

How green are cities?

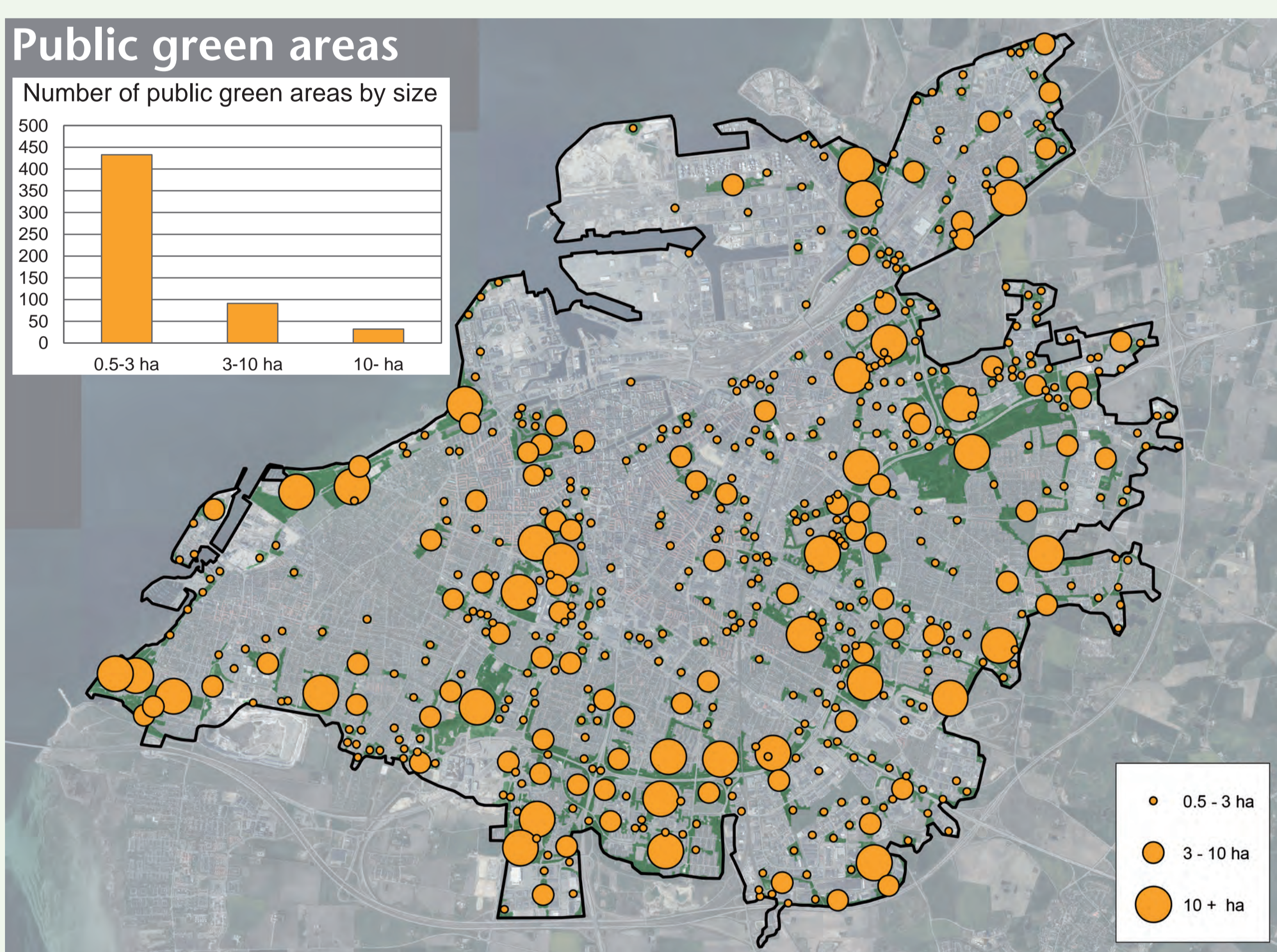
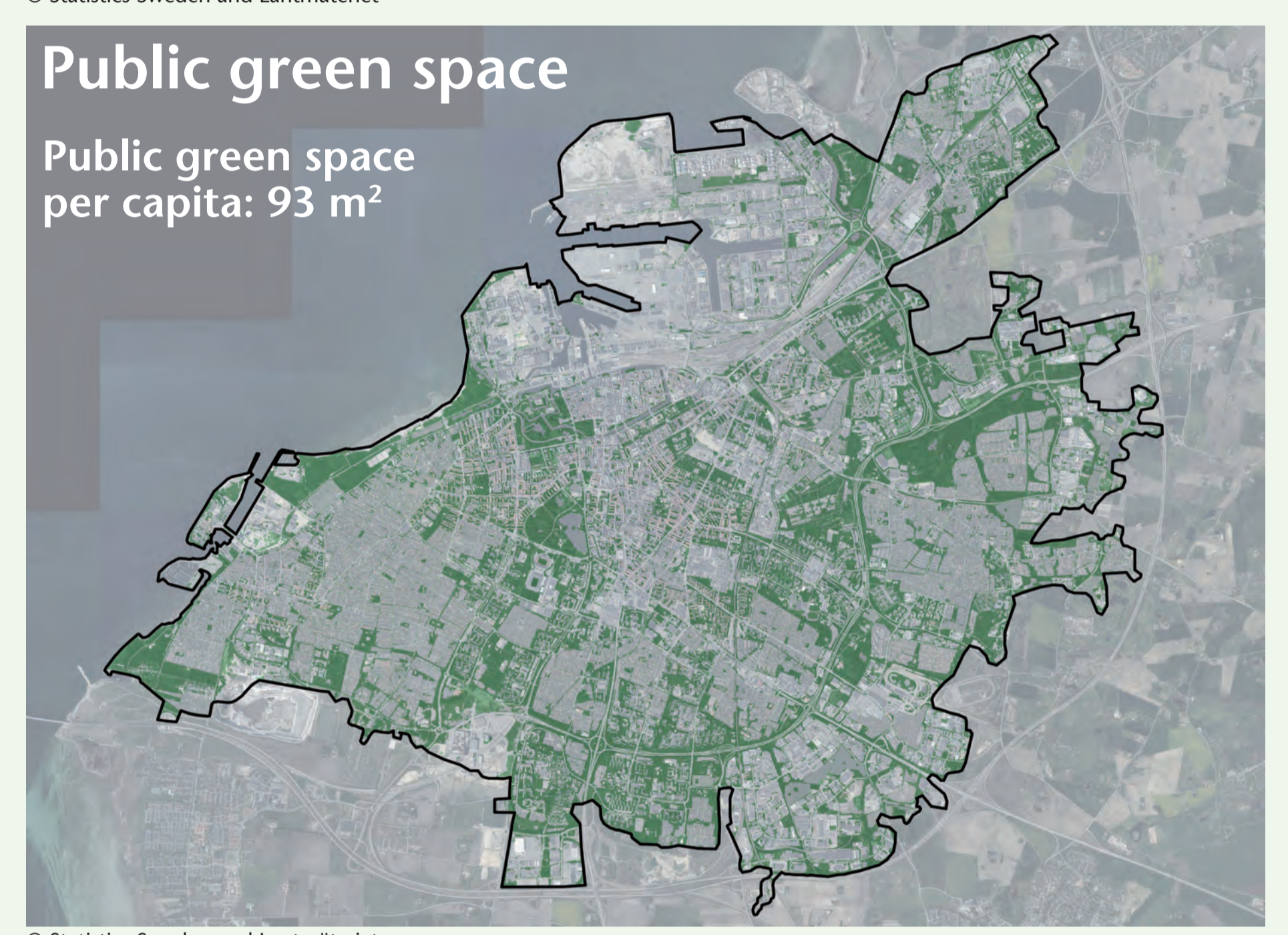
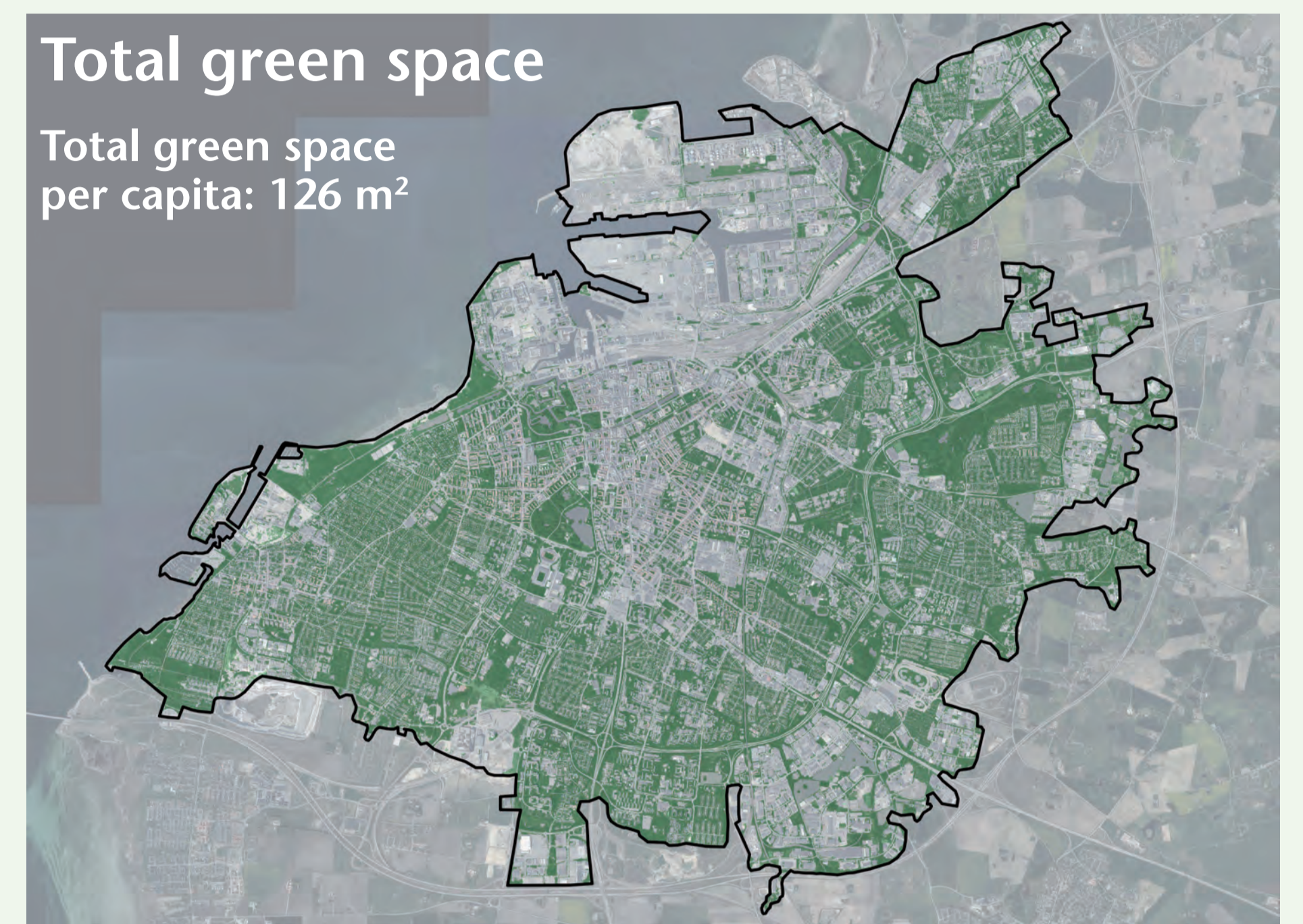
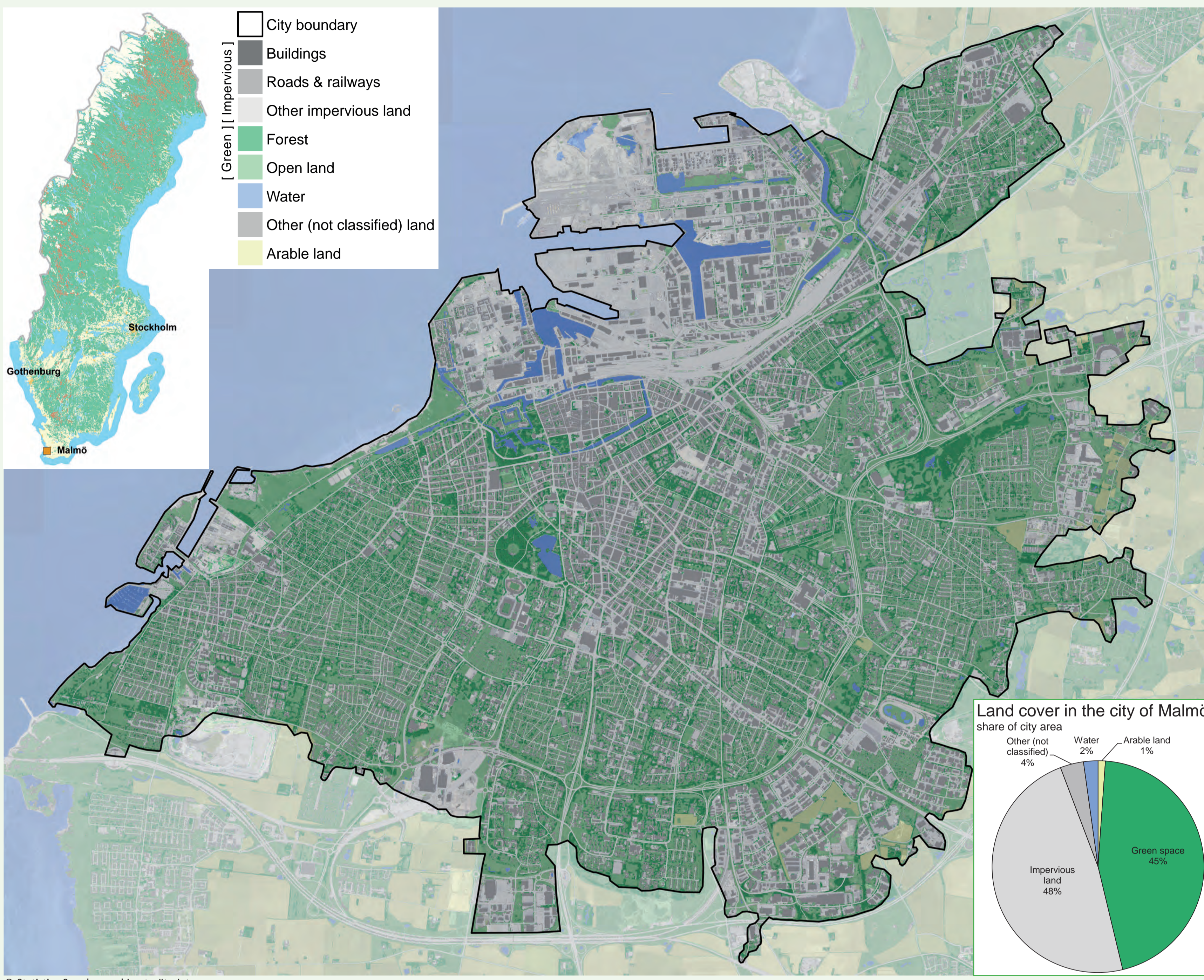
Urban green structure makes cities more resilient and sustainable

Green structure is an integral part of the urban environment, contributing to the resilience and sustainability of cities. The benefits which the urban green structure, and the ecosystem services connected to it, brings to people and environment are numerous. Access to green spaces can provide health benefits, through improved mental health and physical activity, reduced exposure to pollution and heat waves. A high coverage of impervious surfaces in urban areas prevents surface water from being absorbed into the ground, increasing the risk of flooding and pollution from heavy rainfall. Green spaces provide natural filtration of storm water, thus increasing urban resilience to flooding.

How green are cities?

In growing cities, balancing the need to develop land for housing with preservation of green space is a true challenge. City planners have the seemingly contradictory task of creating dense and green cities. In order to find out how green Swedish cities are, Statistics Sweden has undertaken a study on green structure in the largest urban areas. The result is part of official statistics and can be found at www.scb.se/mi0805-en. The statistics are widely used to assess urban planning policies and for monitoring of environmental objectives

City of Malmö



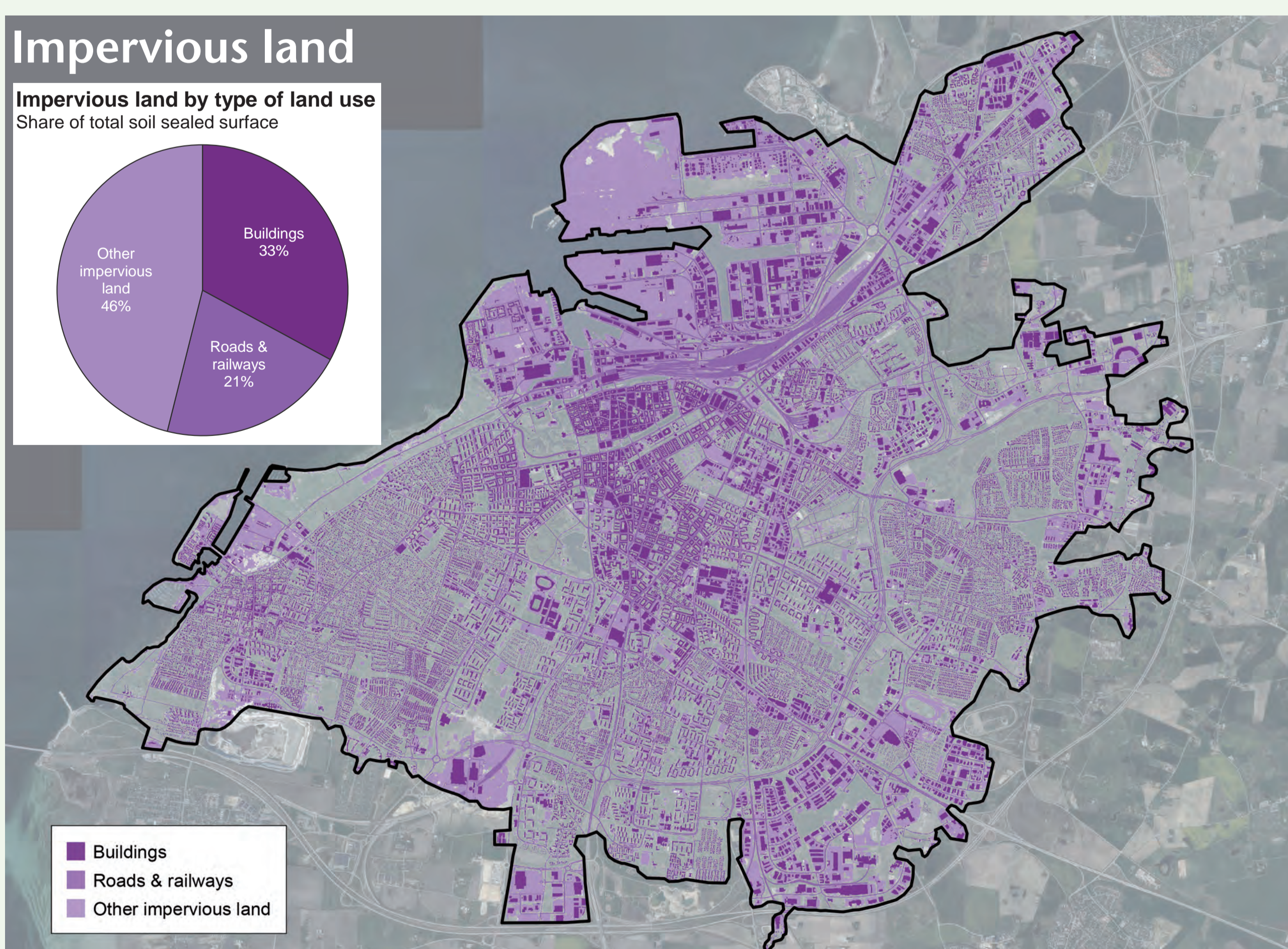
Footnote: A public green area is defined as an area of contiguous green space of at least 0.5 hectares which is available for the public.

Integration of data sources

Assessing urban green structure from a multipurpose approach is a challenging task, involving use of numerous data sources. Classification of land cover is based on remote sensing of satellite imagery and lidar data. Land cover classification is pre-processed and post-processed with additional geospatial data from Lantmäteriet (Swedish mapping, cadastral and land registration authority), Swedish Transport Administration, Board of Agriculture and Swedish Forest Agency to add information on land use to the initial land cover classification. Geocoded administrative data from The Swedish Tax Agency are used to derive information on land ownership and to classify green space in terms of public access. Calculations of population proximity to urban green areas are based on Statistics Sweden's population register geocoded to location of dwellings by use of authoritative address records from the National Mapping Agency.

Geodata cooperation – a new and richer landscape of data

A prerequisite for a successful integration of data has been the Swedish geodata cooperation launched in 2011 as a response to the INSPIRE directive. The cooperation has contributed to a paradigm change in information access resulting in a new and richer data landscape for public administration. More information about the Swedish geodata cooperation can be found at <https://www.geodata.se/en/>



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