# Litter Control Action Plan 2022–2025



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### Litter control action plan 2022–2025

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### 1. Introduction

#### 1.1. Litter Control Action Plan

Littering is a major problem in Helsinki, causing environmental and health damage, reducing the attractiveness and amenity of urban areas and negatively affecting the urban image. In Helsinki, the annual cost of cleaning public areas is more than €11 million. To address the problem of littering, Environmental Services of Helsinki's Urban Environment Division launched a Litter Control Action Plan, which brings together the different operators and stakeholders of the City of Helsinki to jointly address the problem of littering. The Litter Control Action Plan consists of a programme of measures and a network bringing together those working on litter. The aim of the Litter Control Action Plan is to gather the best ideas for practical measures to reduce litter, tackle the growing problem of litter and the damage it causes to the environment and health, raise awareness and knowledge of the problem of litter, and guide efforts towards reducing litter. This action plan is the first of its kind. Some of the measures are aimed at identifying the litter situation and the need for action, so that future programme updates can address litter more effectively. The implementation of the action plan will require additional resources. The programme is valid from 2022 to 2025, and will be updated when the next council term begins in 2026



Image: Kuvatoimisto Kuvio Oy / Helsinki Marketing

#### 1.2. Sources of litter

There are many sources of litter in the environment and it is difficult to determine the relative significance of different sources. In urban areas, littering is mainly generated on land. The causes of littering include litter left by residents, inadequate stormwater treatment, sewer overflows, the dumping of municipal waste, the storage and disposal of snow removed from the street, insufficient bins for cigarette ends and other litter, and wind-blown litter from construction and demolition sites. Litter generation is influenced by factors such as habitual practices, the accessibility of litter bins, the functioning of waste management, and waste characteristics such as reuse potential and product size.

Littering has been studied in Finland from the perspective of marine litter and coastal areas. There has been less monitoring of littering on land. According to a Finnish Environment Institute (SYKE) report on the sources of marine litter in Finland,<sup>1</sup> there is considerably less litter on natural beaches than on urban beaches. On urban and intermediate beaches, it is estimated that around 74-82% of litter comes from terrestrial sources (recreation, run-off, construction and waste dumping), while on natural beaches the average share of terrestrial litter was 56% and that of marine litter (maritime traffic and fishing) 44%. About 90% of the rubbish collected from the beaches was plastic. On urban beaches, the most common litter was cigarette ends which can account for almost 70% in terms of numbers of pieces. Typical letter on beaches is associated with eating, drinking or smoking. Run-off water also carries litter from the city to the beaches. The wind and water from construction sites carries away packaging materials, pieces of polystyrene and construction-related pulse wires, among other things. Marine litter lying on beaches is only a small part of the total amount of waste that ends up in the marine environment as a result of human activity. It is estimated that most marine debris is invisible at the bottom of the sea. The seabeds off the city of Helsinki have also been surveyed, and results published in 2015 indicated litter in all the areas surveyed<sup>2</sup>. Litter can be carried by wind, rain, run-off, watercourses, animals or people far from its source, regardless of national borders. As it oxidises and degrades over time, and its origin cannot be determined. As plastic breaks down into smaller and smaller pieces, microplastics are created, and their environmental and health impacts are only beginning to be understood. SYKE has conducted a survey of Finnish coastal cities to identify the sources and routes of marine litter in cities and to assess the likelihood of litter production from different sources, taking into account local conditions. The single most significant source of microplastics emissions was estimated to be road transport. Emissions are caused by road markings and wear on vehicle tyres and brakes. The next most important emissions were estimated to be rubber granulate emissions from artificial turf fields and raw material pellet emissions from plastics production. Other significant sources were estimated to include house dust, the washing of textiles and cosmetics. However, perhaps the most significant source of microplastics, plastic debris already in the environment, which over time decomposes to form microplastics, was not included in the assessments.

As litter enters the environment from many different sources and activities, effective litter control will require a wide range of means and cooperation between different sectors. To underpin action, we need information based on surveys and mapping that directs resources to the right places. Measures are also needed to prevent littering based on ignorance or negligence.

<sup>&</sup>lt;sup>1</sup> Setälä, O. and Suikkanen, S. (ed.) (2020): Suomen merialueen roskaantumisen lähteet (Sources of marine litter in Finland) Finnish Environment Institute reports 9, 2020

<sup>&</sup>lt;sup>2</sup> Majaneva, S. and Suonpää, A. (2015): Vedenalaisen roskan kartoitus Helsingin edustan merialueella – pilottiprojekti (Underwater litter mapping in the marine area off Helsinki - a pilot project). Publications of the City of Helsinki Environment Centre 2/2015. City of Helsinki Environment Centre.

#### 1.3. Existing measures to reduce littering

Effective waste management is probably the most important way to reduce litter. Packaging and single-use products are the biggest sources of litter in the city, and their release into the environment is best prevented by effective waste management. The organisation of waste management is regulated by the Waste Act (646/2011) and the decrees issued by virtue of it. Section 72 of the Waste Act provides for a prohibition on littering. Waste legislation also provides for sanctions and clean-up responsibilities for littering.

In addition to legal measures, Helsinki has long been tackling littering in a variety of ways. Volunteer coordination helps organise voluntary work on beaches and green spaces, and citizens can sign up to be a park volunteer in a park of their choice. In addition, a number of projects have sought ways to prevent littering and raise awareness. The SATAKOLKYT project has made it easy for people to organise their own volunteer activities and has taken numerous school classes and other groups to clean up the Helsinki coastline. The Baltic Sea Challenge has also organised a round of rapid trials to test new innovative ways to reduce litter in the Baltic Sea and on its shores. Other projects include Puhuva roskis, Helli Helsinkiä and Täti Vihreä. In addition, the city is constantly working on tasks under the Waste Act and the Environmental Protection Act.

Litter controlled is also taken into account in the city's strategies and programmes. The new urban strategy for 2021–25 sets as one of its objectives a functional and beautiful city. During the strategy period, special attention will be paid to ensuring that the basic requirements for a pleasant city, such as clean parks and streets, are taken into account throughout Helsinki. In the Urban Environment Programme 2019–2021, one of the measures was to set up a Litter Network to disseminate information and develop preventive and monitoring activities. Helsinki signed the Plastic Declaration in 2019 and subsequently committed to developing strategies and action plans and setting scheduled targets for significant reductions in plastic pollution. The Roadmap for Circular and Sharing Economy promotes the recycling of materials and prevents a linear economy where commodities end up as waste at the end of their life cycle. Helsinki is also part of the All Plastic Circulates initiative, which aims to make all recyclable plastic circulate more efficiently. The latest Baltic Sea Action Plan 2019–2023 of the joint Baltic Sea Challenge by the cities of Helsinki and Turku includes several litter-related measures, especially related to the mapping of litter sources. Helsinki has also joined the European Union's Green City Accord movement, which aims to make cities cleaner and healthier and has waste and the circular economy as one of its five environmental management areas.

#### 1.4. Preparation of the action plan

The development of the Litter Control Action Plan started in 2020 with workshops of experts from both inside and outside the city. Workshops were held on a number of different themes and the ideas and measures from them were compiled into an action plan during 2021. The preparation of the action plan was guided by a steering group consisting of experts working on littering in the city's different sectors, as well as representatives of HSY, SYKE, Keep the Archipelago Tidy and Kamupak Oy. As part of the programme, the City of Helsinki Environmental Services carried out an international survey in summer 2020 to find out what measures other cities have taken to reduce litter, how they were perceived and how success was monitored. 42 (around one third of the cities surveyed) had an action plan or equivalent. A report on the results of the survey was published in autumn 2020<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> Kaivosoja, A. (2020): Roskaantumisen hillinnän kv-kysely (International survey on litter control) 2020. Materials of the Urban Environment Division 2020:20. City of Helsinki, Urban Environment Division, Environmental Services.

At the final stage of the programme, the measures in the draft were assessed in terms of cost, manpower and benefit. A three-tiered scale (low, medium, high) was used for the assessment. A small cost was defined as  $\notin 0-15,000$ , a medium cost as  $\notin 15,000-100,000$  and a large cost as more than  $\notin 100,000$ . The opportunity to participate in the assessment was offered to the members of the steering group and responsible parties. The results of the assessment were used to help select measures. The final measures were selected on the basis of both the assessment and comments of the Urban Environment Division's management group The action plan was presented to the Urban Environment Division's management group in early 2022 and was adapted based on the feedback received.



Image: Shoot Hailey/Helsinki Marketing

### 2. Measures

#### 2.1. General information on the measures

The measures are divided into five top projects and other measures. The top projects are larger, multi-annual projects that are a particular focus of the programme. The measures can be divided into three themes: communication, public spaces and construction. The draft action plan contained 50 measures, some of which were removed from the programme for this period due to resource constraints, but which can be used when the programme is updated again for 2026.

#### 2.1.1. Communications

A big part of reducing litter is raising awareness and knowledge. Even a dense arrangement of litter bins will not help if they are not used. Urban littering can be partly due to ignorance. For example, not everyone is aware of the harmful effects of cigarette ends on the environment. Part of the reason for littering is people's indifference. This makes it harder to tackle the problem, but raising awareness, facilitating proper disposal of litter and empowering people to take action are the best ways to tackle the problem.

An environment with only low quantities of litter motivates people not to litter, while an environment full of litter lowers the threshold for littering. Everyone in the city can make a bigger difference through their own actions than they might think. The first action plan to tackle litter focuses on communication measures to raise awareness of the factors and aspects of litter in a wide range of ways. On the other hand, it is also essential to provide information insofar as this is necessary to reduce litter. It is essential to understand the reasons behind deliberate littering in order to tackle it effectively.

#### 2.1.2. Public areas

For a city to be a pleasant space to live in, it is essential that public areas are clean and inviting to spend time in. Spending time outdoors improves health and well-being, and increases the attractiveness of the city. Particularly during the coronavirus pandemic, the city's parks and green spaces have provided somewhere for social interaction. However, the increased use of parks and other public areas is also reflected in increased littering, which reduces the amenity and healthiness of the areas.

In 2020, the Urban Environment Division's Maintenance Unit spent €3.4 million on cleaning up parks, of which around €700,000 was allocated to cleaning up illegal dump sites and public events, as well as cleaning up marine waters. €8.5 million was spent on street cleaning. In the spring of 2020, the Urban Environment Division was responsible for the maintenance of public areas in Helsinki with a total of 7,857 litter bins ranging in size from 60 litres to 5 cubic metres. Nearly 150 of these were solar-powered smart bins, which compact the rubbish and can hold five times more rubbish than a standard bin.

Despite the effort put into maintenance, littering and a lack of volume in litter bins are typical concerns expressed by citizens. It is particularly important to map areas prone to littering and use this information to determine the placement and frequency of litter bins. The programme also takes into account litter and microplastics

carried by stormwater run-off. Curbing litter in public areas requires resources. Buying a new container is a one-off investment, but emptying and maintaining it is an ongoing activity.

#### 2.1.3. Construction

Construction and demolition generate huge amounts of waste. On a European level, around one third of all waste generated by human activity is related to construction. For example, pulse wires and various packaging materials, foam and Styrofoam fragments are released from construction sites into the environment. The Construction Plastics Green Deal 2020–2027 aims to significantly increase the sorting and recycling of film plastics. In addition, the aim is to organise training and produce guides on good site practice and waste management plans for construction sites. The Letter Control Action Plan pays particular attention to litter from land reclamation and litter from stormwater and wind-borne debris from building sites.

#### 2.2. Top projects

Top projects	Implementation	Responsible par- ties and timetable
<b>1.</b> An efficient net- work	The key players in the fight against litter will be brought together into a network. Joint network meetings will be organised to share information on planned and current projects and other activities. Information will also be shared on best practices and practices proven to be efficient.	YMPA 2022 →

	A communication campaign will be launched to provide a comprehen- sive picture of litter in the city, includ- ing the costs of littering.	YMPA, VIEPA, YLA Maintenance, Stara
<b>2.</b> An effective com- munication campaign	a) A survey will be conducted on the costs of littering and attitudes to- wards littering	2022
	b) An effective communication cam- paign will be designed and partners will be involved in its implementation	2023
	c) The communication campaign will be implemented	2024
<b>3.</b> New innovations and operating methods	New solutions will be identified and tested to reduce litter a. within the city and b. in partnership with busi- nesses and other communities (e.g. rapid trials)	ҮМРА 2022 →
Top projects	Implementation	Responsible par- ties and timetable
	1. A survey will be conducted on lit- ter-prone areas, using information from sources such as Stara and RYA Maintenance.	

	<ul> <li>c) traditional litter bins will be replaced with smart bins in quieter areas and areas with significant seasonal variations in visitor numbers</li> <li>d) signposts will be added to route maps nature reserve including the location of litter bins</li> </ul>	
<b>5.</b> Citizen involve- ment	<ul> <li>a) A communication campaign with young people and littering will be im- plemented</li> <li>b) Park Pal activities will be devel- oped, including in nature reserves</li> <li>c) Ways will be found to promote citi- zen involvement in litter control</li> </ul>	KUVA NUPA 2023 YMPA, YLA Maintenance 2023–2024 YMPA 2022 →

#### 2.3. Other measures

Communica- tion measures	Implementation of the measures	Responsible par- ties and timetable
<b>6.</b> Environmental training for building developers will be provided in the Helsinki area	Training on environmental impacts (noise, chemicals, litter, etc.) for building developers in the Helsinki area.	YMPA 2022 →

<b>7.</b> Environmental training for Helsinki boat clubs and sailing clubs will be carried out	Training on the environmental impact of boating will be provided (e.g. un- derwater noise, anti-fouling paints, littering, moving around in nature without leaving a trace).	The Baltic Sea Challenge 2022–2023
8. The "Moving around without a trace" campaign will be implemented as part of the "Stay on the path" campaign	An awareness campaign will be im- plemented on trace-free and litter- free movement in nature and conser- vation areas.	YMPA 2023
<b>9.</b> The Mahanpuruja muovista (stomach ache from plastic) campaign will be im- plemented	A campaign developed by the Keep the Archipelago Tidy association will be implemented, placing an informa- tive sticker around well covers. The campaign will raise awareness of the fact that, almost everywhere, storm- water is discharged directly into the nearest water body without being treated.	HSY, Baltic Sea Challenge, VIEPA 2022
<b>10.</b> Awareness of or- dering skips will be raised.	<ul> <li>a. An information campaign against waste dumping will be carried out</li> <li>b. The possibility of providing skips for shared use on a seasonal basis will be explored</li> <li>c. Skips will be ordered in cooperation with customers</li> </ul>	YMPA, VIEPA, YLA Maintenance 2023–2024



Image: Kuvatoimisto Kuvio Oy / Helsinki Marketing

Measures for public areas	Implementation of the measures	Responsible parties and timetable
<b>11.</b> Cooperation and communication will be promoted within the city on the sustainability and environmental impacts of events	a. Stara will be included in event field- and coordination teams, b. communica- tion will be increased between the teams, for example through joint meetings and/or the Teams channel, and c. it will be ensured that the right people are in- volved and aware of the different respon- sibilities and activities.	ҮМРА 2022 →
<b>12.</b> Stormwater will be taken into account in city planning	Planning will take into account storm- water management issues to an ade- quate extent on a case-by-case basis.	ASKA 2022 →

Measures for public areas	Implementation of the measures	Responsible parties and timetable
<b>13</b> . The collection of waste from small marinas will be improved in line with the requirements of the new Ship Waste Directive.	The availability of collection points will be improved, in particular for septic and bilge waste, as will the possibilities for waste sorting	KUVA LIIKU 2022 →
<b>14.</b> Legislation will be promoted on the treat- ment of end-of-life ships to protect the en- vironment	The initiative will be taken to change leg- islation so that end-of-life ships can be tackled early and more quickly than at present.	YMPA, AKV 2023
<b>15.</b> The opening hours of Sortti stations will be extended.	The opening hours of Sortti stations will be extended to weekends to prevent waste from being dumped at weekends.	HSY 2022 →
Construction measures	Implementation of the measures	Responsible parties and timetable
<b>16.</b> The Helsinki worksite water instruc- tions will be updated and worksite water in- structions for the Hel- sinki Metropolitan Area (PKS) will be prepared	The updating of the worksite water in- structions and the preparation of the PKS worksite water instructions will take into account: a. litter control caused by construction sites s. stormwater management so that de- bris is not carried away from construction sites by water The preparation for this will be carried out in cooperation with building develop- ers. Depending on available resources, it will be checked that builders are acting in accordance with instructions.	YMPA 2022

<b>17.</b> Littering caused by land reclamation will be prevented	screened clean, use of protective cur- tains, etc. b. The correct handling of shotcrete and other waste will be monitored and em-	YLA Asset management 2022 →
	phasised at tunnel sites.	

### 3. Implementation and monitoring

Many measures to curb litter require long-term and continuous action. On the other hand, some of the measures are shorter-term pilots to test new innovations and thus support new business. Many of the measures also require cooperation with different operators and stakeholders. It is therefore essential that the action plan is coordinated and that progress is monitored centrally. From 2022 onwards, the workload of the Litter Control Action Plan will be increased by the launch of an action plan (including progress monitoring and reporting), the involvement of citizens and communities, business cooperation including with start-ups, promotion of the action plan with internal operators and stakeholders including through increased cooperation and communication, and the maintenance and development of the litter control network. For 2022, the Litter Control Action Plan has been allocated 30% of the human resources of a coordinator and 50% of the human resources of a project expert. Similar resources will be needed in future years to promote the programme.

The litter control steering group will meet twice a year to monitor progress in implementing the action plan. At the end of the programme period, the implementation and effectiveness of the programme will be reported to the Urban Environment Committee.

### **Abbreviations**

Abbreviations for the organisations and city divisions, services and departments used in the action plan:

HSY - Helsinki Region Environmental Services

KUVA - Culture and Leisure Division

LIIKU – Sports Services

NUPA - Youth Services

KYMP - Urban Environment Division

MAKA - Land Use and City Structure

ASKA – Detailed Planning

PALU – Services and Permits

YMPA – Environmental Services

AKV - Use and Monitoring of Land

RYA – Buildings and Public Areas

YLA – Public Areas

## Description

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Summary:

Helsinki's Litter Control Action Plan 2022–2025 aims to reduce littering and the amount of litter in the city. The action plan brings together the best ideas from practical measures to reduce litter. The aim is to raise awareness and knowledge of litter and the environmental and health impacts it causes, to improve the efficiency of waste management and to guide efforts towards reducing litter.

The measures are divided into top projects and other measures. Others measures can be divided into three themes: communication, public spaces and construction. The programme has been developed in workshops with experts from inside and outside the city. This work is coordinated by the Environmental Monitoring and Supervision Unit of the city's Environmental Services The programme covers the 2021–2025 council term and will be updated for the next council term starting in 2026. Some of the measures are aimed at identifying the litter situation and the need for action, so that future programme updates can address litter more effectively.

Keywords:

Litter control, littering, action plan





The Urban Environment Division is in charge of urban planning, construction and maintenance, building control, and services related to the environment in Helsinki.