

# Helsinki

An aerial photograph of Helsinki, Finland, taken during the golden hour of sunset. The city is densely packed with buildings, many with red-tiled roofs, interspersed with lush green trees. In the background, the city extends to the water's edge, where several construction cranes and industrial structures are visible. A prominent church with a tall, green spire stands out on the right side of the frame. The sky is a clear, warm orange and yellow, transitioning to a pale blue at the top.

**Ai4Cities**  
**10.2.2021**

Pasi Rautio  
Data, AI, Robotics

Helsinki

10.2.2021

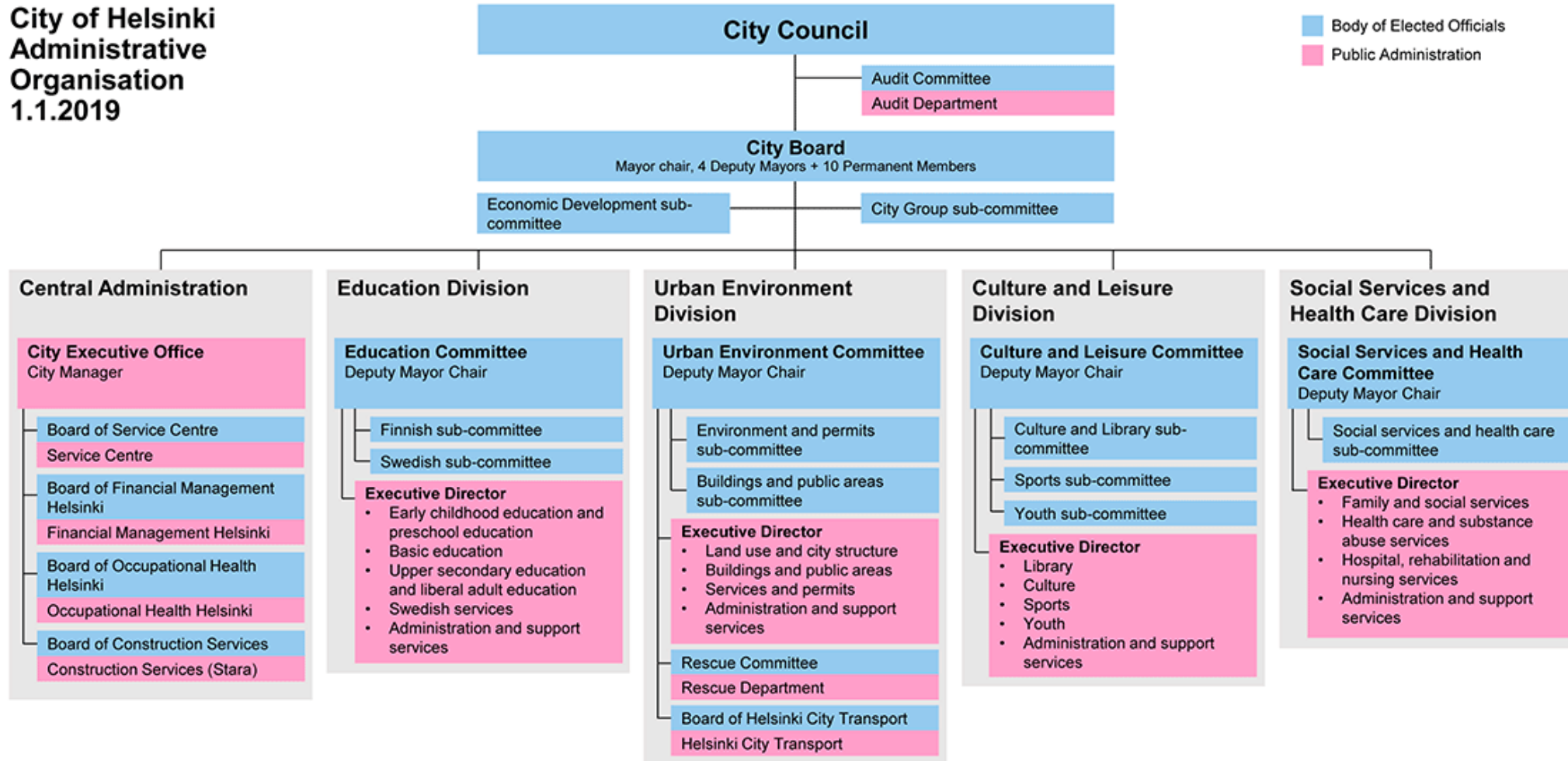


# City of Helsinki digitalization

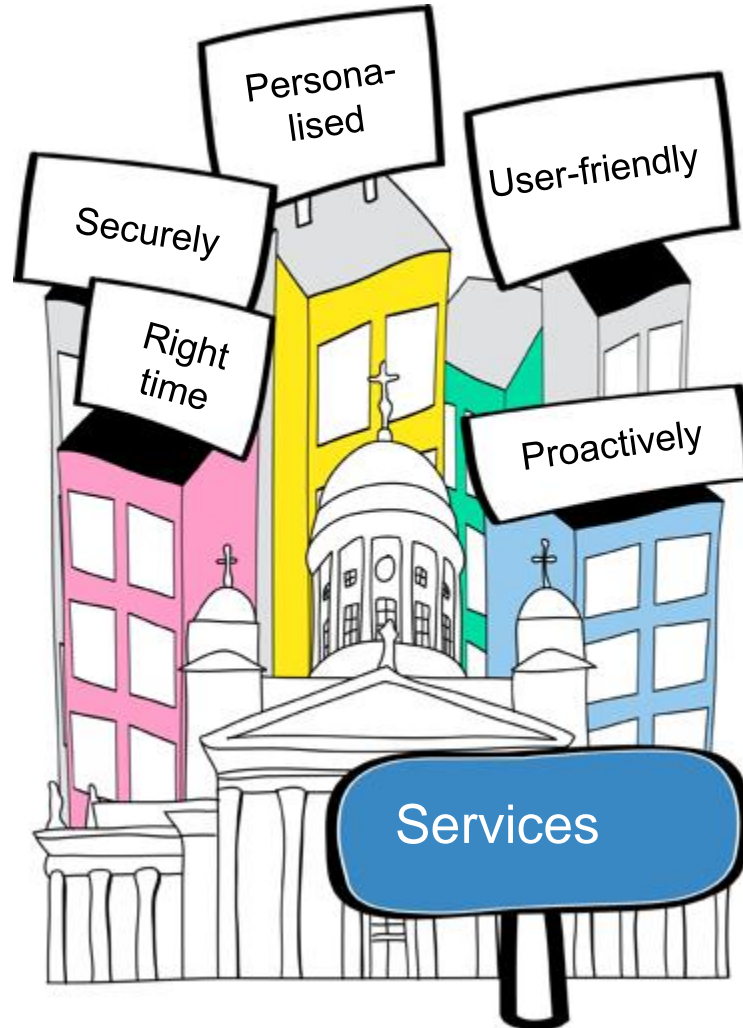
- Helsinki strives for being the most functioning city in the world. To achieve this goal we need to make the best use of digital technologies.
- Helsinki operates based on openness and transparency.
- Helsinki focuses on utilizing digitalization, robotization and AI.

# 38 000 people at your service

City of Helsinki  
Administrative  
Organisation  
1.1.2019



# The Most Functional City in the World that Makes the Best Use of Digitalisation



# Data Strategy for Helsinki

Helsinki

<https://digi.hel.fi/english/>

<https://digi.hel.fi/english/helsinki-city-data-strategy/>

**Data vision:**

**Helsinki's data is the most usable and used urban data by 2025**

Helsinki

Photo: Eetu Ahanen / City of Helsinki



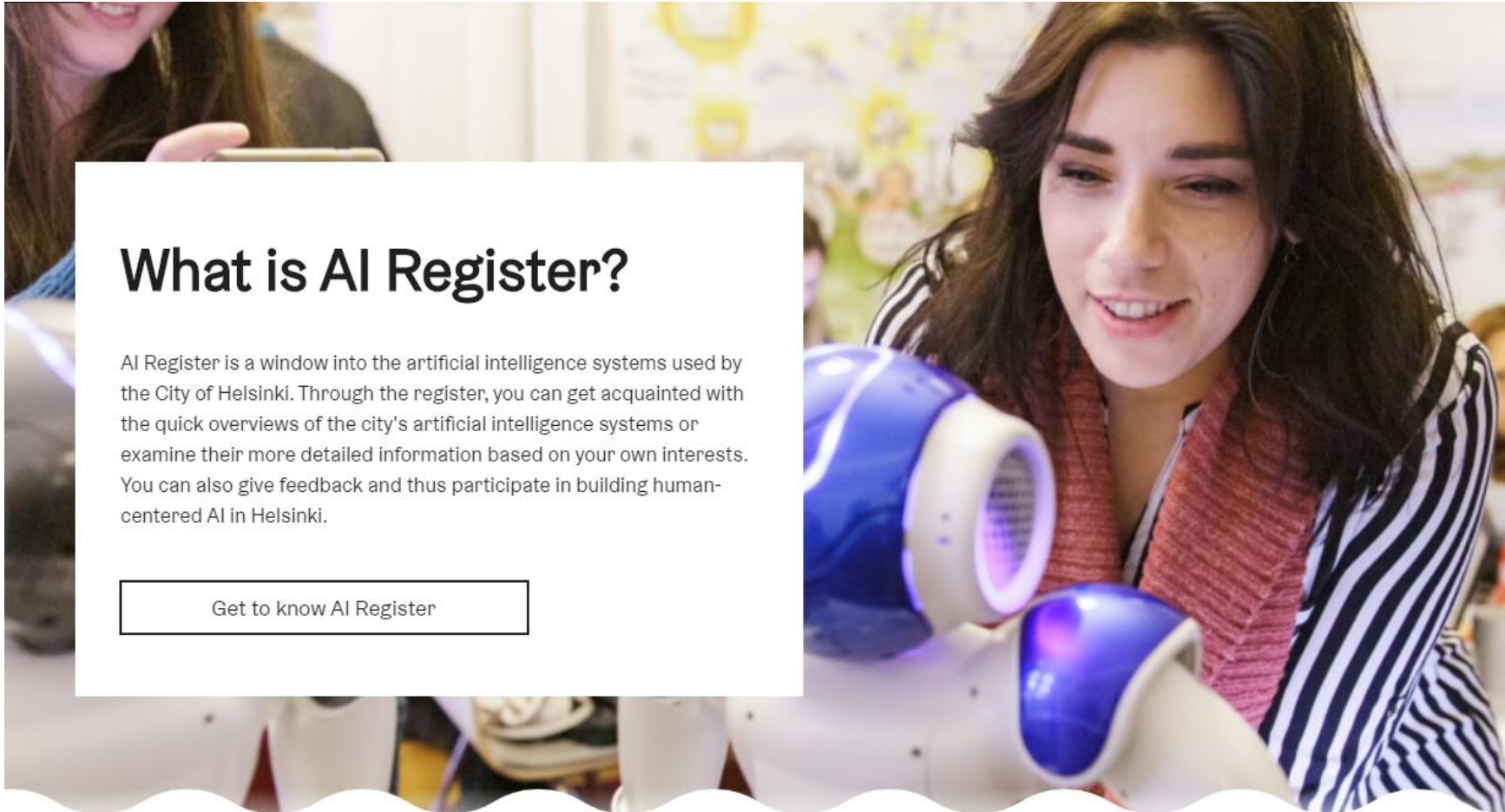
# **Four objectives**

- 1. Proactive and personalised services at people's terms**
- 2. Data-driven decision-making**
- 3. Optimising city's operations**
- 4. Fostering business ecosystem**

# AI in cities depends on the trust of citizens



# AI Register



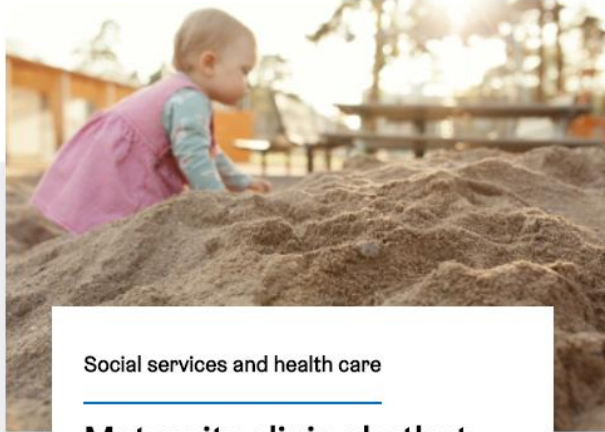
## What is AI Register?

AI Register is a window into the artificial intelligence systems used by the City of Helsinki. Through the register, you can get acquainted with the quick overviews of the city's artificial intelligence systems or examine their more detailed information based on your own interests. You can also give feedback and thus participate in building human-centered AI in Helsinki.

Get to know AI Register

# Artificial intelligence systems of Helsinki

Learn about the use cases where we currently utilise artificial intelligence as part of our city services.



Social services and health care

## Maternity clinic chatbot NeRo

The chatbot answers the clients of the Helsinki counselling centres' questions without queuing at all times of the day. In addition to problems related to the child's growth or development and pregnancy, the customers can also ask questions about dental care, speech development, and...

> [Read more](#)



Housing and environment

## Parking chatbot

The parking chatbot is a customer service channel of city's parking services. Service provides automated answers to the parking-related questions of city residents and visitors. The service is available at the city parking website of Helsinki. The service aims to improve the availability...

> [Read more](#)



Social services and health care

## Health center chatbot

The chatbot provides health and illness-related advice easily without queuing. Chatbot directs the users to the right digital health services and advises on questions related to dental, mental health, substance abuse and social services. The service answers the most frequently asked...

> [Read more](#)

# Helsinki 3D

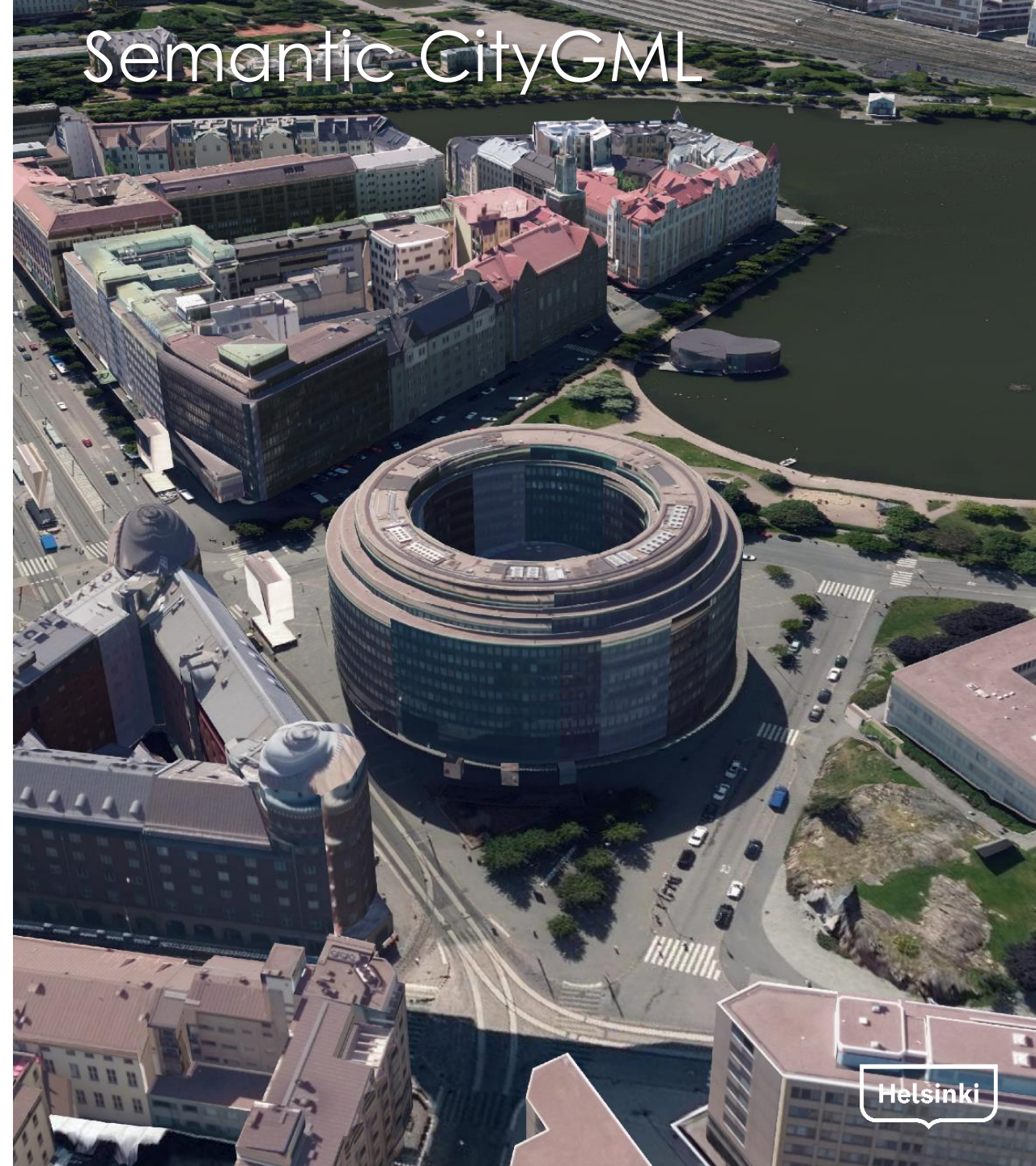
## Digital twin of the city



Reality Mesh



Semantic CityGML

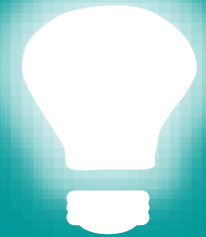




# OPEN DATA UTILIZATION



- Development
- Solutions
- Analytics

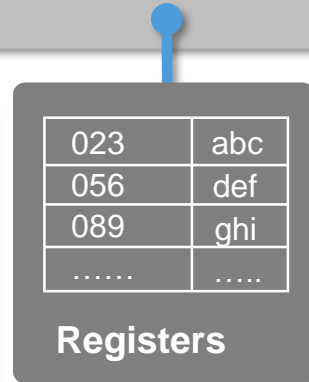
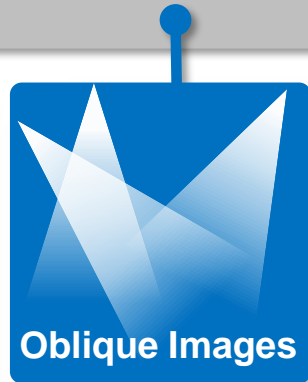
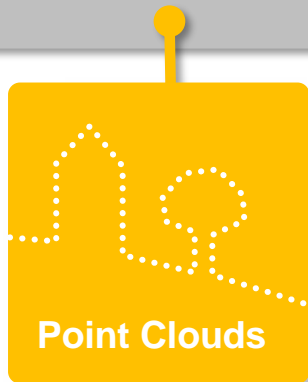


## 3D CITY MODELS



## TECHNOLOGY LAYER

### DATA

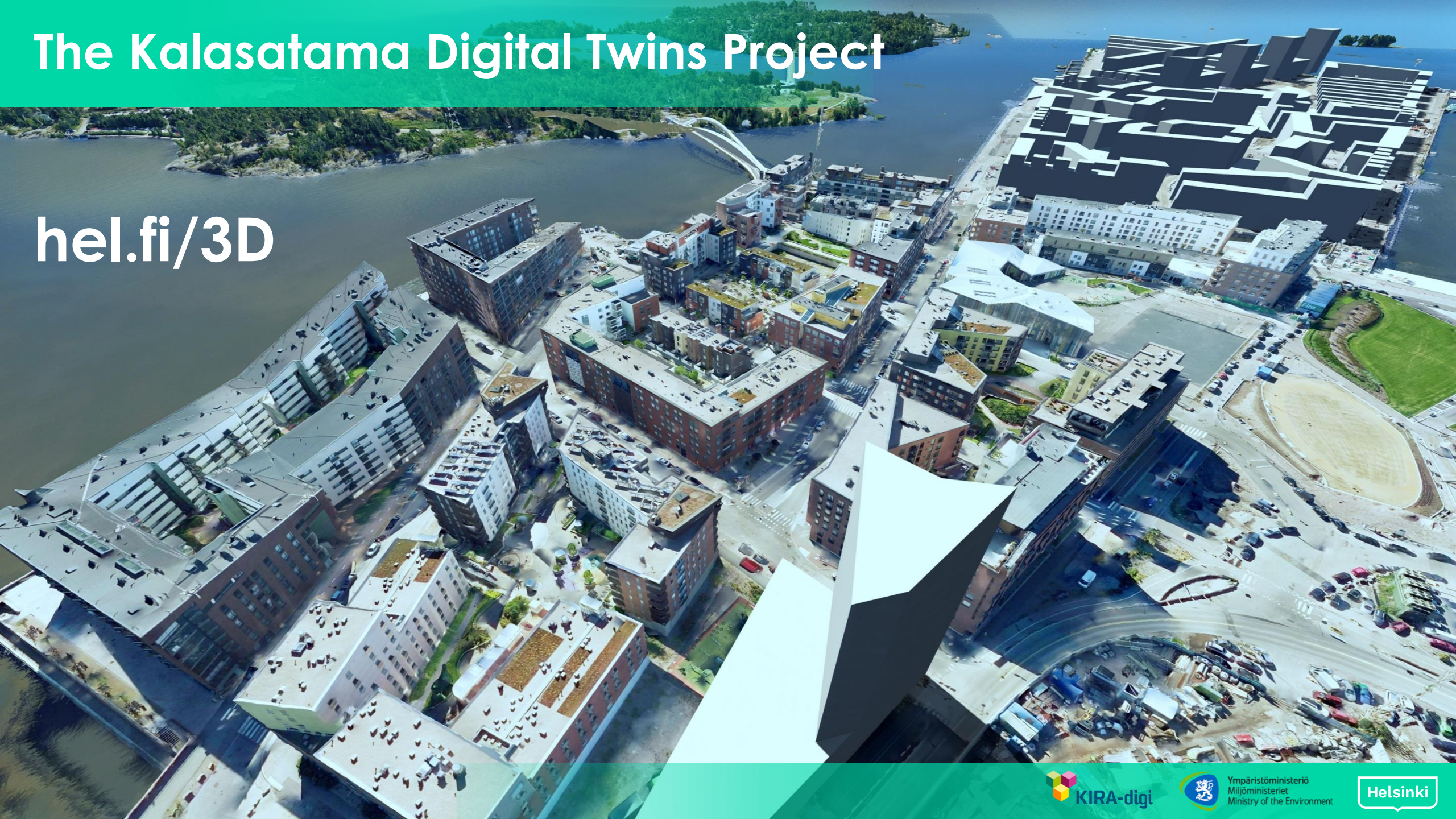


Helsinki

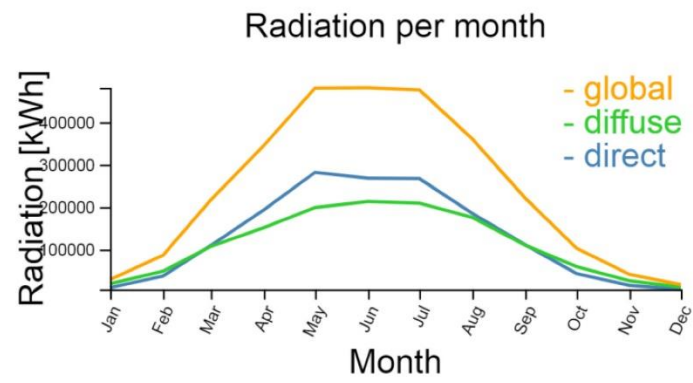
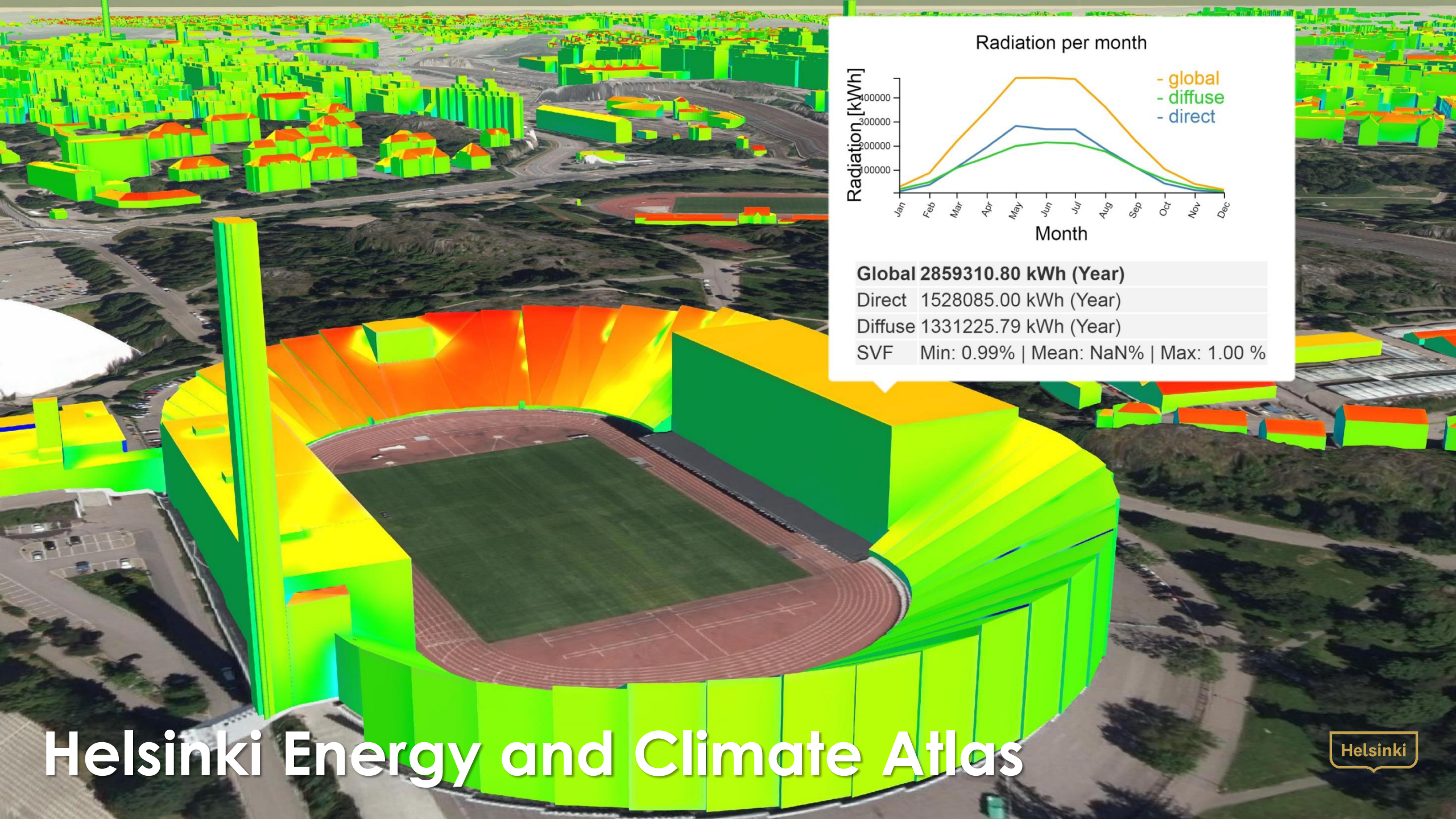


# The Kalasatama Digital Twins Project

[hel.fi/3D](https://hel.fi/3D)







<b>Global</b>	<b>2859310.80 kWh (Year)</b>
Direct	1528085.00 kWh (Year)
Diffuse	1331225.79 kWh (Year)
SVF	Min: 0.99%   Mean: NaN%   Max: 1.00 %

# Helsinki 3D — Digital twin of the city

- **Youtube:**

<https://www.youtube.com/channel/UCC5zVtGUdLXRI354lghLLqg>

- **Web site:**

<https://www.hel.fi/helsinki/en/administration/information/general/3d>

- **Carbon neutral Helsinki 2035:**

<https://www.hel.fi/helsinki/en/housing/environmental/programmes/climate-action/>



# Open Data

- [https://hri.fi/en\\_gb/](https://hri.fi/en_gb/)

The screenshot shows the homepage of the Helsinki Region Infoshare Open Data Service. The header includes navigation links for Frontpage, Data, Showcases, News, Analytics, Support, and What is HRI?, along with a search icon and language options (FI, EN, SV). The main content area features the Helsinki Region Infoshare logo and the text "Helsinki · Espoo" and "Vantaa · Kauniainen". The central heading is "Open data service" with the subtitle "Making better use of public data in the Helsinki region". Below this is a search bar with a "DATASETS" dropdown menu, a "Tag" input field, and a "SEARCH" button. Three statistics are displayed: 625 Datasets, 264 Applications, and 158 APIs. The footer contains a row of icons representing various data categories.



# Thank you!

**Pasi Rautio**

Leading Expert  
Data and Analytics  
City of Helsinki

[pasi.rautio@hel.fi](mailto:pasi.rautio@hel.fi)

Helsinki

