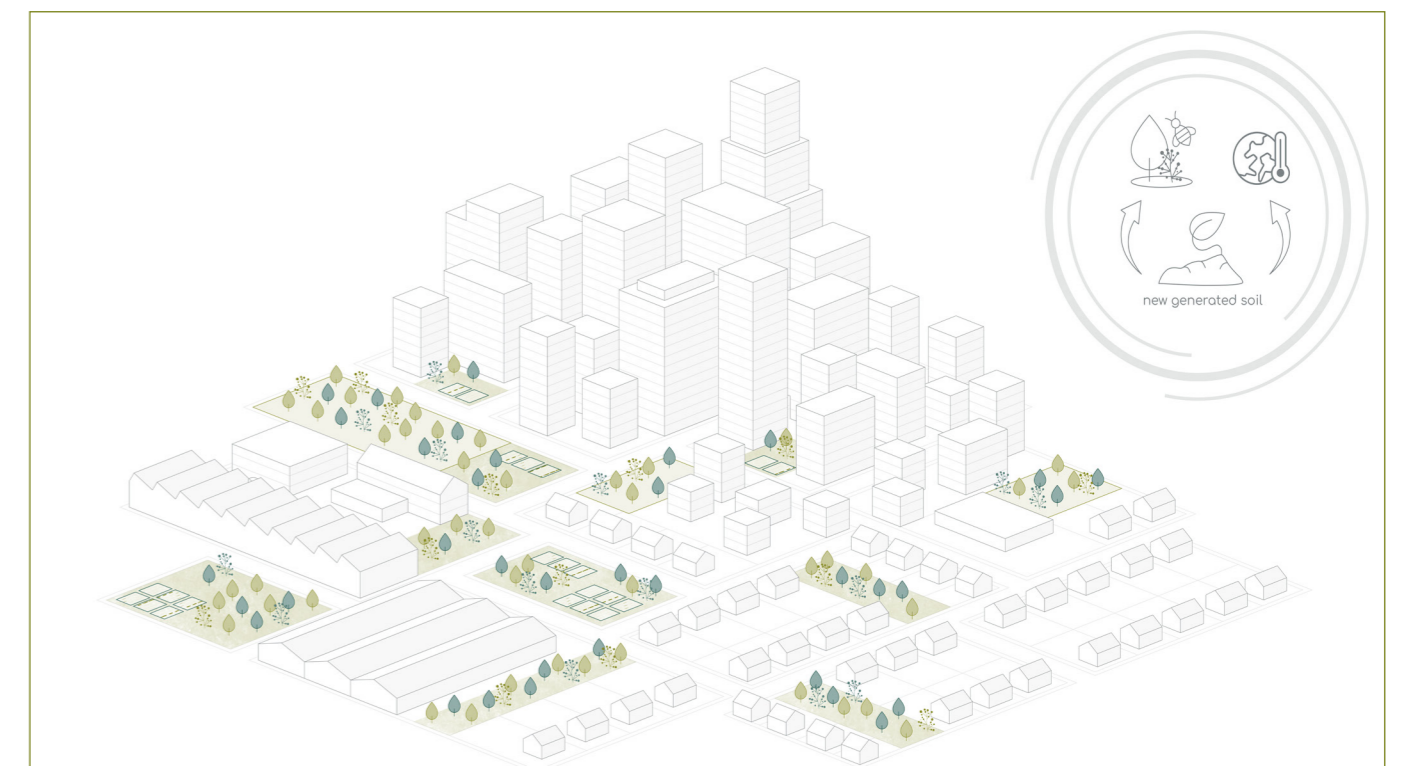
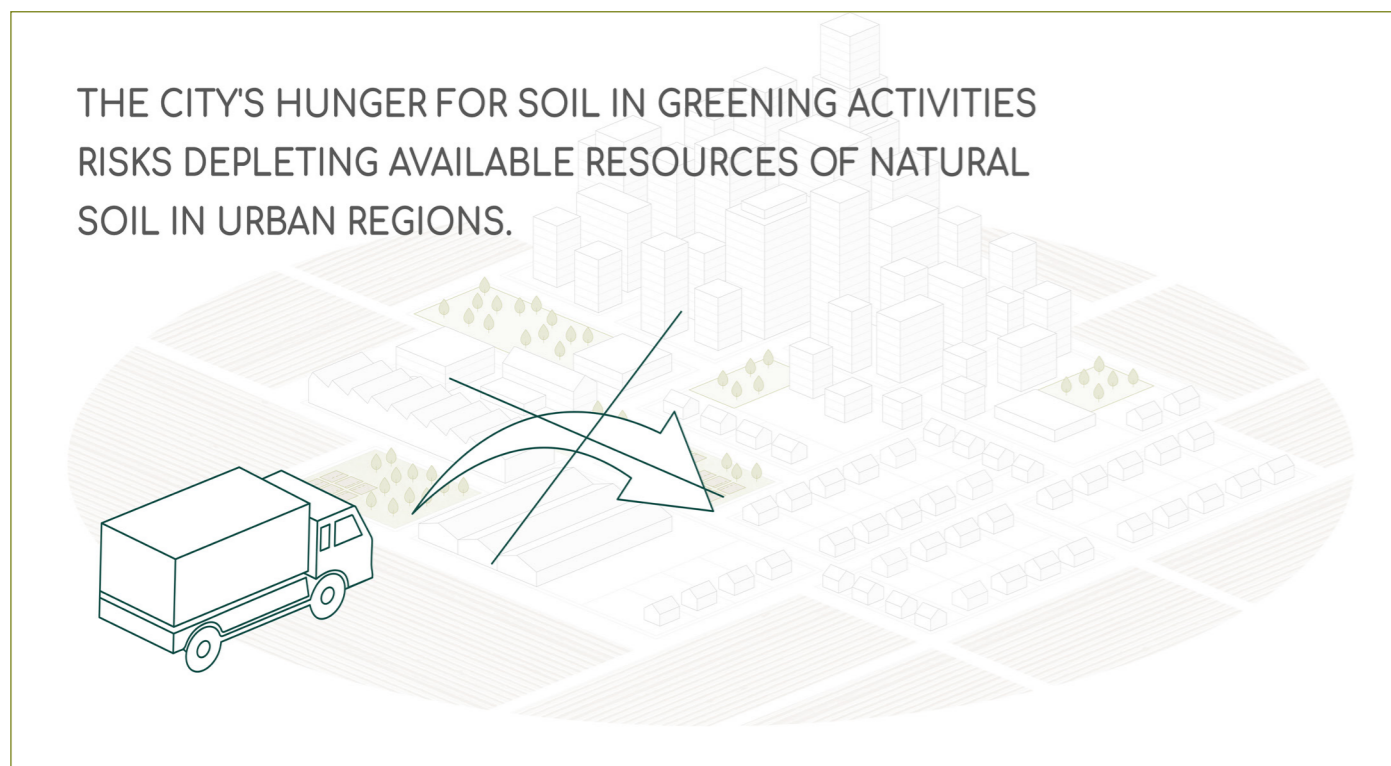


NBS 2 :: New Soil in Sangone Park

Living Lab Turin



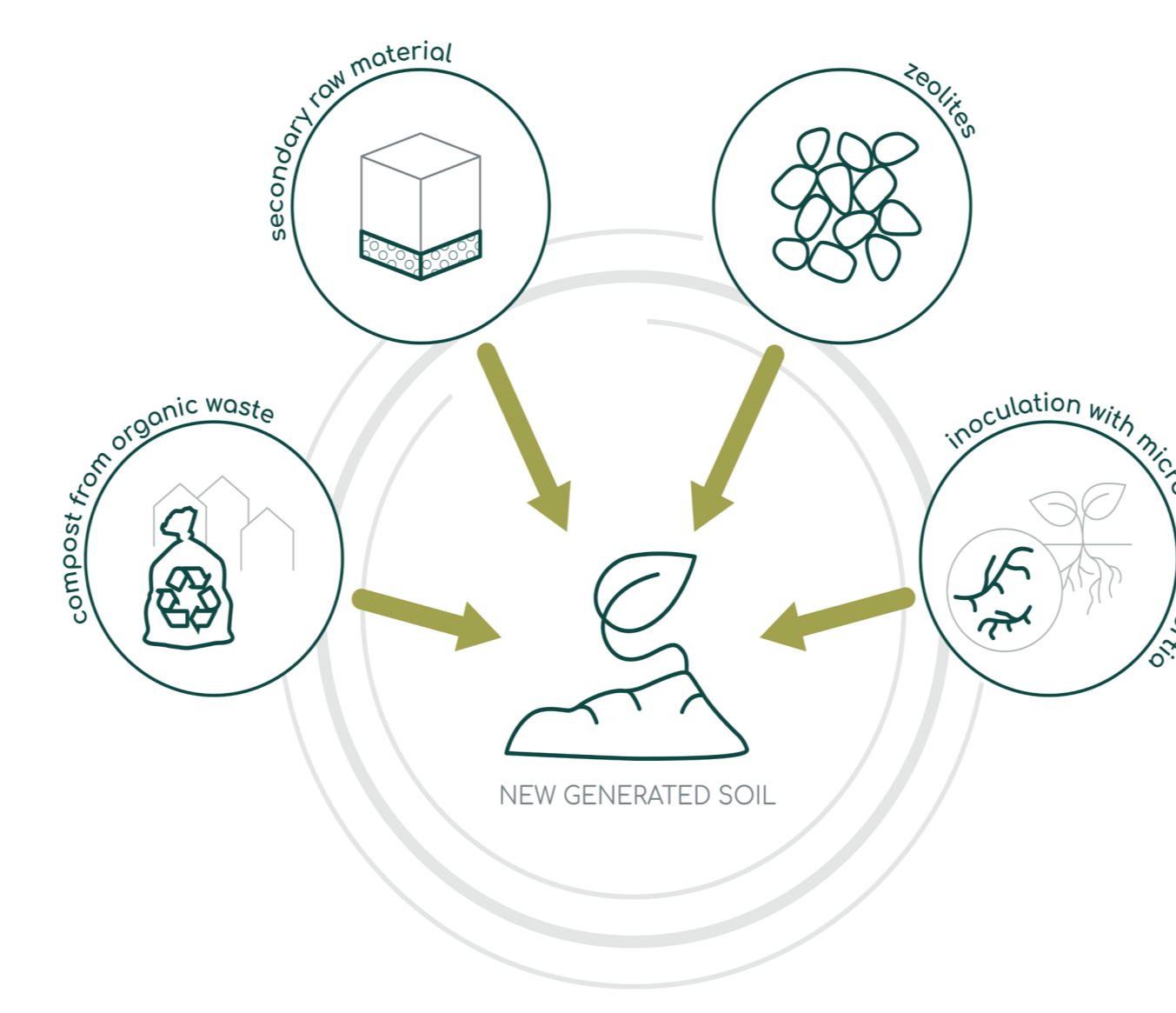
Area of implementation
2,000 m² in Sangone Park,
Mirafiori Sud
GPS coordinates: 45.009040, 7.641200

Implementation budget
proGReg funding: 278.000 €

Timeframe
December 2019
..... February 2020

This NBS experiments with creating an „urban forest“ along the Sangone river banks by using regenerated soil (New Soil).

The base material derives from deep excavations around Turin. Compost, zeolites and innovative bio-stimulants are added to generate new soil using natural processes to be applied in urban parks.



KEY RESULTS

Environmental assessment

- „New Soil“ texture, organic matter, nutrient content compares to typical soil of urban parks and existing soil in Sangone Park. No evidence of contaminations during 3-year monitoring.
- Compost shows significant nutrient content: 1 ton of compost substitutes 48kg of Urea
- Plant species show good growth, also compared to the control site. Gleditsia triacanthos ‚Sunburst‘ tree performed best, suggesting its use for future resilient parks in Turin.
- At full tree growth, 1 ha of NBS 2 might offset:
 - annual carbon footprint of 4 Italian citizens
 - GHGs emissions of 4 diesel cars driving 25,000 km/year.

Economic assessment

„NBS 2 New Soil is a real business case“ (Dual srl). It generates revenue streams as follows:

- Sells new soil to private companies (and private households in small units)
- Flexible price model depending on the required quality
- Dual receives money for taking deep excavation material, being a key resource to produce new soil.

Collaboration to co-create the NBS spans private sector companies, research centers and public bodies. Private sector partner Environment Park managed all NBS activities.

Target groups and beneficiaries

- Municipal Green Department
- Citizens
- Quarry managers
- Compost producers
- Legislators

