GREEN INFRASTRUCTURE: FROM GREEN ASSETS TO A NATURE-BASED CITY STRATEGY

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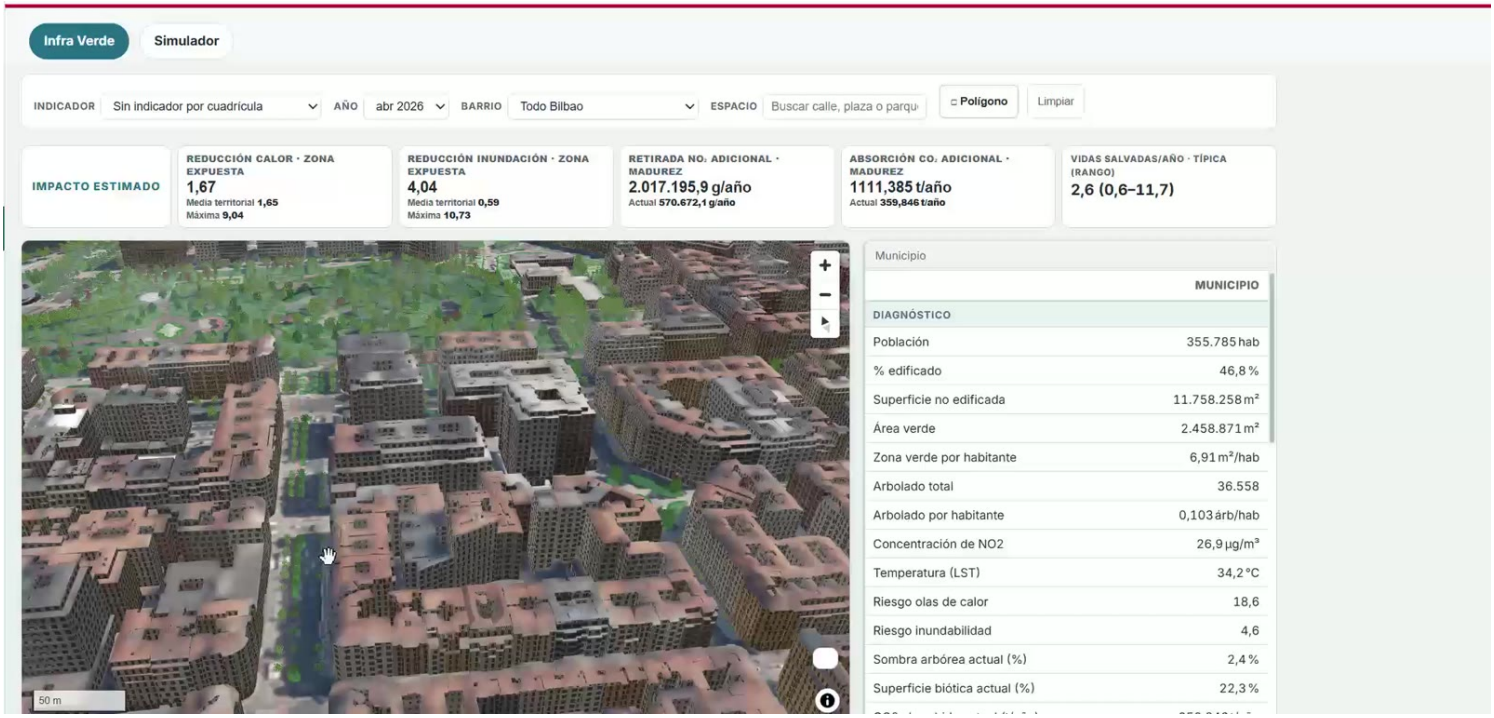
what it is

A TERRITORIAL INTELLIGENCE TOOL FOR URBAN GREENING

Green Infrastructure analyses the city's **trees and green spaces**, their distribution and their environmental benefits. It links the inventory with indicators of coverage, diversity, accessibility and ecosystem services, and its greening model locates gaps, proposes new locations and compares interventions.



objectives

BRINGING MORE NATURE INTO THE CITY

Having an inventory of trees and green spaces is not enough to decide where to expand green infrastructure. Coverage, diversity, accessibility and environmental benefits are unevenly distributed. The tool helps **bring nature closer to people**, starting from targets defined for the city.

features

INVENTORY, SPATIAL PROPOSAL AND BENEFIT SIMULATION

- **Green assets and ecosystem services**: tree canopy cover, species diversity, vegetation index (NDVI), trees per inhabitant, accessibility and estimated services such as CO uptake or NO deposition.
- **Locating new interventions**: the model estimates the trees and green spaces needed to approach the targets and distributes them according to available space and site conditions.
- **Assessing greening scenarios**: when parameters change, it recalculates the proposal and compares indicators and benefits between the current situation and each alternative.

beneficiaries

CITY COUNCILS AND BODIES PLANNING URBAN GREENING

Parks and gardens, environment, planning and public space departments, and bodies planning the greening of municipalities and other urban areas. Proposed locations are then checked against utility networks, maintenance and the real conditions of each site.

applications

USES IN CITY MANAGEMENT

1. Preparing a greening plan: diagnosing the gaps in each neighbourhood and generating a first territorial proposal of areas and actions.

2. Exploring the transformation of streets and squares: comparing greening alternatives by distribution, coverage and benefits before detailed design.

3. Reviewing the territorial balance of green space: testing proposals in areas with gaps to bring their benefits to more people.

demo

PRODUCT DEMONSTRATION

The video shows how the model locates new greening interventions in a real urban setting.

The images and video show the Bilbao 2050 case, promoted by Bilbao City Council with technological collaboration from PwC, NAIDER and TEKNEI. Scenarios are model estimates.

Discover the Green Infrastructure product on DataTool