# 14 Additional Indicators of Place Regeneration

## 14.1 Share of Green Urban Areas

**Project Name:** Indicators for urban green infrastructure (EEA)
**Author/s and affiliations:** EEA, ETC/ULS

| Share of Green Urban Areas | Green Space Management Place Regeneration |
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| **Description and justification** | Green urban areas (GUAs) such as parks, public and private gardens, and even trees lining streets can facilitate climate change adaptation and mitigation, improve health and quality of life, and may favour biodiversity conservation.<br>Vegetated areas in cities can generate a cooling effect thanks to evapotranspiration and shading, which may improve the thermal comfort of urban dwellers and increase their resilience to heatwave events. Moreover, green urban areas are unsealed, allowing the infiltration of storm water and decreasing rainwater runoff.<br>The presence of GUAs favours pollution control as vegetation provides cleaner air by removing pollutants such as nitrogen dioxide and microscopic particulate matter.<br>GUAs have an important value beyond their environmental benefits and aesthetic assets. Exposure to greenspaces can restore the physical and mental health of city dwellers by enhancing psychological health and reducing blood pressure and stress levels. |
| **Definition** | The proportion of all vegetated areas within the city boundaries in relation to the total area. |
| **Strengths and weaknesses** | Strengths: the indicator is easy to measure and it is easy to communicate.<br>Weaknesses: resolution of the data (minimum mapping unit 0.25 ha). Green linear elements are not currently included. |
| **Measurement procedure and tool** | This parameter is based on several classes (11230, 11240, 14100, 14200, 20000, 30000) of the Urban Atlas data, which contain substantial green spaces (the two least dense residential classes with a sealing degree < 30 %, urban parks, sports and leisure facilities, forest, semi-natural and agriculture). It is computed for the core city as defined by Eurostat/Urban Audit. |
| **Scale of measurement** | Minimum mapping unit 0.25 ha |
| **Data source** | |

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| **Required data** | Urban Audit data |
| **Data input type** | |
| **Data collection frequency** | Every 6 years. Currently available for 2006 and 2012. Date for 2018 is under production. |
| **Level of expertise required** | Land use and GIS expertise |
| **Synergies with other indicators** | Distribution of green urban areas (EEA)<br>Access to green areas in Europe (DG Regio) |
| **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** | https://www.eea.europa.eu/themes/sustainability-transitions/urban-environment/sub-sections/urban-green-infrastructure/typology-for-urban-green-infrastructure<br><br>https://eea.maps.arcgis.com/apps/MapSeries/index.html?appid=42bf8cc04ebd49908534efde04c4eec8%20&embed=true |