

NBS description

The Sangone torrent, the waterway that surrounds the city to the south and the Piedmont Park area in the Mirafiori district offered the opportunity to create an ecosystem path capable of redeveloping neglected areas and at risk of "heat island effects" with agricultural, horticultural and beekeeping activities. The NBS fostered involvement, participation and awareness-building processes among local residents. Citizens living in the surrounding area developed a sense of identification and affection for the territory, leveraging community ownership and maintenance of the site.

The former traffic barriers and small gardens lacked character and were hence poorly used by inhabitants: enhancing the street by planting grasses, shrubs and few trees made the area more attractive to residents while improving the environment for pollinating insects and birds that feed on them. The intervention was designed in pre-defined and modular elements, making the operation economically viable according to the available budget, and can be increased when further funding is sourced. In order to enhance the access to natural heritage of Mirafiori district and raise awareness about proGlreg NBS in the

neighbourhood, information totems and a set of visiting path have been designed, accompanied by guided tours organized from spring 2021 to the end of the project.

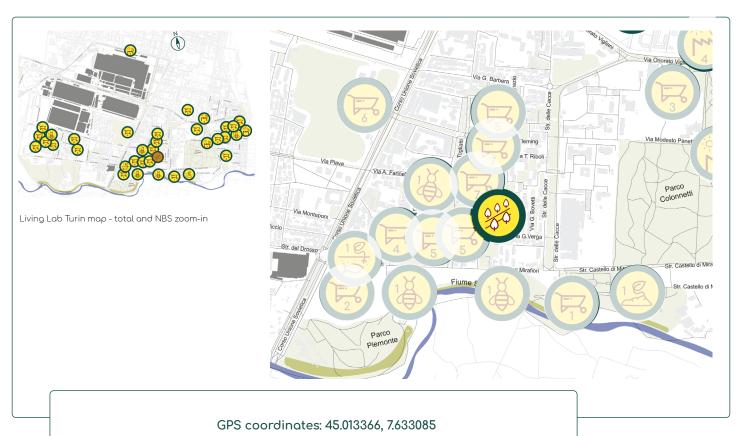
Aim & goals

The NBS addresses societal and environmental issues that improve living conditions inluding:

- Creating an ecosystem path to redevelop areas that lacked character
- Implementing NBS in an area with risk of "heat island effects"
- Fostering processes of citizen engagement and raising awareness among residents
- Increasing biodiversity by planting pollinatorfriendly species
- Developing a sense of community, spatial belonging and co-ownership to ensure comaintenance by residents together with the city administration

Area of implementation

The "Green Corridor" is developed in incremental sections along via Rodolfo Morandi between via Castello di Mirafiori and via Palmiro Togliatti: the first section lies between via Castello di Mirafiori and via Rodolfo Morandi n.17

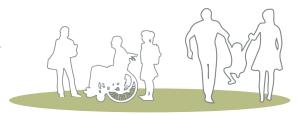


oroGlred

Target groups (beneficiaries)

Local citizens:

- residents of social housing and smallholders,
- communities with economic and social difficulties,
- physically and mentally vulnerable people living in care homes



Stakeholder constellations

Main responsible partner

- > City of Turin Mobility and Infrastructure Department – Urban plan Service; Project design and coordination
- Facilitating collaboration between several municipal departments, enabling the Urban Plan Service to coordinate the design of the NBS "Green Corridor".
- Various stakeholder meetings facilitated communication, professional, design exchanges.
- > Fondazione Mirafiori
- Coordinating active citizen involvement and participation.
- Managing and organising meetings with various stakeholders to harness organisational experience and historical knowledge of the area.
- Coordinating volunteer group of vegetable growers involved in creating the green corridor.
- coordinating the design of information totem's, organising guided tours, together with its LTP Miravolante



> University of Turin (Department of Life Sciences and Systems Biology, DBios and Department of Agricultural, Forest and Food Sciences, DISAFA):

Scientific support for identifying flora and fauna species on the territory.

Contributed fundamental scientific characteristics for designing the NBS, in particular regarding the choice of botanical and faunal species, and then for pre and postimplementation monitoring activities to assess the benefits of the NBS and produce evidence-based data.

> Miravolante - local community association: organising activities and visits for citizens

Other stakeholders involved

- ATC (Housing Agency): contacts with tenants
- Casa Farinelli (House for displaced families): engagement activity with citizens and users
- AIAPP Italian Association of landscape architecture – Piemonte and Valle d'Aosta section: professional consultancy about project technical features
- Catholic Parishes of the neighborhood: involved in engagement and volunteering activities
- ASL Città di Torino (public healthcare agency): involved in engagement and volunteering activities
- I Passi Social Cooperative: involved in engagement and volunteering activities



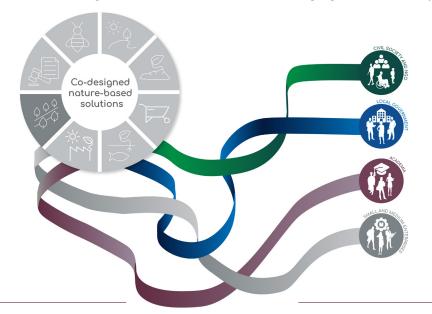








Co-design activities, stakeholder engagement, and pre-implementation activities



Starting point was the need to involve citizens in safeguarding, maintaining and designing when redeveloping green areas. The co-design process aimed at promoting the creation of a small ecosystem that have positive impacts on both human and other living beings.

Planning and preparatory activities (administrative and technical procedures)

Key steps carried out to allow the NBS implementation included:

- Meetings with City of Turin to plan and coordinate with other NBS actions
- preparing and clearing the site
- carry out training to establish the activities for constructing the Green Corridor, also in regard to maintenance
- organize groups of citizens for light maintenance works, accompanied by controlling and reporting any critical maintenance and management issues
- contacting the City of Turin department in charge of urban furniture for identifying the necessary administrative procedures to install landmarks/signs
- requesting and collecting cost estimates for landmarks/signs from three possible suppliers
- following co-design process, final designs were submitted to the Administration to start implementation works.

Total implementation budget and proGlreg funds: 82.000 €

Implementation budget

Co-design and engagement activities

A social analysis identified relevant stakeholders to engage in the co-design process:

- DBios University, Casa Farinelli, ATC, ASL, the local Parish and I Passi engaged in the design process, notably in the phases of involving families with difficult housing or economic conditions regarding future maintenance of the
- NBS and training on re-introducing pollinating insects
- Local residents participating in the planting got to understand the importance of construction and monitoring works, and the benefits of (symbolic) food production to strengthen civic commitment: residents continue to be involved in maintaining the area.



Key achievements and implementation results

The NBS is driven by citizen engagement and NGOs active in the area, e.g. participating in workshops and maintenance activities. Citizen engagement was re-assessed when entering the co-maintenance phase in order to plan dedicated activities. Fruitful collaboration with the University Turin department DBios to select the most suitable plant species for the green corridor to foster the propagation of butterflies and pollinating insects. Subsequently, DBios has started monitoring butterfly activity in the area to compare before and after effects.

Critical implementation issues and barriers encountered

- The Covid-19 pandemic caused delays and the suspension of a series of meetings on site for the design, monitoring and inspections of the NBS implementation.
- Difficulties in obtaining planning permission also caused delays.

Synergies with other proGlreg activities

The area is part of a series of proGlreg interventions:



NBS 3 - Community farming (Orti Generali)

NBS 3 - Gardens integrated into housing: installing box gardens by involving citizens living in the neighborhood



NBS 8 - Butterfly gardens for disadvantaged people with beekeeping activities

- Feeding into the "Spatial analysis and analysis framework" of Work Package 2.1
- Feeding into "Methodologies and variables for NBS monitoring and evaluation" (Work Package 4) in collaboration with UNITO.

Links with other external projects or activities

The activity is linked with the Iperurbana project that organizes visits and events to promote the Mirafiori Sud district.

The redevelopment of the Sangone riverbanks, a municipal project of Turin financed by local funds will allow continuing the revitalization of the area.

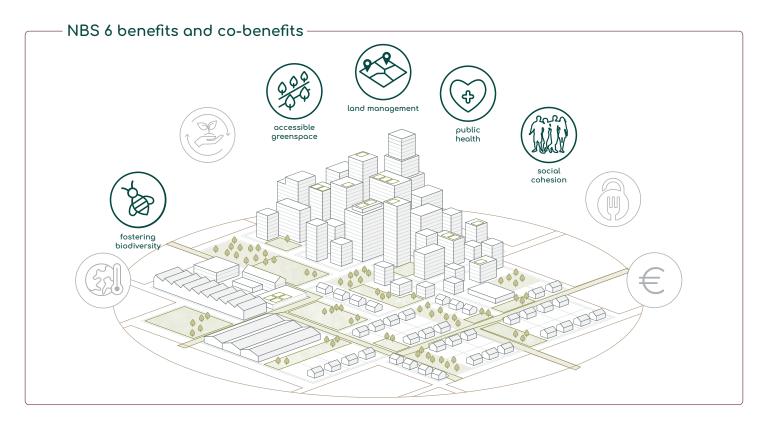
Communication activities



Activities address several levels:

- "Endogenous" workshops with the aim of involving the resident population in different situations to contribute to the formation of a heterogeneous community.
- "Exogenous" workshops, with the aim of involving multimedia networks (radio, television, local and national press) to disseminate the potential role of NBS and increase awareness and participation.
- Small training courses aiming at a better understanding of the importance of vegetation and the fundamental role of pollinating insects, the synergetic effects of different actions that foster a respectful behaviour for green spaces, and a collaborative maintenance and management approach.
- Workshops and meetings aimed at highlighting the value of experiencing cultivation as a heritage of popular traditions.
- Design and construction of information totems.
- Design and organisation of guided tours.





NBS benefits and co-benefits for the Living Lab Turin

The NBS benefits the entire Living Lab area:

- Creation of a community feeling among residents in different residential housing and social conditions with the aim of sharing and understanding the preciousness of social commitment
- · Positive effects of increasing biodiversity
- Contribution to mitigation of climate change effects and heat island risks highlighted in the analysis of locations

Maintenance & Sustainability beyond proGlreg

- Citizen associations present in the area and a group of volunteers is going to be formed to maintain and develop the NBS in collaboration with municipal and district technicians.
- Planned to raise further funds to develop other ambitious projects to achieve wider goals.
- Iperurbana project will be involved in organising events and visits to promote sustainable tourism in the Sangone riverbank area with access to proGIreg NBS.









Fact Sheet



Accessible green corridors





- * www.progireg.eu
- **y** @proGlreg
- in proGlreg-project
- f proGIreg: Nature for Renewal
- ⊚ #proGlreg
- proGIreg: Nature for Renewal
- ▶ proGIreg: Nature for Renewal

Partners







The sole responsibility for the content of this publication lies with the authors and any use that may be made of the information contained therein. It does not necessarily represent the opinion of the European Union or the REA.



This project has received funding from the European Union's Horizon 2020 innovation action programme under grant agreement no. 776528.