Espoo – the most sustainable city in Europe

The Espoo Story is the strategy of the City of Espoo. Goals set in the strategy steer the city to provide better services to its residents and customers. Espoo wants to prove how growth that is socially, economically and environmentally sustainable is possible. The Espoo Story allows us to have a shared view of our work and defines our values and direction. Espoo’s number one value is its residents and customers – no one is left behind. We succeed when we get our residents, communities and partners involved in developing our city together. The message of the Espoo Story is doing things together. Cooperation is also a way to support the green transition of the economy and create sustainable growth.

This also applies to achieving the goals set in UN Agenda 2030. If we want to be a pioneer in sustainable development, we must focus on cooperation and partnerships. This means creating opportunities to develop a city that is wholly sustainable and resident-oriented. Espoo’s role is to be a pathfinder at a local, national and international level. To succeed in this work, we need everyone to join. Only by working together can Espoo become larger than its size in building a sustainable future. The City of Espoo is committed to the UN’s work on Agenda 2030 and its role as a pioneer.

Jukka Mäkelä
Mayor
It is cities that play a key role in building a sustainable future. Whether it is global scale, in Europe or in Finland. In Espoo, this means doing things together with the whole community: citizens, businesses, academia and all others. Our goal is clear: Leave no one behind. At the same time, it is about our environment, biodiversity, climate and all these in a dynamic urban community.

This is the second time we have reviewed the City of Espoo operations according to the UN Sustainable Development Agenda. The VLR23 (Voluntary Local Review) is a compact overview of our urban community in relation to the UN Agenda 2030 Sustainable Development Goals (SDGs). The review makes use of local, national and international metrics and data.

Time-wise, reading this review takes about as long as a refreshing bike ride along the coastal route in Espoo, from the Aalto University campus in Otaniemi, past the maritime Finnoo and towards Nuuksio National Park. Like the bike route, this publication gives you an overview of the city. The 17 Sustainable Development Goals are presented in a clear format that is easy to understand.

Our city is the creation of our community and subject to continuous development. We hope that this review will encourage you to take an active part in building our shared future. You can scan the QR code to go to the City of Espoo website where you can find more data and information on how you can participate in developing our community.

We hope this publication inspires you to join action!

On behalf of the editorial team,

Ville Taajamaa
Editor

Voluntary Local Review VLR23, City of Espoo
Espoo
1 NO POVERTY
End poverty in all its forms everywhere. There is little life-threatening poverty in Espoo, but many have difficulties in affording children’s hobbies, exercising flexibly, going to cultural events or even ensuring their electricity supply.

Espoo measures poverty e.g. by the number of low-income persons and families with children who receive social assistance.

A low-income person is someone who lives in a household whose income is under 60% of the average income of a Finnish household.

Social assistance is granted to families with children whose own income is not sufficient for essential expenses and reasonable housing.

In 2021, 9.8% of the Espoo dwelling population, 28,500 persons, lived in a low-income household. The percentage of low-income persons in Espoo has grown since the previous year, but it remains clearly lower than in Finland as a whole or in Helsinki, for example.

The percentage of families with children who received social assistance decreased from 2020 and was at 11.3% in 2021. The percentage is higher than in the whole of Finland (9.4%).
2 ZERO HUNGER
Even though things are generally good in Espoo, not all residents feel they have access to sufficient food, and they need to skip meals for one reason or another.

End hunger. Free school meals have been offered in Finland for the past 80 years, but not everyone makes use of this benefit. Some Espoo residents even have to give up food, medications or medical appointments due to lacking funds. In Espoo, the Family Centre brings the services for families with children in one place.

» Espoo schools generate little food waste

In 2020, about one in six working-age persons (age 20–64) had compromised on food or healthcare due to lacking funds. The percentage is lower than in Finland overall or in Espoo’s neighbouring cities.

<table>
<thead>
<tr>
<th>Young people who do not have breakfast or school lunch (2021)</th>
<th>Does not eat breakfast every weekday morning</th>
<th>Does not eat school lunch daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils in grades 8–9 of comprehensive school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students in years 1–2 of vocational school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students in years 1–2 of general upper secondary school</td>
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</tbody>
</table>
3 GOOD HEALTH AND WELL-BEING
Ensure healthy lives. Satisfaction with life and quality of life are essential factors in wellbeing. Satisfaction with their quality of life is related to a person’s living environment and expectations. A healthy lifestyle and reduced use of intoxicants are chosen by an increasing number of young people.

» The attitude of young Espoo residents towards drugs has become more negative in the past few years

People of all ages have a right to a good quality of life. Among Espoo residents over 20, satisfaction with quality of life has decreased somewhat since 2018. However, satisfaction remains significantly higher than the national average and the best out of large cities.

A decreasing number of young people approve of their peers smoking marijuana (cannabis)
Espoo residents have a higher level of education than the overall population of Finland (and that of neighbouring municipalities). Almost half of Espoo residents have a degree from higher education.

Espoo residents are happy with education services, as over 90% of them believe the services are handled well or very well in Espoo. The only exception is early childhood education, where the satisfaction rate is 72%.
Achieve gender equality. Democracy requires that everyone has the opportunity to influence their community, regardless of gender. Young women and minorities, in particular, face hate speech, which reduces their willingness to engage in politics.

It can be considered a manifestation of gender equality that everyone has the opportunity to reach the highest political positions. In a municipality, this would be the council, which wields the highest decision-making power.

Gender is a matter of self-identification for each person. The freedom to live your life without experiencing physical threat or sexual violence or harassment is an essential factor in realising gender equality.

### Physical threat and sexual violence experienced by young people (2021)

<table>
<thead>
<tr>
<th></th>
<th>Physical threat</th>
<th>Sexual violence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Pupils in grades 8–9 of comprehensive school</td>
<td>17.8%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Students in years 1–2 of vocational school</td>
<td>20.4%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Students in years 1–2 of general upper secondary school</td>
<td>12.5%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>
6 CLEAN WATER AND SANITATION
Wastewater load refers to the amount of various substances that the residents, companies and other operators in the area let into water systems along with wastewater. The most commonly monitored figures are the amount of phosphorus and nitrogen, and the amount of oxygen being consumed by the substances in wastewater. The aim is to reduce the wastewater load.

Wastewater load in Espoo has decreased since 2019.
7 Affordable and clean energy
Energy production and consumption generates most of the City’s emissions. Most of these are generated from district heating. Espoo, along with the energy company Fortum, is committed to moving to carbon-neutral district heating in the 2020s (methods include using waste heat, renewable electricity, heat pumps and bioenergy).

Other uses of renewable energy are also a way to reduce emissions. By reducing energy consumption, we can generate savings and decrease the need for energy production.

**Total emissions of district heating in Espoo** (1,000 tonnes of CO\textsubscript{2}e)

- **1990**: 200 (Households), 300 (Services and public sector), 50 (Industry)
- **2019**: 150 (Households), 350 (Services and public sector), 100 (Industry)
- **2021**: 120 (Households), 300 (Services and public sector), 100 (Industry)
- **2022**: 100 (Households), 250 (Services and public sector), 100 (Industry)

**Number of solar panel systems in Espoo**

- 2019: 500
- 2020: 1,000
- 2021: 1,500
- 2022: 2,000
- 2023: 2,500

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**Clean energy.** Energy involves e.g. heating and electricity production, distribution, energy efficiency and energy conservation. Aim is to provide citizens and companies with clean and reasonable priced energy. Communities are moving towards renewable energy production and sustainable and flexible consumption.
8 DECENT WORK AND ECONOMIC GROWTH
Meaningful work, sufficient pay and good working conditions are important factors in an individual's wellbeing. Even though the City of Espoo is a significant employer, most jobs exist and are created in companies.

The percentage of unemployed persons of the workforce has been on a clear decrease for the past few years since the increase caused by the COVID-19 pandemic.
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
The City’s measures in construction and steering construction work impact the building of sustainable infrastructure. Cooperation and partnerships with universities, other education and research institutions, organisations and businesses allow for new innovations and economic sustainability.

The City aims to rely on its support measures and generally business-favourable atmosphere to attract new innovative companies and investments to Espoo. This has succeeded, as Espoo was sixth in the comparison of patent applications submitted in European cities in 2021, with its 1,200 patent applications.

**Largest industries by number of jobs** *(percentage of all jobs at the end of 2021)*

- Education
- Software and consulting
- Wholesale
- Retail
- Community care social services

**Innovation and infrastructure.** Infrastructure, meaning services and structures, will be needed to allow for a sustainable economic sphere. For example, company turnovers are on the increase in the area around the West Metro line. The Jokeri Light Rail, line 15, will contribute to sustainable mobility and increased vitality of the city.
10 REDUCED INEQUALITIES
In 2021, 7% of the graduates of Espoo general upper secondary schools spoke a first language other than Finnish or Swedish. Among vocational school graduates, this percentage was 10%.

The number of children who speak a first language other than Finnish or Swedish attending early childhood education (daycare) has grown steadily over the past few years. In 2022, over one in four children in early childhood education spoke a first language other than Finnish or Swedish.

» Offering equal education opportunities to all population groups contributes to the development of the Espoo community

**Children speaking a foreign language in early childhood education**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of children</th>
<th>Percentage of children attending early childhood education</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>3,000</td>
<td>20%</td>
</tr>
<tr>
<td>2019</td>
<td>3,500</td>
<td>25%</td>
</tr>
<tr>
<td>2020</td>
<td>4,000</td>
<td>30%</td>
</tr>
<tr>
<td>2021</td>
<td>4,500</td>
<td>35%</td>
</tr>
<tr>
<td>2022</td>
<td>5,000</td>
<td>40%</td>
</tr>
</tbody>
</table>
11 SUSTAINABLE CITIES AND COMMUNITIES
Make the city safe and sustainable. Rapid population growth, the ageing population and the increase in the foreign-language population will also increase service needs in Espoo and challenge both sustainable construction and service production. Facilitating mobility is an important aspect of a functional city.

In 2021, a little under one in ten households (= persons living permanently in the same dwelling) were living in a cramped home. The percentage is higher than the national average, but slightly lower than in Helsinki and Vantaa.

Fully electric and hybrid cars
13% » of the vehicle population
46% » of first registrations (2022)

Sustainable mobility is an essential part of Espoo’s goal to reach carbon neutrality by 2030.

Half of all trips are taken by sustainable transport modes
- By foot 28%
- By public transport 14%
- By bicycle 8%

Percentage of persons living in cramped homes of all households
- 9.3% » Percentage of persons living in cramped homes of all households

Graph: Percentage of persons living in cramped homes of all households:
- 2017: 10%
- 2018: 5%
- 2019: 0%
- 2020: 0%
- 2021: 0%
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Sustainable consumption and production patterns. The City of Espoo promotes SDGs in procurement and encourages the whole community, businesses included, to operate the same. The consumption choices made by residents and housing companies are an important part of sustainable development and responsibility.

It is responsible to only buy new things when you need them, share products and services, and repair and reuse old things. Climate emissions show how we live and consume. Of consumption-based emissions, more than two thirds are generated by services, food and goods produced outside of Espoo.

In 2022, Espoo households’ amount of waste per capita was the lowest in the Metropolitan Area, with the highest recycling rate.

One third of consumption emissions came from energy consumption and construction.
13 CLIMATE ACTION
The definition of carbon neutrality is that a city area only generates the amount of emissions that it can offset in a year. The greatest emission sources in Espoo are the heating of buildings, transportation and electricity for consumption. In the 2020s, the largest emissions reductions have been achieved in district heating production, in which the most significant climate action is ceasing the use of coal by 2025. The City’s climate actions are compiled in the Climate Watch service.

In 2022, the emissions of the City of Espoo grew due to the Russian invasion of Ukraine.

Espoo’s climate emissions per capita are the lowest in the Metropolitan Area for seven years in a row.

<table>
<thead>
<tr>
<th>Regional greenhouse gas emissions per capita (CO²e)</th>
</tr>
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<tbody>
<tr>
<td>1990</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>2020</td>
</tr>
<tr>
<td>2021</td>
</tr>
<tr>
<td>2022</td>
</tr>
</tbody>
</table>

Legend:
- Heating
- Electricity
- Transport
- Industry and machinery
- Waste processing
14
LIFE
BELOW WATER
Conserve oceans and seas. Espoo is a maritime city. Almost half of the area, 216 km², is water, of which the sea area makes up 158 km². Espoo cares about protecting its waters. The Water Protection Action Plan for 2022–2027 lists the actions to improve water system quality in the next few years.

» More than one in three Espoo residents moves about the coastal areas at least weekly

Changes in the environment threaten the water systems. We must work constantly to improve water quality and regularly monitor the ecological state of water systems.

Many Espoo lakes are in good condition, some even in excellent condition.

<table>
<thead>
<tr>
<th>Ecological status of water systems</th>
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<tbody>
<tr>
<td>Excellent</td>
</tr>
<tr>
<td>Good</td>
</tr>
<tr>
<td>Passable</td>
</tr>
<tr>
<td>Satisfactory</td>
</tr>
<tr>
<td>Poor</td>
</tr>
<tr>
<td>No classification</td>
</tr>
</tbody>
</table>

Materials: City of Espoo, Finnish Environment Institute
15 LIFE ON LAND
Local nature and conserving biodiversity are important factors in building a pleasant living environment. One way to preserve biodiversity is natural reserves. Nuuksio National Park is the largest single protected area in Southern Finland.

By the start of 2023, protected areas amounted to almost 4,000 hectares, which is 7.5% of Espoo’s area.

About one sixth of Espoo forests was over 100 years old in 2019. The number decreased in the 2010s.
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
The City of Espoo continues to employ over 10,000 people, even though the personnel of Espoo social and healthcare services moved to the Western Uusimaa Wellbeing Services County in 2023. In 2022, the City had 15,360 employees.

Younger age groups remain underrepresented in the City Council, but their proportion of councillors is higher than that of all local councillors in Finland.

Build effective, accountable and inclusive institutions. Trust and involvement in political and social systems is essential in a functional democracy. We hope that the community’s decision-making and activities would involve residents from various backgrounds.

49.7% of City of Espoo employees feel the organisation's decision-making is fair.
17 PARTNERSHIPS FOR THE GOALS
Espoo wishes to be a pioneer in the development of municipal services. Services are developed for residents’ needs and in cooperation with residents. In 2022, the City supported organisation activities with 4.7 million euros.

Residents’ satisfaction with services is monitored via an annual study on city and municipal services (Kaupunkija kuntapalvelututkimus). One essential figure being monitored is the home municipality index, which is a ‘satisfaction average’ (on a scale of 1–5) calculated from 51 factors being monitored.

Development of the extensive home municipality index in Espoo 2011–2022