

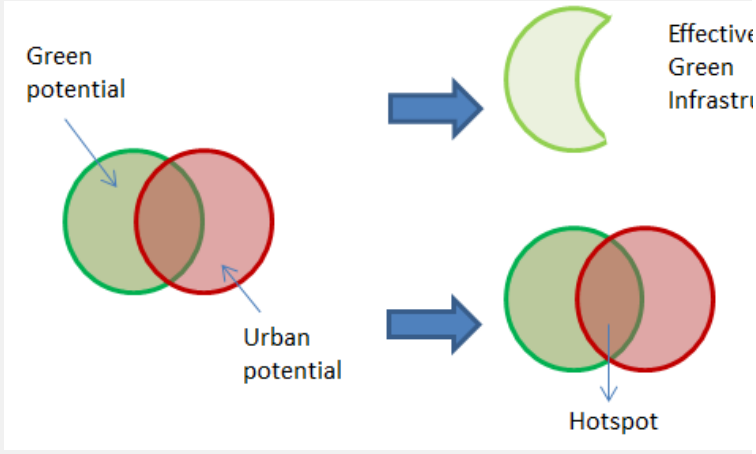
https://www.eea.europa.eu/themes/sustainability-transitions/urban-environment/urban-green-infrastructure/indicators_for_urban-green-infrastructure
<https://eea.maps.arcgis.com/apps/MapSeries/index.html?appid=42bf8cc04ebd49908534efde04c4eec8%20&embed=true>

8.7 Hot spot in peri-urban green infrastructure

Project Name: Indicators for urban green infrastructure (EEA)

Author/s and affiliations: EEA, ETC/ULS

Hot spot in peri-urban green infrastructure	Green Space Management
<p>Description and justification</p>	<p>The urban-rural interface, the area where a city or town meets the countryside, has no clear delineation due to the permeability of its boundaries. It is a dynamic and highly diverse region, where development processes and changes occur at different spatial and temporal scales. The urban fringe is characterised by the trade-off of land uses and the compensation of derived impacts. Here, a strong competition for land use takes place and, accordingly, potential conflicts of interest may arise among a variety of end-users. However, it also presents an opportunity for greening and for connecting existing green spaces to build a solid and functional natural network.</p> <p>The hotspot identifies those areas where the influence of green spaces and the impact of artificial elements overlap. This indicator provides information about the amount and location of areas where potential conflicts may exist or, from a positive perspective, where management actions present major opportunities for enhancement. On the one hand, high hotspot values may be due to the negative effects of the encroachment of artificial areas into green landscapes and the related loss of ecosystem services and functions. On the other hand, it may represent an opportunity to use green spaces to alleviate the urban heat island effect or to clean up pollution.</p>
<p>Definition</p>	<p>The hotspot ratio is the percentage of potential GI in peri-urban areas, strongly influenced by the proximity of built-up areas. Potential and a considerable urban effect coincide.</p>
<p>Strengths and weaknesses</p>	<p>Strength: Weaknesses: resolution of the data (minimum mapping unit 25 ha).</p>

<p>Measurement procedure and tool</p>	<p>The indicator is based upon two metrics: a) the delineation of NBS, and b) the potential area of influence of built-up areas.</p> <p>Delineation of NBS in the peri-urban area is described in the factsheet Effective GI.</p> <p>The potential area of influence of built-up is calculated by selecting the Corine Land Cover classes 1.1, 1.2 and 1.3. Then, Corilis methodology is applied (EEA, 2006), which results in intensity maps after weighting values of neighbouring cells. Therefore, the outcome is a map of probability for the presence of built-up areas (varying from 0 to 100).</p> <p>The hot spot is the intersection of areas with a minimum value of 50% for the green potential and 25% for the urban.</p> 
<p>Scale of measurement</p>	<p>Minimum mapping unit 25 ha Note: the indicator is now based on the 25 ha MMU Corine Land Cover dataset. In 2020, the Copernicus Urban Atlas data will be used and hence the MMU will improve to 0.25 ha.</p>
<p>Data source</p>	
<p>Required data</p>	<p>Corine Land Cover</p>
<p>Data input type</p>	<p>Data provided by Copernicus Land Monitoring Service with public access</p>
<p>Data collection frequency</p>	<p>Every 6 years (2000, 2006, 2012, 2018).</p>
<p>Level of expertise required</p>	<p>Geospatial analysis. Thematic knowledge on green infrastructure and urban environment.</p>

Synergies with other indicators	Share of green urban areas (EEA) Access to green areas in Europe (DG Regio) Effective GI in peri-urban areas (EEA)
Connection with SDGs	SDG-11 (Sustainable cities and communities), specifically target 11.7 (universal access to safe, inclusive and accessible, green and public spaces)
Opportunities for participatory data collection	

Additional information

References	<p>EEA, 2006. Land accounts for Europe 1990-2000. EEA. EES Report No 11/2006. https://www.eea.europa.eu/publications/eea_report_2006_11/eea_report_2006_11/viewfile#pdfjs.action=download</p> <p>EEA, 2014, Spatial analysis of green infrastructure in Europe, EEA Technical Report No 2/2014, European Environment Agency. https://www.eea.europa.eu/publications/spatial-analysis-of-green-infrastructure https://www.eea.europa.eu/themes/sustainability-transitions/urban-environment/urban-green-infrastructure/indicators_for_urban-green-infrastructure</p> <p>https://eea.maps.arcgis.com/apps/MapSeries/index.html?appid=42bf8cc04ebd49908534efde04c4eec8%20&embed=true</p>
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Contextual Information

Country: Spain

Area (km²)	33,6
Population density (inh/km²)	5,067,4
Max average temperature (°C)	23,7
Min average temperature (°C)	4,6
Annual precipitation (mm)	662,5
Urban water areas (%)	0,0

Urban Green Infrastructure Main Indicators

Share of Green Urban Area (%)	59,9
Distribution of GUA (m/ha)	23,4
Effective GI - Mean (%)	33,0
Mean Hotspot (%)	4,8

some extent the opposite picture to cluster 5 (green cities), there are only few southern European cities in this group, but quite a number of cities in the central and southern part of Poland, as well as in Germany (mostly, but not exclusively, the western part, Rhine-Ruhr region) and the Netherlands. It contains many large and capital cities, of which many have been or still are industrial cities.

Characterising cluster parameters

Effective Green Infrastructure