These maps show the potential of nature-based solutions to address multiple sustainability challenges (e.g. climate change, loss of biodiversity, human health and well-being) across more than 700 European urban areas. A set of tools using open-source GIS-based modelling, was used to quantify benefits of urban nature-based solutions under different scenarios, that differ in the amount and location of nature-based solutions within the cities.

Read our [**general brief on open access digital maps**](http://naturvation.eu/sites/default/files/open_access_digital_maps_assessing_the_potential_benefits_of_nature-based_solutions.pdf) as well as our [**background brief on mapping benefits of nature-based solutions in European urban areas**](https://naturvation.eu/sites/default/files/background_information_mapping_benefits_of_nbs_in_775_urban_areas.pdf) and check out the [**Urban Nature Navigator**](https://naturvation-navigator.com/) - a tool that helps you assess the contributions that different nature-based solutions can make to meeting urban sustainability challenges and to identify the nature-based solutions which fit your needs the best.

**SCENARIO**

***Reference:*** Representing the current situation.

***Green****:* Additional trees and parks are implemented within the city.

***Grey****:* Trees and parks are largely removed from the city.

***Nature for Nature***: Bringing nature back into the city by creating additional space for semi-natural green areas (e.g. forests, grasslands, parks) within the city.

***Nature for Society:*** Integrating nature into the city where people most need it by implementing additional trees, permeable surfaces, parks and forests within the city.

***Nature as Culture:*** Creating ‘attractive’ nature within the living environment by increasing the amount of public accessible green spaces (e.g. parks, beaches, forested area) within the city.

**BENEFITS**

***Heat mitigation potential:*** Average heat mitigation potential (0-1) describing NBS contribution to reduce the urban heat island effect (UHI; additional heat stress in the city when compared to areas surrounding the city) by providing shade, increasing cooling through evapotranspiration, and modifying the thermal properties of the urban fabric (albedo effect). Select a city from the table below, and download a map showing the potential of nature-based solutions to reduce temperatures (i.e. heat mitigation per grid cell, average heat mitigation and cooling potential) within your city of interest.

***Heat stress mitigation:*** Relative contribution of urban NBS to reduce the risk of exceeding temperatures thresholds over which people perceive heat stress, using national heat health warning levels as a benchmark.

***Carbon storage potential:*** Average amount of carbon stored (kton C/km2) in living biomass, dead wood, litter and soil. Select a city from the table below, and download a map showing the potential of nature-based solutions to store carbon (i.e. per grid cell, average and total ton carbon stored) within your city of interest.

***Carbon mitigation:*** Relative contribution of urban NBS to reduce cities annual CO2 emissions, based on the amount of carbon sequestered by trees within the FUA relative to cities’ carbon footprints.

***Biodiversity***: Potentially occurring fraction of species (POF), measuring the proportion of birds and flying insects populations which could potentially survive in the urban area based on the availability of semi-natural habitat within 100m and 1000m distance.

***Green space availability***: Share of population living within 300m distance to publicly accessible urban green spaces (e.g. parks, beaches, forest areas of at least 1h).

***Water retention potential***: Relative contribution of urban NBS to avoided stormwater runoff: the amount of avoided aboveground stormwater runoff (m3/km2) during a heavy rainfall event, based on the natural infrastructure’s capacity (i.g. soil permeability) to retain water in relation to the amount of rainfall

***Stormwater regulation****:* Amount of avoided stormwater runoff: the amount of avoided aboveground stormwater runoff (m3/km2) during a heavy rainfall event, based on the natural infrastructure’s capacity (i.g. soil permeability) to retain water in relation to the amount of rainfall