

Guidelines for Sustainable Tampere 2030 – towards a carbon-neutral city



Committee for City Planning and Infrastructure Services, 15 May 2018
City Council, 18 June 2018
City Board, 26 Nov 2018





CITY OF TAMPERE

The city of sustainable growth

The city strategy includes a sustainable development objective:

“The City of Tampere bears responsibility for well-being and the environment by acting in an ecologically, socially, culturally and economically sustainable manner.”

and clear environmental objectives:

“Tampere will be carbon neutral in 2030.”

“As a city of sustainable growth, Tampere will value nature, conserve natural resources and reduce emissions.”





Impact assessment and partnership are needed

The environmental policy towards a sustainable, carbon-neutral city

becomes reality by identifying and anticipating the full life cycle impacts of the operations throughout the entire city organisation as well as by monitoring and reacting to adverse changes.

The objectives and impact assessment of the environmental policy reach beyond the city organisation itself, for instance, in large-scale urban construction projects and service-providing partnerships with companies and other actors.

At the core of implementation are:

efficient, common practices
smart, low-emission, natural resource-efficient and life cycle-identifying solutions.

Guidelines update the objectives of the environmental policy towards a sustainably growing, carbon-neutral city

The background material used includes, for instance, the following:

The Humane and attractive Tampere

Lauri Lyly's
Mayor's programme
for 2017-2021

**Tampere -
The Best for You**

Tampere city
strategy 2030

**Proactivity
and responsible
operating methods**

City of Tampere
environmental
policy 2020

**Energy
Efficiency
Agreement for
Municipalities**

2017-2025

**Housing
and land
policies**

2018-2021

The Sustainable Tampere 2030 - Towards a carbon-neutral city

ENVIRONMENTAL POLICY GOALS 2030

Climate emissions
will be reduced
and carbon sinks
strengthened

Natural resources
will be used wisely

Natural capital
will be used
sustainably

State of the
environment will be
good and continually
monitored

GUIDELINES FOR SUSTAINABLE TAMPERE 2030

Sustainable
mobility
and urban
structure

Sustainable
housing and
construction

Sustainable
production and
consumption
of energy

Sustainable
consumption
and materials
economy

Sustainable
urban
nature

Good state
of the
environment



The Sustainable Tampere 2030 programme:

Roadmap, measures and practices towards the goals and the implementation of guidelines.



1. Sustainable mobility and urban structure 2030



Tampere will be a pioneer in sustainable urban planning, mobility and working methods. The city will be prepared for risks resulting from climate change. The living environment will be safe, healthy and comfortable.

- **Traffic** will be characterised by low emissions and efficiency.
- **Travel chains** will be smooth, and shared mobility solutions advanced.
- **Walking and biking** will be popular modes of travel, and routes will be coherent and comfortable.
- **The urban forests, green areas and waters** of the city will form a coherent and diverse network, the use of which will be both economically and ecologically sustainable.
- **The city's growth** will be directed to the public transport zone and population centres, and the need for travel will decrease.
- **The majority of residential construction** will be carried out through infill development.



Implementation methods and tools during the current City Council term include, for instance:

- Housing and land policies
- The local master plan work programme
- The local detailed planning programme
- Sump – Sustainable Urban Mobility Plan
- The urban runoff programme
- The risk management plan
- The tramway construction project
- Developing the bus network and vehicles
- Enhancing conditions for biking

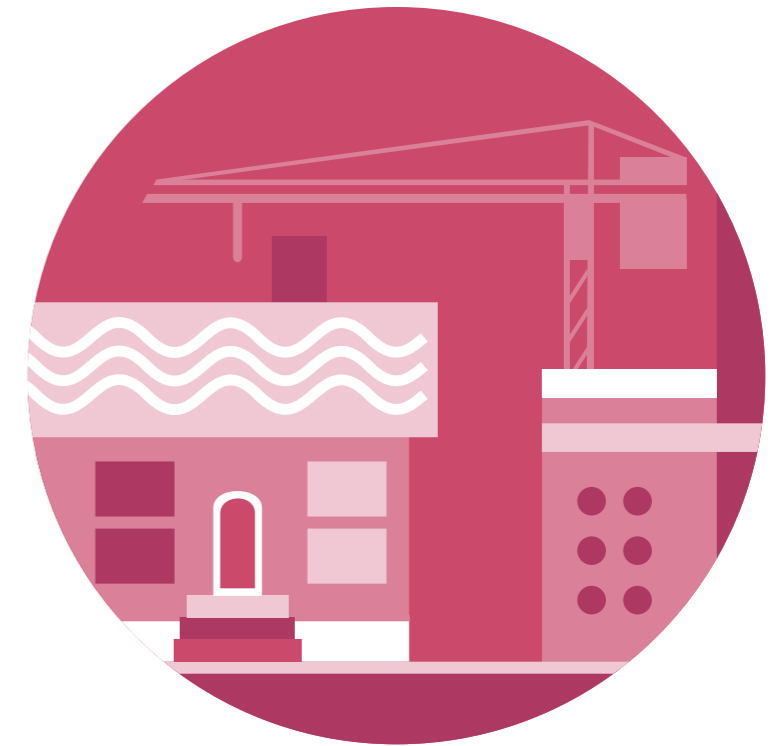


2. Sustainable housing and construction 2030



Residential areas will be attractive and unique, and they will promote sustainable lifestyles and participation. Easy access to nature will promote the well-being of residents. With construction activities, we will create conditions for safe, healthy and comfortable living.

- **Housing** will be diverse, flexible and energy efficient, and smart home solutions will be advanced. In the housing planning process, carbon neutrality will be evaluated broadly by considering construction, maintenance and living as a whole.
- **Construction activity** will be climate proof and material efficient; timber construction will be preferred.
- **Environmental risks related to construction** and use of buildings will be identified and their impacts minimised.
- **Nature-based solutions** for infrastructure construction and maintenance will be in use and increase the diversity of urban nature and the comfort of residential areas.



Implementation methods and tools during the current City Council term include, for instance:

- Tools for housing and land policies
- Mass economy planning
- The Smart Tampere programme
- Timber construction promotion programme 2016 - 2020
- The Urban nature labs project
- The EU-GUGLE project
- The AREA21 project
- PALM programming and tracking tool (= services–housing–mobility–land use)



3. Sustainable production and consumption of energy 2030



Energy sources will be low in emissions. Energy will be utilised efficiently as smart heating, cooling and electricity networks, energy storages and smart buildings will work in conjunction with each other. In addition, smart solutions and energy services will decrease electricity and heating consumption peaks.

- **Centralised energy production** will be nearly carbon neutral, and the significance of centralised renewable energy as a part of the energy system will have increased.
- **The energy consumption** of the existing building stock is decreased as a result of work on energy efficiency. Individual fossil fuel heating will have ceased.
- **With the help of demand-side management** and other new operational models, there will be less power variation.
- **The energy consumption in transport** will decrease, and the proportion of renewable fuels increase. Infrastructure will support the increasing use of both electric cars and biofuels.
- **The energy business and competence** in Tampere will be top-quality. In Tampere, there will be one or more platforms which make it possible to test smart energy network solutions and different sustainable sources of energy in practice.



Implementation methods and tools during the current City Council term include, for instance:

- The AREA21 project
- The EU Smart City lighthouse project STARDUST
- Energy Wise Cities -project and Hiedanranta energy platform
- Smart buildings & Infra development work
- Tampereen Sähkölaitos power utility's service development
- Tammervoima incineration facility Tampere Regional Solid Waste Management Ltd's biogas production
- The energy efficiency plan for municipalities (KETS)
- The creation and implementation of the Sustainable Energy and Climate Plan (SECAP)



CITY OF TAMPERE

4. Sustainable consumption and materials economy 2030



The principles of circular economy will direct the use of materials. The city will support sustainable consumption solutions for its residents.

- **Ecological, economic and social impacts** throughout the life cycle will be recognised/taken into account in all of the city's investments and procurement activities of services and materials.
- **Mass balance evaluation** and on the procurement of materials will be taken into account already at the urban planning phase by material balance planning.
- **Materials** will be re-used, and waste prevented.
- **Food waste** will be minimised.
- **Waste water cleaning** and the recycling of nutrients will be efficient.
- **The use of facilities** will be flexible and efficient.
- **Citizens' possibilities to use local services** will be enhanced.



Implementation methods and tools during the current City Council term include, for instance:

- Housing and land policies
- Favourable economic and innovation policy for a circular economy and the circular economy parks in Tarastenjärvi and Kolmenkulma
- The Smart Tampere programme
- Development and enhanced deployment of criteria for sustainable procurement
- Development of the waste management of city premises
- The Sulkavuori waste water treatment plant and the biogas plant of Tampere Regional Solid Waste Management Ltd
- Resident collaboration
- Communication and joint campaigns between different operators
- UUMA3 project



CITY OF TAMPERE

5. Sustainable urban nature 2030



Natural resources will be used sustainably, and carbon sinks will be strengthened. Biodiversity and the amount of green urban areas will be increased, and nature tourism further developed.

- **The significance of the environment** for the well-being and health of residents will be recognised.
- **The number of nature conservation areas** will be systematically increased, and biodiversity secured.
- **The preservation of endangered habitats**, species and traditional rural biotopes will be ensured.
- **The sustainable recreational and tourist use of lakes** will be enhanced, and nature tourism conditions improved.



Implementation methods and tools during the current City Council term include, for instance:

- The nature conservation programme
- The biodiversity programme
- Implementation of hiking areas and the Lake Nature Center
- Compilation of the green roof strategy
- Using the green factor method in land-use planning
- Reviewing ecosystem services to support decision-making
- Principles for sustainable forestry



6. Good state of the environment 2030



The full life cycle environmental impacts of the operations will be identified and managed throughout the entire city organisation. The state of the environment will be constantly monitored and improved. The monitoring data will be publicly available and available to be used in decision-making.

- **The nutrient and pollution load** in waters will be decreased.
- **Drinking water quality** will remain excellent, and groundwater basins effectively protected.
- **Air quality will remain good**, and the protection activities against environmental noise will be successful.



Implementation methods and tools during the current City Council term include, for instance:

- The Eco-support network
- The Ekokompassi management system
- The development and programming of information management, reporting and monitoring; implementing, monitoring, maintaining etc.
- programmes, such as air quality, small waterbodies, protection from noise, housing and land policies and, for instance, the Unalab project



The Sustainable Tampere 2030 programme

Implements the Guidelines for Sustainable Tampere 2030 – towards a carbon-neutral city

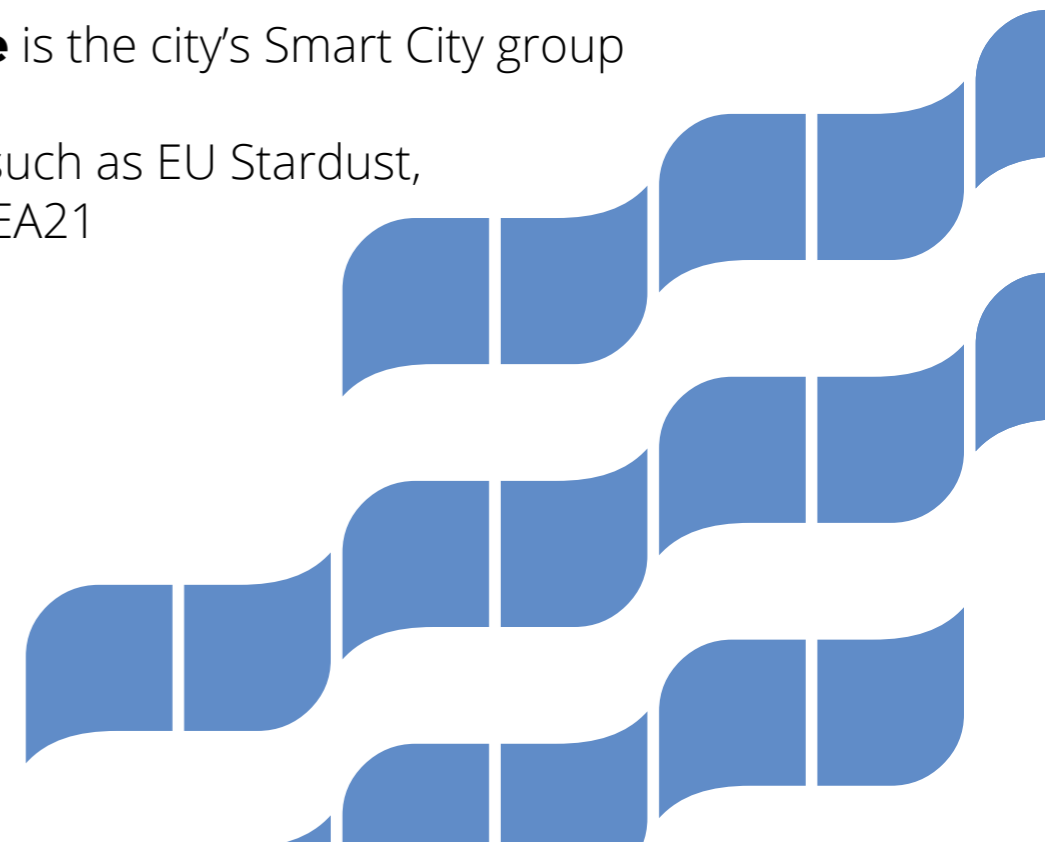
The City Board took the decision to launch the programme on 18 June 2018

The programme will be implemented as part of the Smart Tampere development programme and in collaboration with all of the city's services, municipal enterprises, and companies

The programme's partners include businesses, communities, the city's university, and educational institutions

In charge of the implementation of the programme is the city's Smart City group

The programme includes several projects, such as EU Stardust, 6Aika / Energy-Wise Cities, and AREA21



Sustainable Tampere 2030 – towards a carbon-neutral city



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