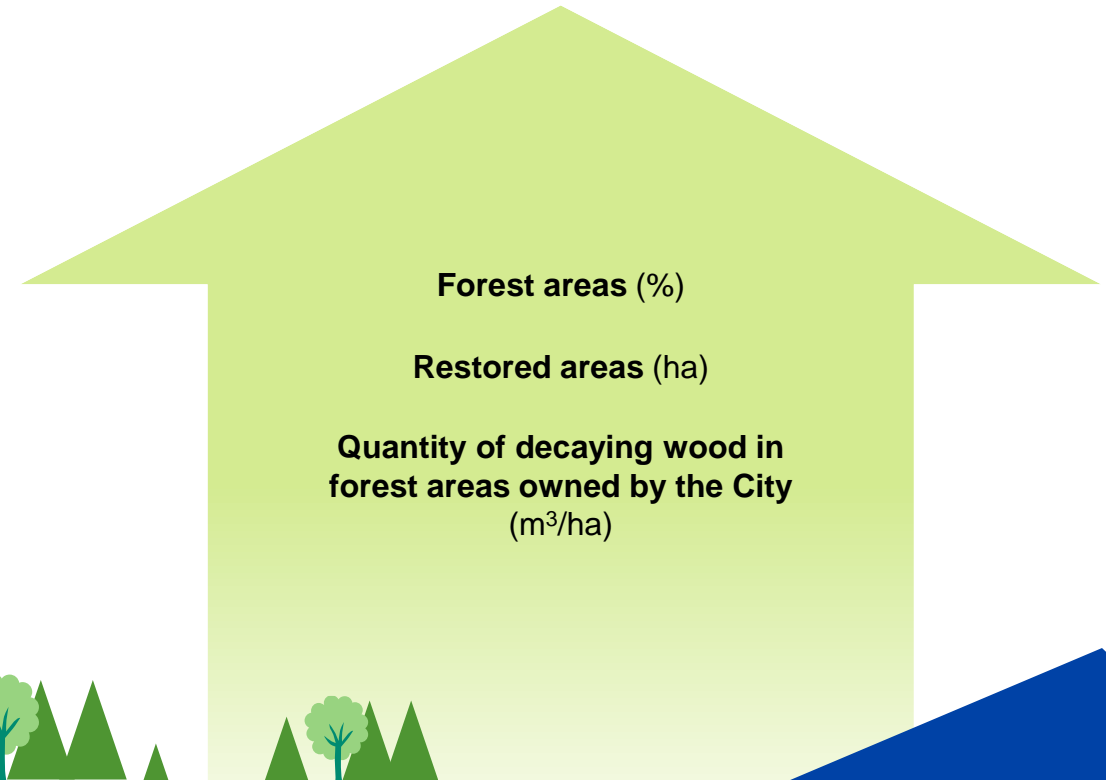


GOAL 16

Strengthening actions to improve the diversity of forest and marsh ecosystems

- Information and monitoring is needed on the state of nature and habitats outside of protected areas.
- Improving the ecological state of forests and marshes through active management and restoration measures and by combating damage arising from wear and tear.
- Urban planning takes into account the forest network structure including its comprehensive ecological connections and their support areas in the built environment.
- Coordinating the means to promote biodiversity and provide ecosystem services.

Goal indicators and desired direction of development





GOAL 17

Improvement in the natural state and diversity of water bodies

- Continued work for the benefit of aquatic communities in Vantaa.
- Reserving enough space for stream corridors in the planning of new areas so that streams could meander and live as nature intended.
- The environmental goal of the Uusimaa waterways management action programme is for the Vantaanjoki river to be in a good state by 2027. Much active work is required to reach this goal.

Goal indicators and desired direction of development

Monitoring results of stream water quality
(results in different classes)

Ecological state of surface waters
(percentages)





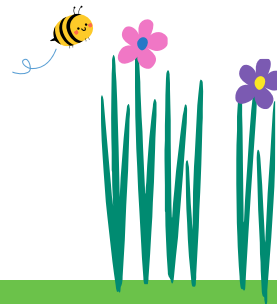
GOAL 18

Ensuring a comprehensive network of open areas

- Active measures are required to conserve and increase the diversity of open habitats since a significant share of threatened and endangered species in Finland depends on these habitats.
- Increasing the surface area of meadows.
- Increasing the diversity of meadow environments through correct management of meadows as well as by mowing grass areas and increasing the number of species of meadow plants.
- Studying the network of open areas as part of Vantaa's ecological networks plan to ensure the success of meadow species.
- Developing the city's mowing practices to ensure seed production and the success of insects.

Goal indicators and desired direction of development

Valuable meadows under management
(m²)





GOAL 19

Intensifying prevention of harmful invasive alien species

- Increasing residents' awareness of invasive alien species and arranging voluntary work parties with residents to weed out invasive alien species.
- Outlining operating models and allocating resources to fight invasive alien species.
- Working with neighbouring municipalities to fight invasive alien species.
- Targeting prevention measures primarily at sensitive habitats in nature reserves.

Goal indicators and desired direction of development

Number of voluntary work parties arranged by the city to weed out invasive alien species (no.)

Number of citizens participating in voluntary work parties to weed out invasive alien species (persons)





GOAL 20

Protecting nature from wear and tear

- Reducing damage to habitats by carefully planning routes, guidance and by creating structures that prevent wear and tear.
- Protecting nature by marking routes and main tracks. Steering recreational use by various means also prevents disturbance caused to birds nesting on the ground and to other animals.

Goal indicators and desired direction of development

**Routes implemented in
nature reserves**
(km)

**Number of management and use
plans drawn up for protected areas**
(no.)



Responsible Vantaa

Reaching Vantaa's climate goals requires the city's residents, businesses and entities to act responsibly. This calls for the city organisation to act as an example, an enabler and a communicator that highlights new ways of working. Climate action must become more habitual and open through communication and dialogue.



Goals of the lane:

21. Communicating inspirationally about environmental responsibility and enabling interactive engagement.
22. Educating and supporting Vantaa residents in a sustainable lifestyle and environmental responsibility.
23. Reducing the environmental impacts of food.
24. Promoting the environmental responsibility of the city organisation.
25. Promoting environmentally responsible procurements.
26. Promoting the environmental responsibility of businesses and organisations..



GOAL 21

Communicating inspirationally about environmental responsibility and enabling interactive engagement

- Utilising partnerships by means of interactive communication and developing new ways of active engagement.
- Holding campaigns, theme years and projects related to environmental themes. Open communication so that Vantaa residents know about the municipality's climate work and the importance of their own actions.
- Motivating various actors in the municipality to implement shared goals through inspiring communication about the importance of climate action.
- Resource-wise Vantaa serves as an example in the implementation of sustainable choices into everyday life, with particular attention to highlight emissions in the consumption of goods and services.

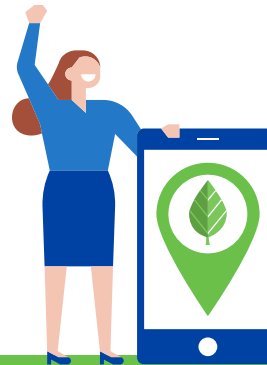
Goal indicators and desired direction of development

Engagement measures (no.)

Campaigns and reach (no.)

Climate info notices, engagement measures and campaigns (no)

Media releases including the carbon-neutral environmental aspect (no.)





GOAL 22

We educate and support Vantaa residents in a sustainable lifestyle and environmental responsibility

- Teaching themes affecting the skills, knowledge and actions of a sustainable lifestyle such as dining, food production, energy, mobility and other consumption. This should be done in accordance with the curriculum and education plans.
- Increasing information from educators and teachers about an environmental and sustainable lifestyle at all levels from early childhood care and education to vocational education. Municipal residents' knowledge of sustainable lifestyles and environmental responsibility can also be increased as part of leisure-time activities and engagement through services for both young people and adults.
- Including themes of environmental responsibility in voluntary activities, cultural production, events and exhibitions.

Goal indicators and desired direction of development

Organisation of sustainable life, climate and environmental responsibility courses, study periods and qualification components (no.)

Vantaa residents completing Koutsi courses on the Ilmastoinfo online course platform (no.)

Vantaa participants on Ilmastoinfo's energianeuvonta courses (no.)

Lessons ordered through HSY's environmental education (no.)

HSY's sponsor schools in Vantaa (no.)





GOAL 23

We reduce the environmental impacts of food

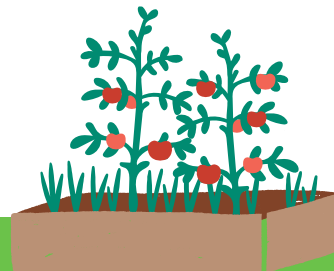
- Pursuing sustainability in institutional catering on nutritional recommendation terms and ensuring that food tastes even better than it does now.
- Developing the responsibility of food procurement by food procurement criteria work (among other things) and by monitoring the carbon footprint of catering services.
- Using open innovation to develop sustainable food industry ecosystems and food circular economy models.
- Demonstrating new innovative urban farming and foodtech solutions to increase food security and self-sufficiency.
- The Yhteinen pöytä – Shared Table network is exploring the possibility to expand its surplus food terminal and surplus food logistics to utilise prepared food surplus in Vantaa.

Goal indicators and desired direction of development

Number of Vantaa residents reached by a food aid network (no.)

Surplus food passing through the surplus food terminal (kg)

Carbon footprint of Vantaa's catering services





GOAL 24

We promote the environmental responsibility of the City's organisation

- The City of Vantaa keeps the sustainability competence of city employees up to date by ensuring adequate education and orientation.
- Integrating environmental issues into everyday working life as part of routines, ways of working, structures guiding work, planning and decision-making.
- Including the management and continuous improvement of environmental issues as part of other management.
- Supporting the introduction of environmental certificates such as the EcoCompass environmental management system and the Eco-Schools sustainable schools programme (Green Flag).
- Urban Environmental Department uses an environmental management system to develop its activities.
- Exploring different models of climate modelling and their suitability for Vantaa.

Goal indicators and desired direction of development

Trainings and participants
(no.)

Eco support systems
(persons)

Environmental management systems
(no.)

Educational institutions, schools and child daycare centres with environmental certification
(no.)





GOAL 25

We promote environmentally responsible procurements

- Using risk analyses to identify the most environmentally significant procurements. Studying the environmental impacts of these procurements and taking them into account in decision-making throughout the lifecycle of the product or service.
- Improving the effectiveness of procurements in cooperation with other cities by developing the procurement process and by drawing up common procurement criteria.
- Pursuing sustainable demolition, zero-emission building sites and reducing harmful chemicals in child daycare centre procurements with the help of Green Deal agreements.
- Reducing transport emissions by acquiring low-emission vehicles and expanding the network of charging points.
- Making sustainability and responsibility part of the criteria in the competitive tendering of procurements.

Goal indicators and desired direction of development

Product groups with the most significant environmental impacts studied using risk analyses (no.)

Lifecycle review introduced for the most significant product groups (no, %)

Implementation of the goals of Green Deal agreements



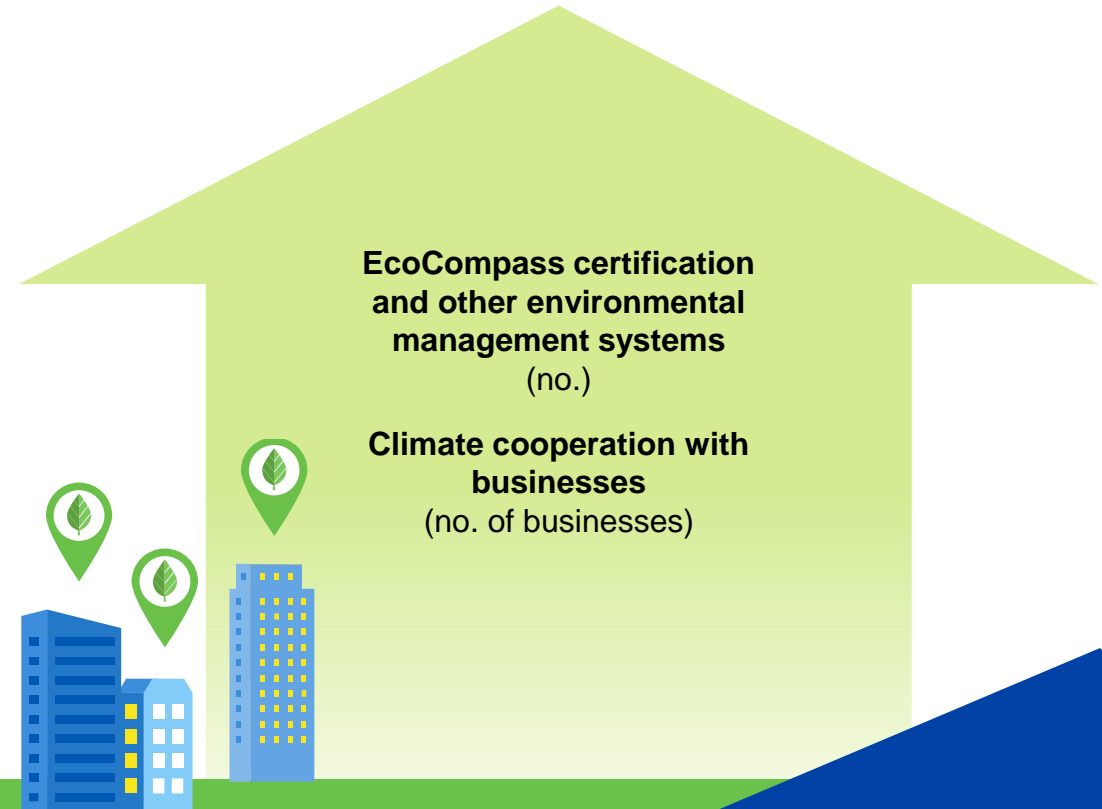


GOAL 26

The city promotes the environmental responsibility of businesses and organisations

- Intensifying environmental cooperation with the business community, educational institutions, research bodies, organisations and the city and local authority subsidiaries by introducing operating models recognised in the Climate partnership project.
- Creating new innovations, operating models, value chains and services both for the city and participating organisations through rapid experiments and projects.
- Promoting joint carbon neutrality measures with cities in the Metropolitan Area through the Ecosystem Agreement and metropolitan policy.
- Promoting and supporting the expansion of SMEs' and Vantaa City Group's environmental management systems across the city.
- Requiring Vantaa City Group's largest subsidiaries to draw up their own carbon neutrality roadmaps and actions.
- Requiring all Group entities to report their responsibility actions in their annual reports.

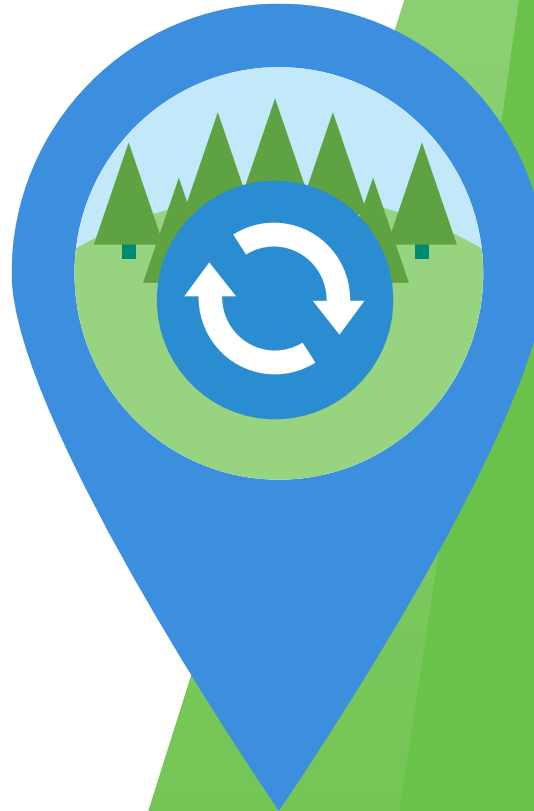
Goal indicators and desired direction of development



Carbon sinks and compensation

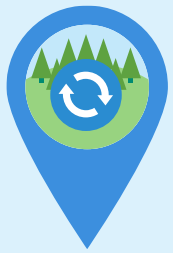
Carbon neutrality means that regionally Vantaa's GHG emission balance is zero. In Vantaa's carbon neutrality ambition, emissions have been reduced by at least 80% in 2030 compared to 1990. The remaining 20% can be sequestered in vegetation, the soil, building using wood, or through compensating emissions reduction measures elsewhere.

The carbon handprint has also been raised for consideration. If the emissions reductions exceed 80%, it reduces the need for compensation.



Goals of the lane:

- 27. Compensating emissions of the entire city area.
- 28. Strengthening of carbon sinks and carbon storage
- 29. Increasing the carbon handprint and promoting carbon negativity.
- 30. Compensating the City's own direct emissions.



GOAL 27

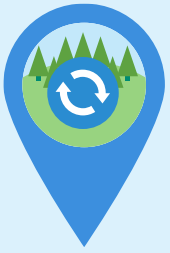
Compensating emissions of the entire city area

- Studying the types of compensation that are both economically and scientifically sustainable, and beneficial to Vantaa by working together with other cities, the State, Finnish Environmental Institute and HSY.
- Introducing ways of compensating emissions through experimentation and seeking other cities' experiences of compensation.
- The goal is to create a compensation model and to include compensating as part of the emissions calculation.

Goal indicators and desired direction of development

City area emissions offset
(kt CO₂)





GOAL 28

Strengthening of carbon sinks and carbon storage

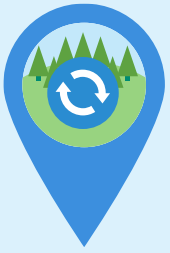
- Strengthening the storage of carbon dioxide in the urban area's vegetation and soil and maintaining the existing carbon storage.
- Updating forest management goals and measures to support the formation of carbon sinks and the maintenance of carbon storage.
- Steadfastly and comprehensively increasing the number of trees in the city in natural areas.
- Taking the carbon sequestration of city parks into greater account when planning green building. Developing a green efficiency tool for improved carbon sequestration on plots.
- Developing carbon sequestration by farming technology and reducing nutrient loading in the Baltic Sea through Vantaa's Baltic Sea Programme.
- Drawing on the model for the whole life carbon assessment of buildings and databank, as developed by the Ministry of the Environment, to monitor the carbon sequestered in wood building.

Goal indicators and desired direction of development

**Change in carbon storage
in the Vantaa region**
(kt CO₂, carbon sink t CO₂/yr)

**Carbon sequestered in
wood building**
(t CO₂, t CO₂/yr)





GOAL 29

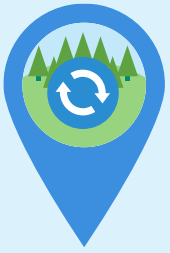
Increasing the carbon handprint and promoting carbon negativity

- Making the carbon handprint visible in business cooperation and resident interaction as well as in education and training.
- Participating in the development of calculation and evaluating whether it is possible to use the method in calculating the percentage of carbon compensation.
- In Vantaa Energy's Carbonnegative 2030 project, investments will sequester more carbon dioxide than the company releases into the atmosphere. Carbon negativity will be made possible by phasing out fossil fuels by 2026 and then progressing to becoming carbon negative through the plan's four main projects.

Goal indicators and desired direction of development

Promoting carbon handprint cooperation with businesses





GOAL 30

Compensating the City's own direct emissions

- Starting to compensate emissions from own operations by exploring the means and assessing the percentage that can be compensated.
- A gradual compensation of the City of Vantaa's energy consumption, employee mobility and commuting will be introduced by 2030.
- Reviewing the experiences and models of other cities and studying the ways of working in necessary guidance and agreements ahead of introducing carbon emission compensation.
- A similar method with regard to Vantaa City Group entities will take place through carbon neutrality programmes.

Goal indicators and desired direction of development

City organisation's emissions compensation (t CO₂/yr)



Roadmap implementation, monitoring and reporting



The goals become actions in the city departments' implementation plans.

Development of goals and progress of departments' actions are monitored in the Environment Watch service.

An Environment Responsibility Report is compiled annually of the implementation of goals in the implementation plans.

- Approval by the City Environment Committee.
- For the information of the City Executive Board and the City Council.



Carbon budget 2025 and 2030



Emissions in Vantaa by sector 1990 and 2020

Vantaa	Emissions, 1000 t CO ₂ -ekv		Change %, 1990–2025/2030*	
	1990	2020	2025	2030
Transport (incl. rail transport electricity)	318	348	203 (-36%)	58 (-82%)
District heat	271	216	108 (-60%)	0 (-100%)
Household electricity	165	127	106 (-36%)	85 (-49%)
Industry and machinery	95	67	53 (-44%)	39 (-59%)
Waste handling	91	22	14 (-85%)	5 (-94%)
Oil heating	74	49	25 (-67%)	0 (-100%)
Electric heating	60	53	40 (-34%)	26 (-57%)
Agriculture	3	2	1,5 (-50%)	1 (-70%)
Total	1076	883	548.5 (-49%)	214 (-80%)

Average annual carbon emissions reduction effort 2021–2030

Average emissions reduction effort 2021–2030		
	kt CO ₂ -eq./per year	%/per year
Transport (incl. rail transport electricity)	29.0	8.3%
District heat	21.6	10.0%
Household electricity	4.2	3.3%
Industry and machinery	2.8	4.2%
Waste handling	1.7	7.7%
Oil heating	4.9	10.0%
Electric heating	2.7	5.1%
Agriculture	0.1	5.0%
Total	66.9	7.6%

* Emissions for 2025 and 2030 are based on a scenario review (Sitowise) drawn up in 2021.



More information:

[Vantaa.fi/environment and nature](https://vantaa.fi/environment-and-nature)