

Indicator 11: Impermeable surfaces

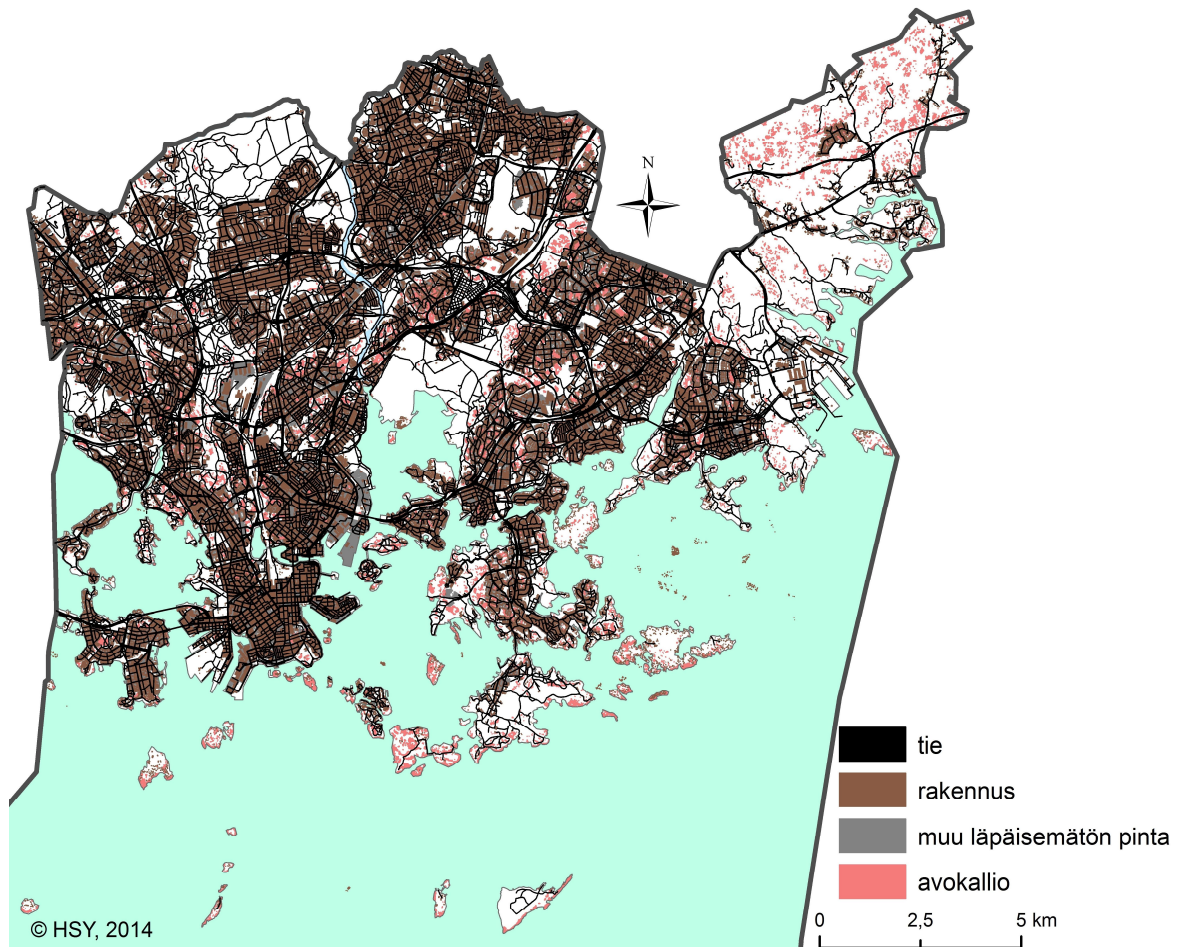


Figure: Map of the permeable and impermeable surfaces of Helsinki. Permeable surfaces are shown in white. Black=road, brown=building, grey=other impermeable surface, red=open rock (Figure: Niina Salojärvi, 2015)

Status:

The company Blom Kartta Oy has determined the area of impermeable surfaces in Helsinki for the Helsinki Region Environmental Services HSY. The estimation was performed twice, once using the Soil Sealing data for the year 2009 and secondly using the regional land-cover data (SMPA) for the year 2013. The figure for the amount of permeable surface was calculated by subtracting the amount of impermeable surface from the total surface area. In this regional land-cover data, also open rock and the category 'bare soil' are included in the impermeable surfaces. The reason for including the latter category is that there were numerous instances in which e.g. asphalt-covered areas were categorized as bare soil.

	Soil surface-area (km ²)	Permeable surface (km ²)	%
Soil Sealing (2009)	213.4	135.1	63.3
SMPA (2013)	214.2	131.2	59.7

Score:

0 points: < 33.1%

1 point: 33.1% - 39.7%

2 points: 39.8% - 64.2%

3 points: 64.3% - 75.0%

4 points: > 75.0%

Monitoring:

The objective is to assess the regional land-cover data approximately every four years. Helsinki Region Environmental Services HSY will be responsible for this assessment. The data for the monitoring of Indicator 11 can be checked at the same time. The value for this indicator is currently average. An increase of approximately 4% in permeable surface would be sufficient to raise the value for this indicator to the next level. The objective of the monitoring is that the level of the indicator will not decrease. The target is to improve the result. A proportion of green roofs could be included in the permeable surface category if they could be counted and surveyed.

Contact person (firstname.surname@hel.fi):

Sanna Elijoki, Environmental Inspector, Environmental Protection Department, Helsinki Environment Centre.