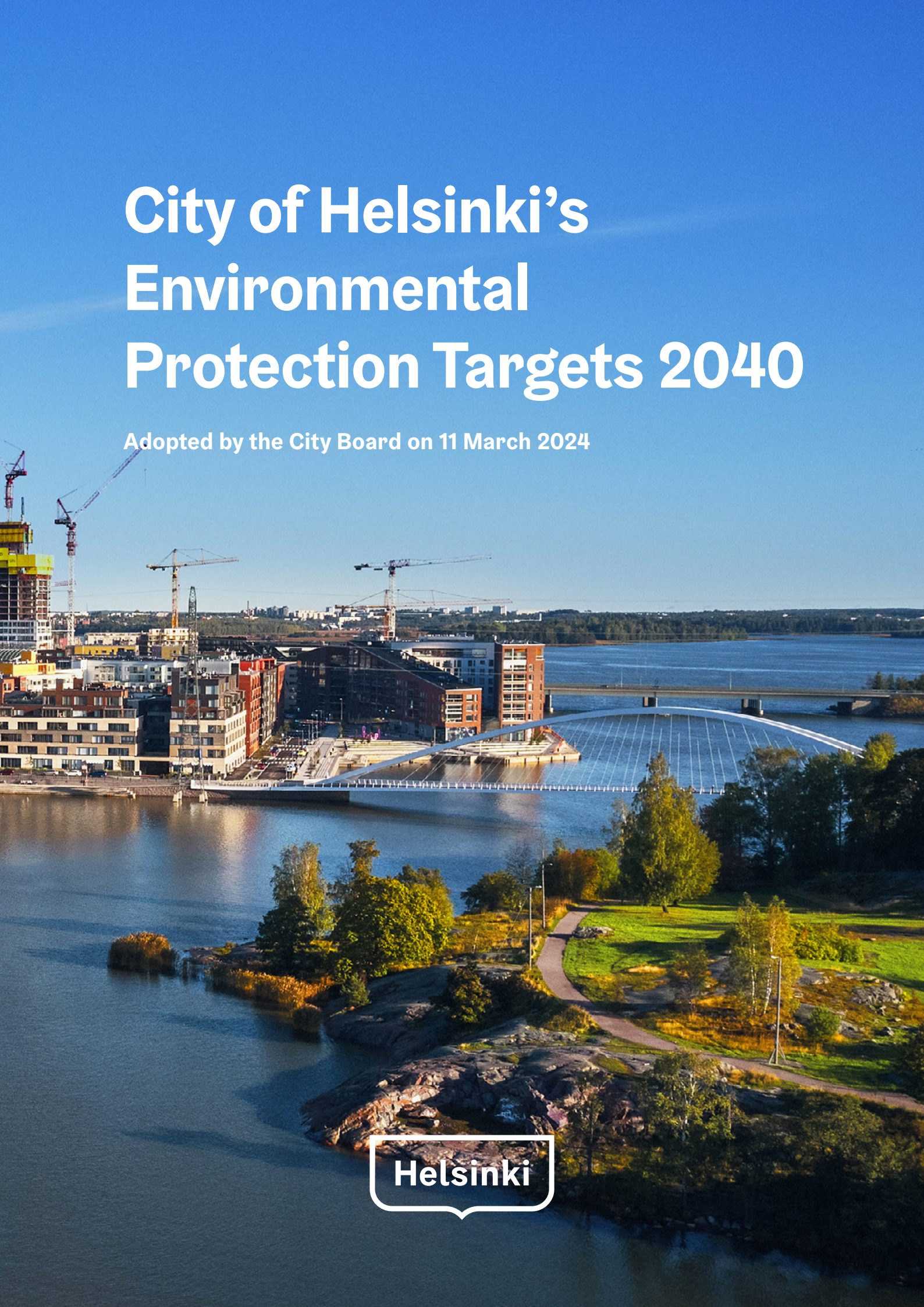
City of Helsinki's Environmental Protection Targets 2040

Adopted by the City Board on 11 March 2024



Helsinki

The City of Helsinki's Environmental Protection Targets 2040

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Introduction

The City of Helsinki's Environmental Protection Targets 2040 is a document that guides the city's environmental protection activities and contains medium and long-term environmental protection targets. It specifies environmental targets related to the City Strategy 2021–2025 and sets targets for other environmental protection areas that the strategy does not cover. The City Strategy sets out the city's policies on climate protection, adaptation to climate change, the circular economy, biodiversity protection, nature conservation, and protecting the Baltic Sea.

The environmental protection targets for 2040 are a part of the city's overall sustainable development goals. The document combines the goals for ecological sustainability and sets long-term targets that are fundamental for carrying out environmental protection consistently. An SDG analysis (UN Sustainable Development Goals) has been carried out for the sub-areas of these targets, and the links between the sub-areas and the SDG goals are discussed in the text for each of these sub-areas.

Helsinki's environmental protection targets are based on the city's environmental policy, which was adopted by the City Council on 26 September 2012. Updating the environmental policy is timely, as the medium-term target year of 2020 has passed, and many changes have already been made to the targets. For example, the City Strategy has made the 2030 carbon neutrality target more stringent, and legislation has become stricter in areas such as air protection targets. In addition, the title of the environmental policy will be changed to 'City of Helsinki's Environmental Protection Targets 2040' to better reflect its actual content.

The process of updating the environmental policy was launched with a joint kick-off event in December 2018, after which the theme managers engaged the city's experts in setting theme-specific targets. A resident event was held at the Helsinki Central Library Oodi in March 2020, where the theme managers each presented the goals of their respective themes. The updated targets were presented to the City Executive Group in June 2020, which guided further work on the process. This work continued in discussions between the Urban Environment Division and the City Executive Office, where it was decided to wait for the completion of the City Strategy 2021–2025. Following the adoption of the new City Strategy, it was ensured that the environmental protection targets and the City Strategy were coherent.

The long-term vision for environmental protection extends to 2040, and the medium-term targets are listed under each environmental protection theme. The figure on the next page outlines the city's ecological sustainability entirety, in which the City Strategy and this document set the environmental protection targets, and the environmental protection sub-programmes provide the measures to achieve these targets.

In the medium-term targets, one or two key targets are shown in bold for each sub-area.

Updating, monitoring and reporting on the environmental protection targets

The environmental protection targets are updated at the beginning of every council term after the new City Strategy is ready. Progress on these targets will be monitored annually and reported as part of the city's Environmental Report (the link will open in a new window) to the City Council. The environmental report also presents the key indicators and trends in the sub-areas. The divisions' annual action plans set out concrete measures to improve the environment for the following year and, in particular, the potential investment needs for the Urban Environment Division over a ten-year period.

The Environmental Report provides information on ecological sustainability for the city's biennial Voluntary Local Review (VLR) on implementing sustainable development. The city's Executive Group and the City Council review progress towards the environmental protection targets twice during each council term.

The annual targets set for the sub-areas of environmental protection mean that the targets should be achieved by the end of that year.

Ecological sustainability overview

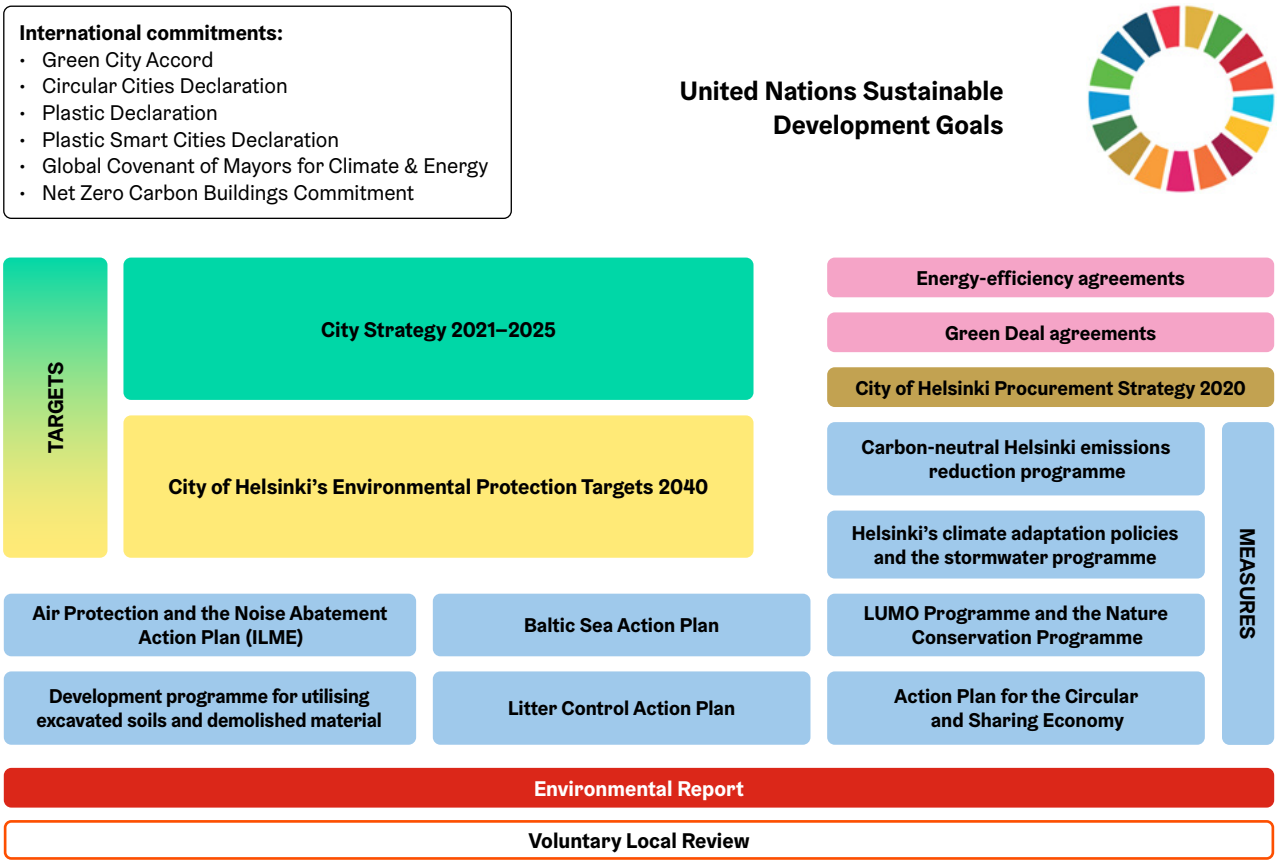


Figure 1: The city's entire ecological sustainability programme.

Helsinki's vision for environmental protection 2040

Helsinki is an international pioneer in environmental management. The city and its businesses are based on a carbon-neutral circular economy, in which natural resources are used sustainably, and products and materials are kept in circulation for as long as possible. Biodiversity has increased despite the city's growth and development. The amount of waste generated in the city has decreased and all generated waste is recycled in accordance with the waste hierarchy. The effectiveness of the environmental criteria used in the City Group's procurement is significant, and the carbon footprint of procurement has been reduced. The city's employees, residents and businesses are environmentally conscious and operate in environmentally sustainable ways.

Helsinki will enable a just transition to a climate-resilient and climate-secure city. The city will reach its zero-carbon target by 2040, meaning it will be carbon neutral without external offsets. After that, the goal is to be carbon negative, i.e., sequester more carbon inside city borders than it emits into the atmosphere. The residents' carbon footprint will decrease steadily.

Traffic emissions, street dust, and fireplace use will not impair air quality, and the target and guideline values for it will not be exceeded. City residents will not be exposed to prolonged and intense noise from traffic.

The marine environment off the coast of Helsinki, small water bodies, and groundwater have achieved good status. The objectives and measures for achieving excellent status have also been defined. The city has restored its coastal areas and small waters identified as having significant natural value and created new conservation areas to safeguard habitat diversity and vitality. At least 30% of the sea area is protected. Underwater noise, pollutants and marine litter have decreased.

Urban biodiversity has increased. The amount of forested and wooded areas has remained at around a third of the total land area. The surface area of terrestrial and marine nature reserves has been increased to at least 10% of the total surface area. The ecological status of forests, peatlands and wetlands has improved. Land use will ensure the preservation of natural soils in the urban environment and compensate for any damage that may be caused.

Medium-term targets for environmental protection

Climate change

Climate change is a significant threat to Helsinki's future. The City Strategy aims for a carbon-neutral Helsinki that achieves its targets, leads by example and does more than its share to mitigate climate change. The progression of climate change also requires adaptation to its impacts. Helsinki will safeguard its residents' way of life, health and property. The goal is for Helsinki to be prepared for extreme weather events and their indirect impacts. The city's climate work is implemented through the Carbon-neutral Helsinki emissions reduction programme (in Finnish, the link will open in a new window) and Helsinki's climate adaptation policies 2019–2025 (the link will open in a new window).

Mitigating climate change

Medium term

- **Helsinki will be carbon neutral by 2030, which means reducing greenhouse gas emissions by at least 80% from 1990 levels and offsetting or increasing carbon sinks for the remaining 20% of emissions.**
- Helsinki will contribute to developing methodologies for calculating consumption-based emissions and will set a target for reducing the carbon footprint of its residents.
- Helsinki will offset as much of its emissions as possible by increasing carbon sinks. The city will identify and develop the best ways to increase the amount of green infrastructure in the built environment in order to increase these carbon sinks.

Adapting to climate change

Medium timeframe

- **The city has prepared for rising sea levels, increasing stormwater runoff, flooding from heavy rainfall, and heat waves by developing its climate risk management and ensuring that measures are integrated into all city planning and operations by 2025.**
- Meadows that can withstand extreme heat and green structures that manage stormwater runoff, such as parks and green roofs, will be increased by 2025.

Indicators

- Greenhouse gas emissions (Scope 1 and 2)
- Quantity and quality of carbon sinks
- Surface area of green infrastructure
- Permeable areas as a percentage of total land area

Air protection

The current health-based annual limit value for nitrogen dioxide in the EU Ambient Air Quality Directive has not been exceeded in Helsinki in recent years. However, it is still at risk of being exceeded in some places in the city centre where there are urban canyons. This is due to exhaust emissions from transport, especially diesel vehicles. The WHO has set new, much stricter air quality guideline values, which will also serve as the basis for revising the EU limit values. Thoracic particles also contribute to air quality – notably street dust in the spring and dust around major construction sites. There is also a risk of exceeding the limit value for street dust. In addition, burning wood in fireplaces reduces air quality, especially in residential areas with detached houses. The city's air protection is implemented through the City of Helsinki's Air Protection Plan 2017–2024 (in Finnish; the link will open in a new window). The plan is currently being revised.

Medium term

- **The EU annual limit value for nitrogen dioxide (NO_2) will not be exceeded after 2024.**
- **New sensitive sites being planned, such as day-care centres, schools, playgrounds, senior centres and service homes, will not be exposed to air quality that is poorer than the urban background level.**
- In 2025, the daily limit value for street dust, or thoracic particulate matter (PM_{10}), will not be exceeded more than 18 times.
- The WHO's annual guideline value for fine particulate matter will not be exceeded.
- The target value for benzo(a)pyrene from residential wood combustion will not be exceeded.

Indicators

- Concentrations of air pollutants compared to their limit values, guideline values and target values
- Percentage of successfully completed measures of the Air Protection Plan

Noise abatement

Environmental noise is a significant factor impairing the quality and amenity of Helsinki's living environment. High levels of continuous noise also cause adverse health impacts. Road traffic is the main source of noise pollution, but noise is also generated by other traffic and temporary activities such as construction and events. The City of Helsinki's noise abatement activities are implemented through the Noise Abatement Action Plan (in Finnish; the link will open in a new window). The plan is currently being revised.

Medium term

- **Helsinki will have a healthy, comfortable and high-quality acoustic environment. The number of residents exposed to continuous and intense noise will decrease by 2030.**
- Helsinki will foster and develop a pleasant and peaceful acoustic environment in the city's green spaces. All city residents will have convenient access to green spaces with tranquil acoustic environments.
- Sensitive sites, such as day-care centres, schools, playgrounds and service homes, will not be exposed to noise but will have a healthy and comfortable acoustic environment.
- Noise impacts from temporary activities (e.g. construction and events) will remain moderate.

Indicators

- Exposure levels based on noise assessments every five years
- Percentage of successfully completed measures of the Noise Abatement Action Plan
- Percentage of residents living close to event venues who find the noise from outdoor concerts very annoying

Water protection

The condition of Helsinki's aquatic environment is affected not only by the status of the Baltic Sea but also by the quality of stormwater runoff, nutrient and pollutant loads from construction sites, and nutrients from diffuse pollution. Water bodies contribute significantly to health and wellbeing and are valuable for their landscapes and recreational value. In line with the City Strategy, Helsinki will protect the Baltic Sea and its shores and reduce emissions into the Baltic Sea. Helsinki's water protection activities will improve the status of small waters and coastal waters and support the recovery of migratory fish stocks in its waters. Achieving good status for water bodies is a binding EU law.

The Baltic Sea Action Plan 2024–2028 (the link will open in a new window) is one of the means for water protection. In addition, water protection has been firmly integrated into the city's planning and development, for example, through a stormwater programme.

Medium term

- **The chemical and ecological status of Helsinki's marine waters and small water bodies will improve significantly.**
- **Helsinki will effectively prevent the littering of public areas and the sea. By 2025, the quantity of the most common type of shoreline litter found on beaches and fishing gear found at sea will be reduced by 30%.**
- The protection of aquatic biodiversity will be enhanced by creating new conservation areas by 2030 that align with the EU Biodiversity Strategy.
- The amount of microplastics in water systems and plastic debris in the environment will decrease by 2027.
- Flowing waters will be restored, and migration routes for fish and other organisms that inhabit flowing water will be improved.
- Marine habitats and small water bodies will be comprehensively considered in land-use planning, zoning and development based on current ecological data.
- Helsinki's oil spill response preparedness will be improved to protect beaches and small water bodies.

Indicators

- The percentage of water bodies that have achieved good status (rivers, groundwater, and the marine area along the coast of Helsinki)
- Percentage of restored rivers and streams (flowing waters)
- Percentage of successfully completed measures of the Baltic Sea Action Plan

Protecting biodiversity

In line with the City Strategy, Helsinki will actively protect and conserve its diverse nature. We will strengthen the meadow and forest networks within the city. We will ensure that all Helsinki residents will continue to have an easy access to local natural areas. At least five new nature reserve areas will be established every year during the 2021–2025 strategy period. The protection of biodiversity is implemented through the City of Helsinki Biodiversity Action Plan 2021–2028 (the link will open in a new window) and the City of Helsinki Nature Conservation Programme 2015–2024 (in Finnish; the link will open in a new window).

Medium term

- **By 2030, the biodiversity loss in Helsinki will have stopped and biodiversity will be increasing.**
- The proportion of forested areas will have remained at around a third of the total land area.
- In 2030, Helsinki's green network will be connected and ecologically functional as part of the regional green infrastructure.
- The status of habitat types will have improved through restoration and nature management where necessary.
- The spread of invasive alien species will be halted by 2030.
- The city will avoid construction on green areas. However, if it is necessary to zone green areas for development, the city will compensate for this land-use and green space planning. This can be done, for example, by improving the functionality and ecological quality of green spaces, restoring natural sites, or creating new green spaces in the vicinity. In 2024, Helsinki will experiment with ecological compensation models and calculations, and a more comprehensive model will be introduced as soon as possible. Primarily, construction will not be designated to the most valuable nature areas.
- We will calculate the biodiversity footprint of Helsinki and introduce the most effective measures for reducing that footprint.
- We will set a target for increasing the area of meadows and other semi-natural biotopes in the city by 2024.

Indicators

- Quantity of natural areas
- Proportion of forests and green space areas of the total land area
- The number and surface area of protected areas and the percentage of that surface area of the total land area
- Percentage of successfully completed measures of the LUMO Programme
- Changes of birdlife in the built environment
- Qualitative metrics for monitoring Helsinki's progress towards halting biodiversity loss

Soil protection and remediation of contaminated soil

Soil protection is important for carbon balance, biodiversity and human health. As Helsinki's urban structure becomes denser, remediating contaminated land is a significant challenge. The systematic use of soils also contributes to the circular economy. Urban planning and control must work together to ensure that soil contamination will no longer occur in the city.

Medium term

- **By 2030, soil protection and its sustainable use will be taken into account in all land use.**
- Land use planning and environmental supervision will have measures in place to ensure that no soil contamination occurs within the city.
- Landfills in the Helsinki area will be rehabilitated by 2030.

Indicators

- Number of remediated soil sites per year
- Quantity of permeable surfaces as a percentage of the total land area

Promoting the circular and sharing economy

By transitioning to the circular and sharing economy, we can preserve our diminishing natural resources and reduce waste generation. The circular and sharing economy is also an effective way to combat climate change; reducing the use of virgin raw materials also reduces the emissions resulting from the production of materials. In line with the City Strategy, the City of Helsinki's Roadmap for Circular and Sharing Economy (the link will open in a new window) is being implemented on an ambitious scale. Environmental littering is being reduced through the Litter Control Action Plan 2022–2025 (the link will open in a new window), adopted in 2022. Regarding land masses, the targets will be implemented through the programme for developing the use of excavated soils (in Finnish; the link will open in a new window).

Medium term

- **Buildings will be designed to be durable, adaptable, repairable and recyclable when demolished.**
- Infrastructure and building construction projects will include project-specific circular economy targets by 2025.
- The amount of food waste generated by the City Group's food services will be reduced by 50% between 2021 and 2030.
- The utilisation of the city's facilities and lending of goods and equipment by libraries will increase significantly by 2030.
- The city will eliminate single-use plastic packaging wherever feasible from a health and safety perspective, and plastic waste will have a 100% recycling rate.
- The recycling rate of the municipal waste generated by the city organisation will increase to 60 per cent by 2025.

Indicators

- Percentage of successfully completed measures of the Circular and Sharing Economy Action Plan
- Percentage of successfully completed measures of the Litter Control Action Plan
- Percentage of construction project plans with circular economy targets
- Quantity of reused soils
- Recycling rate of municipal waste from the city organisation's service buildings
- Amount of food waste in the city organisation's food services

Promoting responsible procurement

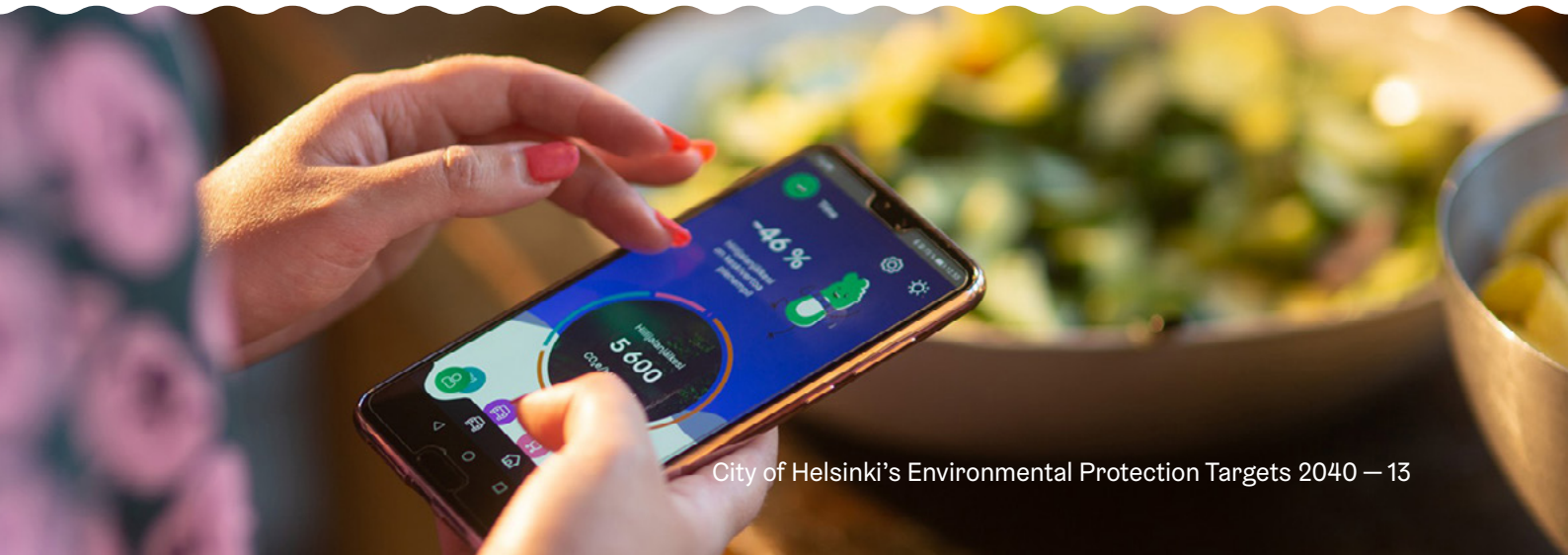
Responsible procurement reduces negative impacts on the environment and promotes positive impacts. The city contributes to the emergence of a sustainable market by leading the way in developing and deploying new energy and material-efficient solutions that promote the circular economy and the conservation of biodiversity. The City of Helsinki Procurement Strategy (the link will open in a new window) guides responsible procurement.

Medium term

- **All of the Helsinki City Group's procurements will be assessed for their environmental impacts, and all procurements will generally have ambitious environmental targets. The targets will follow the city's Procurement Strategy, which aims to make Helsinki a trendsetter in climate-friendly and environmentally sustainable procurement.**
- In the city's construction procurement, environmental sustainability considerations will guide planning and implementation as follows:
  - We will set ambitious targets for the carbon footprint that will be more stringent than the national targets.
  - We will consider the impacts of climate change comprehensively and prepare for the risks it poses.
  - We will set strict targets for energy efficiency and significantly increase the production of renewable energy in buildings.
  - We will conserve natural resources and prevent waste by using the circular economy.
  - We will define operating models for construction that will safeguard biodiversity and protect natural values.
  - Construction sites and their associated transport will be fossil-free, the majority of machinery and vehicles will be powered by electricity, hydrogen or biogas, and other environmental impacts of the job site will be minimised.
- The city's food procurement (foodstuffs and food and restaurant services) will set comprehensive criteria and contract terms for procurement that reduce climate and environmental impacts, taking into account the purpose of the procurement. The fulfilment of the criteria and contract terms will be monitored during the contract period.
- The City Group will halve its consumption of meat and dairy products by 2025 compared to 2019.
- To increase the proportion of plant-based food, we will ensure that menus, recipes and food procurement are in line with the environmental targets.

Indicators

- Percentage of procurements (in euros and number of units) for which environmental criteria have been set
- Qualitative assessment in construction and food procurement
- Consumption of meat and dairy products: grams of meat per customer and consumption of liquid dairy products, litres per customer



Promoting environmental awareness and sustainability

Our environmental efforts require the contribution of all Helsinki residents. Environmental education aims to promote a shift in values, knowledge, skills and behaviours towards sustainable development and increase environmental awareness. There is currently no separate action plan for promoting environmental awareness and sustainability, but it is promoted through eco-support activities, and its targets will be pursued across all of the environmental protection sub-programmes, as appropriate.

Medium term

- **The city's personnel, management, and leadership will be committed to achieving the environmental protection targets and will be able to apply them in their work.**
- Learning communities, playgrounds, day-care centres, schools, and educational institutions will have expertise in environmental sustainability.
- Environmental education and training will be carried out in a way that is knowledge-based, inclusive, empowering and skills-building.
- Every child will have access to nature schools, environmental schools or guided field trips into the natural environment during school period.
- City residents will be environmentally conscious and make environmentally friendly choices in their everyday lives.

Indicators

- Results of an environmental attitude survey of city residents and personnel about every five years
- Number of educators who have participated in environmental training
- Number of participants in nature schools, environmental schools and guided field trips to natural areas
- Number of companies using the MyHelsinki 'Think Sustainably' service
- Number of companies on the service map offering circular economy services

Environmental management

‘Environmental management’ means managing activities so that the environmental protection targets are taken into account in all the City Group’s activities and decision-making. In accordance with the City Strategy, we steer and evaluate Helsinki’s development through the UN Sustainable Development Goals. Sustainable growth is compatible with ecological constraints and creates socially, economically and culturally sustainable well-being. There is no separate action plan for environmental management, but the ‘City of Helsinki’s Environmental Protection Targets 2040’ serves as its steering mechanism.

Medium term

- **The divisions, municipal enterprises and subsidiaries with significant environmental impacts will have a verified environmental management system and/or a sustainability programme that broadly takes into account the UN Sustainable Development Goals. Other municipal enterprises and subsidiaries will integrate environmental management into their operations, following the principles of less formal environmental management systems, and/or develop a sustainability programme by 2025.**
- Each work community will have a trained eco-support person with working time dedicated to carrying out this task.
- By 2025, all divisions, as well as municipal enterprises and subsidiaries with significant environmental impacts, will have at least one full-time (or equivalent) environmental sustainability or responsibility expert. Large entities will have at least two such full-time (or equivalent) experts.
- The city’s Executive Group and the City Board will review progress towards the environmental protection targets twice during each council term.

Indicators

- Percentage of divisions, municipal enterprises and subsidiaries with environmental certifications, following the principles of an environmental management system, or implementing a sustainability programme
- Number of eco-support persons trained per year
- Percentage of divisions and enterprises where environmental issues are included in the induction programme

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