

# Mirafiori Sud Living Lab Torino | Mirafiori Sud Living Lab Turin

## Mappa del Living Lab | Living Lab map

Update: DEC, 2022



### Obiettivi e vision generale del LL Living Lab goals and overall vision

Rigenerare e valorizzare le aree insicure o abbandonate del quartiere di Mirafiori coinvolgendo i cittadini nella progettazione e gestione di spazi verdi pubblici.

To regenerate and enhance the abandoned or unsafe areas of the Mirafiori district by involving citizens in the design and management of public green spaces.

Promuovere nuove professionalità e modelli di business basati sulle soluzioni naturali.

To promote new professionalism and business models based on natural solutions.

Valorizzare i benefici multipli (sociali, ecologici, economici e per la salute) delle soluzioni naturali inserendole negli strumenti di pianificazione e rigenerazione urbana.

To demonstrate the multiple benefits (social, ecological, economic and health) of nature-based solutions as an integral tool of urban planning and regeneration.

### Dettagli sulla NBS 2 | Details on NBS 2

#### NEW REGENERATED SOIL THANKS TO BIOTIC COMPOUNDS FOR URBAN FORESTRY AND URBAN FARMING



**Produzione di nuovo suolo rigenerato nel Parco Sangone.**  
**Descrizione:** Creazione di un'area di "foresta urbana" lungo le sponde del Sangone attraverso l'utilizzo di suolo rigenerato (New Soil), a base di inerti e compost da FORSU e biostimolanti innovativi.  
**Partners:** Dual, Envipark (Acea e ccs come terze parti), Unito (DISAFA e Dip. Chimica), Città di Torino.

**New Soil production in Sangone Park.**  
**Description:** Creation of an area of "urban forest" along the banks of the Sangone through the use of regenerated soil (New Soil), based on aggregates and compost from FORSU and innovative biostimulants.  
**Partners:** Dual, Envipark (Acea e ccs as third parts), Unito (DISAFA and Dip. Chimica), City of Turin.

### Dettagli sulla NBS 3 | Details on NBS 3

#### COMMUNITY-BASED URBAN FARMS AND GARDENING ON POST-INDUSTRIAL SITES



**Recupero rovine Castello di Mirafiori.**  
**Descrizione:** Trasformazione paesaggistica per valorizzazione area di interesse storico-ambientale.  
**Partner:** Orti Generali - Comitato Borgata Mirafiori

**Castello di Mirafiori ruins recovery.**  
**Description:** Landscape transformation for enhancement of an area of historical and environmental interest.  
**Partner:** Orti Generali - Comitato Borgata Mirafiori



**Orti Generali.**  
**Descrizione:** Orti individuali e collettivi assegnati con contributo spese ai singoli cittadini, area didattica comune per attività formative e associative.  
**Partner:** Orti Generali

**Gardens in Cascina Piemonte (Orti Generali).**  
**Description:** Collective gardens rented to individual citizens, common educational area for training and community activities.  
**Partner:** Orti Generali



**Giardini fioriti al WOW.**  
**Descrizione:** Giardino in cassone e arnie.  
**Partners:** Orti Alti, Fondazione Mirafiori, Miravolante, Città di Torino.

**Pollinator friendly gardens at WOW.**  
**Description:** Box gardens and beehives.  
**Partners:** Orti Alti, Fondazione Mirafiori, Miravolante, Città di Torino.



**Orto a scuola in cassone.**  
**Descrizione:** Realizzazione o integrazione di orti didattici in cassone e di laboratori scientifici rivolti alla scuola primaria e superiore sui temi di proGREG.  
**Partners:** Fondazione Mirafiori, Miravolante, Unito (DBios e DISAFA).

**School garden in box.**  
**Description:** Realization or integration of educational gardens and scientific laboratories aimed at primary and high schools on the topics of proGREG.  
**Partners:** Fondazione Mirafiori, Miravolante, Unito (DBios e DISAFA).



**Ortomobile.**  
**Descrizione:** Fornitura di uno stock di cassette per la realizzazione di "micro-orti" e compostiere per le scuole e corso pratico per gli insegnanti.  
**Partners:** Iter, Unito (DBios e DISAFA).

**Portable school gardens.**  
**Description:** Supply of a stock of wood cassettes for the realization of "micro-garden" and composters for schools and practical course for teachers.  
**Partners:** Iter, Unito (DBios e DISAFA).



**Orti comunitari a scuola.**  
**Descrizione:** Orto didattico in cassone.  
**Partners:** Iter, Liceo Scientifico Primo Levi, Unito (DBios e DISAFA)

**Community school gardens.**  
**Description:** Vegetable garden in wood boxes (raised bed).  
**Partners:** Iter, Liceo Scientifico Primo Levi, Unito (DBios e DISAFA)



**Orto tra le case.**  
**Descrizione:** Posizione di cassoni fissi per orticoltura urbana.  
**Partner:** Fond. Mirafiori, Miravolante.

**Gardens between houses.**  
**Description:** Placing of fixed containers for urban horticulture.  
**Partners:** Fond. Mirafiori, Miravolante.

### Dettagli sulla NBS 4 | Details on NBS 4

#### AQUAPONICS AS SOIL-LESS AGRICULTURE FOR POLLUTED SITES



**Test di acquaponica.**  
**Descrizione:** Sistemi di acquaponica su piccola e media scala, progettati con la comunità e installati in due edifici del quartiere.  
**Partner:** Città di Torino.

**Aquaponics test.**  
**Description:** Small and medium scale community - designed aquaponics system, to be set up on two local buildings.  
**Partner:** City of Turin.

### Dettagli sulla NBS 5 | Details on NBS 5

#### CAPILLARY GI ON WALLS AND ROOFS



**Nuovo tetto verde Casa Nel Parco.**  
**Descrizione:** Ripristino dell'accesso del tetto verde di Casa Nel Parco.  
**Partner coinvolto:** Città di Torino, Fondazione Mirafiori.

**New green roof at Casa nel Parco.**  
**Description:** Restoration of the Casa nel Parco green roof access.  
**Partners:** City of Turin, Fondazione Mirafiori.



**Parete verde a scuola.**  
**Descrizione:** Parete indoor con sistema a vaschette estraibili. Progettazione partecipata e co-gestione per la cura delle pareti con coinvolgimento di studenti e personale scolastico.  
**Partners:** Città di Torino, Politecnico di Torino (DAD e DIATI).

**Green Wall at school.**  
**Description:** Green indoor wall with removable tray system. Participatory processes and co-management for the maintenance of the green walls with the students and the school staff.  
**Partners:** City of Turin, Politecnico di Torino (DAD and DIATI).



**Parete verde dormitorio senzatekto.**  
**Descrizione:** Parete verde autoportante esterna, con vaschette rimovibili e tasche in feltro. Progettazione partecipata e co-gestione per la cura delle pareti con coinvolgimento degli utenti.  
**Partners:** Città di Torino, Politecnico di Torino (DAD e DIATI).

**Green wall at homeless shelter.**  
**Description:** Outdoor self-supporting green wall, with removable trays and felt pockets. Participatory design process/co-management for the maintenance together with the users.  
**Partners:** City of Turin, Politecnico di Torino (DAD and DIATI).



**Tetto verde al WOW.**  
**Descrizione:** Realizzazione di un tetto verde estensivo sull'edificio WOW.  
**Partners:** OrtiAlti, Città di Torino.

**Green roof at WOW building.**  
**Description:** Realization of an extensive green roof WOW building.  
**Partners:** OrtiAlti, City of Turin.

### Dettagli sulla NBS 6 | Details on NBS 6

#### ACCESSIBLE GREEN CORRIDORS



**Corridoio verde.**  
**Descrizione:** Realizzazione di un percorso verde e pollinator friendly.  
**Partner:** Città di Torino.

**Green corridor.**  
**Description:** Creation of a green and pollinator friendly course.  
**Partner:** City of Turin.

### Dettagli sulla NBS 6 | Details on NBS 6

#### ACCESSIBLE GREEN CORRIDORS



**Valorizzazione del patrimonio naturalistico nel corridoio verde.**  
**Descrizione:** Potenziare la fruizione dell'area naturalistica del corridoio verde e promuovere l'utilizzo della pista ciclabile tramite segnaletica verticale e arredo urbano.  
**Partner:** Fondazione Mirafiori

**Local natural heritage enhancement in green corridor.**  
**Description:** Enhancement of the naturalistic green corridor and promotion of the cycling path through the creation of vertical signage and street furniture.  
**Partner:** Fondazione Mirafiori

### Dettagli sulla NBS 7 | Details on NBS 7

#### LOCAL ENVIRONMENTAL COMPENSATION PROCESSES



**Partnership strategico pubblico-privato per il verde in città.**  
**Descrizione:** Identificare, raccogliere e mostrare strumenti e opportunità concrete per permettere all'amministrazione di migliorare il patrimonio verde della città grazie alla collaborazione pubblico-privata.  
**Partner:** Città di Torino.

**Strategic public-private partnership for greening the City.**  
**Description:** Identify, collect and display tools and concrete opportunities in order to allow the Administration to improve the green assets of the City through public private collaboration.  
**Partner:** Città di Torino.

### Dettagli sulla NBS 8 | Details on NBS 8

#### POLLINATOR BIODIVERSITY IMPROVEMENT ACTIVITIES AND CITIZEN SCIENCE PROJECT



**Giardino farfalle nelle scuole e presso centri per disabili mentali.**  
**Descrizione:** Realizzazione di un corso e di varie attività formative sulla vita delle farfalle. Supporto alla realizzazione del giardino delle farfalle. Biomonitoraggio con il metodo del transetto.  
**Partners:** Unito (DBios) e Unito (DISAFA).

**Butterfly gardens in schools and for disadvantaged people.**  
**Description:** Realization of training activities on the life of butterflies. Supporting the creation of the butterfly garden. Biomonitoring with the transect method.  
**Partners:** Unito (DBios) e Unito (DISAFA).

### Partner locali proGREG (e altri importanti stakeholder)

#### Local proGREG partners (and other important stakeholders)



### Legenda | Legend

#### Soluzioni nature based Nature based solutions

- Rigenerazione di suolo  
NBS 2: Regenerating soil
- Orticoltura di comunità  
NBS 3: Community urban gardening and farming
- Acquaponica  
NBS 4: Aquaponics
- Tetti verdi e verde verticale  
NBS 5: Green roofs and vertical gardens
- Migliorare l'accessibilità ai corridoi verdi  
NBS 6: Improving accessibility to green corridors
- Processi di compensazione ambientale  
NBS 7: ICT Tools
- Insetti impollinatori e biodiversità  
NBS 8: Pollinator biodiversity

#### Stato di implementazione Implementation status

- Realizzato  
implemented
- In corso  
in progress
- Programmato  
in planning

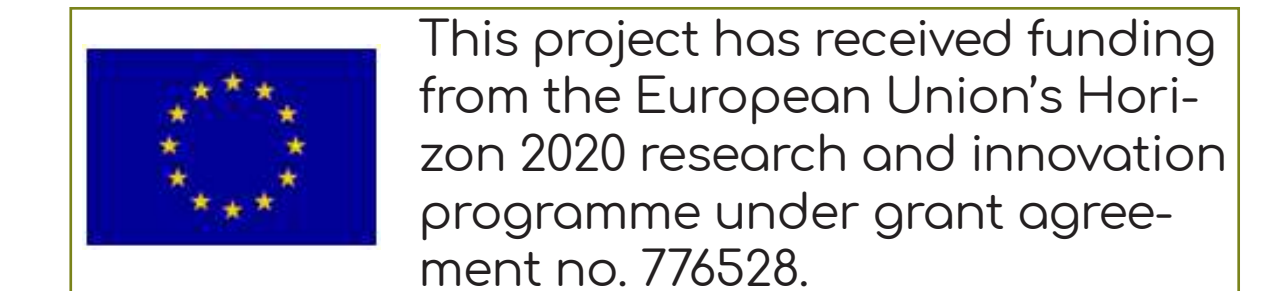
#### Legenda dei colori Colour palette

- Parchi/aree verdi  
parks/green spaces
- Zone boschive  
Forest
- Fiumi/laghi  
waterways/lakes
- Costruito  
built up areas
- Aree industriali  
industrial areas
- Confini del Living Lab  
Living Lab area boundary

Scale: 1: 10000

Map by Politecnico di Torino, Dep. Architecture and Design

Productive Green Infrastructure for post-industrial urban regeneration (proGREG)  
 Email: [progereg@la.rwth-aachen.de](mailto:progereg@la.rwth-aachen.de)  
 Website: [www.proGREG.eu](http://www.proGREG.eu)



This work was financially supported by the National Key Research and Development Program of China (2017YFE0119000).

## NBS 2 New generated soil for urban forestry and urban farming



### Living Lab Turin, Italy



#### NBS 2 description

Creation of an area of „urban forest“ along the banks of the Sangone river through the use of regenerated soil (New Soil), based on excavated material with the addition of compost, zeolites and innovative bio-stimulants. Plants of different species were planted in the New Soil area and in the adjacent area as a control field. Growth analysis to monitor the effect of new soil on vegetation has been performed during the implementation phase.

#### Aims & goals

The NBS New soil supports:

- increased sustainability of the urban system
- urban regeneration through improvement of climate change risk management and resilience.
- supports viable business models with employment opportunities for local population.
- Significant technical, social and economic impacts are achievable to support sustainable innovation.
- the conversion of organic fraction of municipal solid waste in certified compost to be applied as fertilizer in the new soil application contributes to reducing GHG emissions.
- the nutrient content of the compost is significant as 1 ton of compost can substitute 37 kg of Urea.
- GHG emissions reduction potential, composting results in 87% of emissions saving with respect to traditional waste disposal.

#### Target groups and beneficiaries

- Green department technicians of the City of Turin
- Citizens
- Quarry managers
- Compost producers
- Legislators

#### Contact

✉ [paola.zitella@envipark.com](mailto:paola.zitella@envipark.com)  
🌐 [www.envipark.com](http://www.envipark.com)



#### Area of implementation

2.000 m<sup>2</sup> in Sangone Park  
GPS coordinates: 45.009040, 7.641200

#### Main responsible partner

Environment Park (private sector)

#### Other proGireg partners involved

Dual Srl  
UNITO  
City of Turin

#### Other stakeholders involved

- ACEA (TLP of Envipark)
- CCS (subcontracting of Envipark)
- Arpa Piemonte (TLP of City of Turin)
- Città Metropolitana di Torino (TLP of City of Turin)
- Private gardeners of adjacent municipal gardens
- Representatives of groups of citizens

#### Implementation budget

Total implementation budget: 278.000 €  
proGireg funding: 278.000 €

#### Timeframe

Start  
December 2019



Completion  
February 2020



### Living Lab Turin, Italy



#### NBS description

Orto WOW is composed of 15 garden boxes with aromatic plants and other melliferous plants that attract pollinating insects. Orto Wow was implemented in the courtyard of an abandoned building named WOW in the Living Lab in Mirafiori Sud. The area hosts a weekly farmers market organized by the farmer association Coldiretti. The idea is based on creating a “green square”, by placing the boxes in the courtyard to facilitate public activities open to all (such as educational activities, public talks, convivial activities, etc.).

#### Aim & goals

Key goal of this NBS is to improve the usability of the area in order to:

- recover an abandoned and underutilized former industrial lot and return it for public use;
- favor the transition of pollinating insects, following the directions of the ecological corridors identified by proGREG;
- activate local inhabitants in taking care of the new green installations, by stimulating them through citizens-science activities;
- promote collaborative multiple stakeholder networks to guarantee the sustainability of the intervention in the future.

#### Target groups (beneficiaries)

- Local community of Mirafiori in general
- Residents living in the surroundings, who historically are interested in accessible open area,
- Families and elderly people.

#### Main responsible partner

NGO OrtiAlti - coordinated all activities including co-design and co-implementation activities



#### Area of implementation

The area of the NBS borders to the south on a Colonnetti Park, suitable for placing bee hives given the bio-diversity green corridor. The garden boxes are placed at the entrance area, close to the public part of the courtyard

GPS coordinates: 45.017254, 7.644881

#### ProGREG partners involved

- City of Turin (Heritage Management Department)
- NGO Fondazione di Comunità Mirafiori
- University of Turin (Department of Life Sciences and Systems Biology, DBios and Department of Agricultural, Forest and Food Sciences, DISAFA)

#### Other stakeholders involved

- Coldiretti (national farmers association) to support the management of the garden boxes and keep the area open to the public in the future
- Associazione Parco del Nobile (Beekeepers - operative partner)

#### Implementation budget

Total implementation budget:  
proGREG funds: 7.500 €

#### Contact

✉ info@ortialti.com  
🌐 www.ortialti.com

#### Timeframe

Start  
February 2020



Completion  
June 2020



### Living Lab Turin



#### NBS description

Orti Generali are community urban gardens as part of regenerating the derelict Cascina Piemonte area based on an innovative concept and business model. It consists of 160 garden plots of different charges and sizes and 330 trees planted. 30% of the area were transformed into shared green space where people can meet and socialize. Gardeners can contribute to the maintenance of these common spaces.

#### Aim & goals

Orti Generali aims at building an enterprise model for the transformation and management of post-industrial and metropolitan residual agricultural areas based on ecological sustainability and social equity with the goal:

- create an educational center
- technological innovation
- job training and integration into the labour market
- building networks incl. public and private bodies, associations, cooperatives, groups and citizens

#### Target groups (beneficiaries)

Plots are assigned to individual citizens, families or collectives, with lower charges for people under 35 and for economically disadvantaged people. Collectives. Schools of the district can benefit from educational offer.

#### Main responsible partner

The association Orti Generali is the key partner responsible for designing and managing the urban garden. Orti Generali will guarantee the continuity of this NBS over time.

#### Contact

✉ [ortigenerali@gmail.com](mailto:ortigenerali@gmail.com)  
🌐 [www.ortigenerali.it](http://www.ortigenerali.it)



#### Area of implementation

12.000 m<sup>2</sup> in Cascina Piemonte Park  
GPS coordinates: 45.011266, 7.627034

#### ProGireg partners involved

NGO Fondazione Mirafiori supports the association, shares office space and acts as a facilitator in relations with institutions.

University of Turin (Department of Life Sciences and Systems Biology, DBios and Department of Agricultural, Forest and Food Sciences, DISAFA) responsible for the environmental monitoring and experimenting and disseminating the new soil concept; Department DBios monitored pollinators and advised on choice of trees and shrub species.

#### Other stakeholders involved

- MIUR (Ministry of Education, University and Research).
- PON Metro (City of Turin).
- Fondazione Compagnia di San Paolo
- IREN SpA. (Energy services company)
- private non-profit organisation Fondazione CRT.

#### Implementation budget

Total implementation budget: 324.100 €  
proGireg funding: 61.500 €

#### Timeframe

Start February 2019 → Completion November 2019





### Living Lab Turin, Italy



#### NBS description

Two local NGOs, Orti Generali together with Comitato Mirafiori Borgata, transformed the landscape and green area adjacent to the ruins of the Castle of Mirafiori dating back to the 16th century in the Sangone Park. The NBS intervention also involved the renovation of the altar inside the area of the Bela Rosin Mausoleum. Newly planted vegetation including hedges outlining the the ancient layout of the castle. Visitors can now learn about the historical-environmental information on tailor-made panels. This NBS intervention has enhanced the recreational and educational offer in Sangone Park while valorising the historical site and artistic heritage.

#### Aim & goals

Overall goals of the NBS include improving the green infrastructure and socio-cultural fabric of Mirafiori including:

- transforming the green area around the ruins of the Castle of Mirafiori
- valorising the cultural heritage of the site
- providing quality green spaces
- enhancing the recreational value of the Sangone Park.

#### Target groups (beneficiaries)

- Local residents who want to discover this historical part of the Sangone Park
- Turin citizens visiting the Mirafiori Sud district

#### Main responsible partner

Orti Generali, coordinated all project activities

#### Contact

✉ [ortigenerali@gmail.com](mailto:ortigenerali@gmail.com)  
🌐 [www.ortigenerali.it](http://www.ortigenerali.it)



(c) L. Ribotta

#### Area of implementation

The area of implementation is the Sangone Park next to Bela Rosin Mausoleum

GPS coordinates: 45.011266, 7.627034

#### ProGReg partners involved

City of Turin (Green Department)

#### Other stakeholders involved

Comitato Borgata Mirafiori:

- Mirafiori Sud neighbourhood committee
- Initiated the renovation and enhancement of the castle ruin's surroundings

#### Implementation budget

Total implementation budget and proGReg funding:  
16.000 €

#### Timeframe

Start  
May 2020



Completion  
June 2021



### Living Lab Turin, Italy

#### NBS description

This NBS integrates urban horticulture in the Mirafiori Sud district by installing wooden boxes on public spaces that lack green. A total of 20 wooden boxes for vegetable gardens were positioned in two public spaces, plus smaller installations in the yards of public buildings and managed by non-for-profit organisation.

#### Aim & goals

Key goals of this NBS include:

- improving the urban quality and quality of life in the areas,
- stimulating the active participation of citizens in urban transformation processes,
- creating opportunities for aggregation and cooperation among citizens on issues of environmental sustainability and urban horticulture,
- technological and social innovation, care and sharing of common goods.

#### Target groups (beneficiaries)

- Small children, and educators and families
- Refugees and educators of a refugee shelter
- Disadvantaged families
- Residents of the neighbouring areas

#### Main responsible partner

NGO Fondazione della Comunità di Mirafiori

#### ProGREG partners involved

- NGO Associazione Miravolante (Linked Third Party) - co-design and co-implementation of the gardens.
- City of Turin - administrative procedures and authorizations

#### Contact

- ✉ [info@fondazionemirafiori.it](mailto:info@fondazionemirafiori.it)
- 🌐 [www.fondazionemirafiori.it](http://www.fondazionemirafiori.it)



#### Area of implementation

Centro Mirafleming, Youth Centre:

GPS coordinates: 45.016525, 7.635449

Casa del Mondo, a community shelter for refugees:

GPS coordinates: 45.018589, 7.610006

Crescere Insieme, a Community centre in via Roveda 22/a:

GPS coordinates: 45.022256, 7.607381

public space of via Morandi:

GPS coordinates 45.013953, 7.633208

public garden of via Roveda 35/1:

GPS coordinates 45.020615, 7.606504

#### Other stakeholders involved

- ATC - Agenzia Territoriale per la Casa: institution responsible of public social housing
- Cooperativa Mirafiori, Cooperativa l'Arcobaleno and Associazione Arcobaleno - non-for-profit organizations
- Progetto Tenda - non-for-profit organization managing Casa del Mondo
- Associazione Crescere insieme - non-for-profit organization

#### Implementation budget

ProGREG funds: 32.000 €

City of Turin: 2.800 €

Total budget: 34.800 €

#### Timeframe

Start  
February 2019



Completion  
May 2022



### Living Lab Turin, Italy

#### NBS description

Implementation of low-cost, but stable and easy to operate aquaponics systems. Aquaponics is the combination of raising fish (aquaculture) in tanks together with soilless cultivation of plants (hydroponics) in a symbiotic environment, whereby the fish waste water provides the nutrients needed to feed the plants. Aquaponics is ideal for promoting local food production in areas with contaminated or poor-quality soil. Locally produced food by locals can lead to healthier diets and contribute to community-building.

#### Aim & goals

- Testing tests aquaponics horticultural cultivation in urban field conditions through planning, building and management of three demonstration plants of different scales: micro, mini and semi-commercial / educational
- Rehabilitating the site of the facility and involving citizens, schools and local communities. Hence, creating a plant with high impact on the area that evokes the curiosity of visitors and participants
- Creating green job opportunities

#### Target groups (beneficiaries)

- citizens directly involved in activities of education and participated in the planning and management
- agricultural operators,
- school professionals and students (both Italian and foreign),
- people with disabilities and rehab patients
- adults in care of local residential communities,
- possible investors.

#### Main responsible partner

- Grow Up, an innovative startup with a social vocation and agricultural company
- Mitte Garten, an innovative agricultural startup, established in 2021, cultivates vegetables using the aquaponics method.

#### Contact

Grow Up

✉ info@grow-up.farm

🌐 www.grow-up.farm

Mitte Garten

✉ info@mittegarten.org

🌐 www.mittegarten.org



#### Area of implementation

Grow Up installed two plants in Mirafiori Sud district: micro and semi-commercial plant.

GPS coordinates: 45.01263, 7.62642.

A mini plant at Comunità Giulia, a local residential community hosting temporarily youngsters aged 11-17 with psych-social issues.

GPS coordinates: 45.08133, 7.67891.

Mitte Garten's greenhouse was built in Strada Castello di Mirafiori

GPS coordinates: 45.01221, 7.62871

#### ProGlgreg partners involved

- City of Turin
- NGO Fondazione della Comunità di Mirafiori
- University of Turin, Department of Agricultural, Forest and Food Sciences

#### Other stakeholders involved

NGOs located in Turin:

- Soluzioni Artistiche APS,
- Al Laboratorio CTM,
- Aquaponic Design APS
- ASC Arci Servizio Civile Piemonte

Residential local communities for adults with disabilities;

Confagricoltura Torino: Agriculture trade union

TEORES! Group: local company expert in research and technological innovation.

#### Implementation budget

Total implementation budget: ca 25.000 €

proGlgreg funding: 20.000 €

private sector co-funding: 5.000 €

#### Timeframe

Start

May 2022



Completion

December 2022



## Living Lab Turin - Mirafiori Sud

### NBS description

Creation of an extensive green roof on a currently abandoned public building, located in an area named WOW in the Mirafiori Sud district. The green roof covers an area of 140 sqm and is intended to be a “natural lawn” by sowing a mixture of seeds from stable meadows of northern Italy. These seeds can be calibrated to be used in plains and mountain areas. Further extensions are foreseen.

### Aim & goals

The NBS addresses multiple dimensions:

- Experimenting with technical and administrative issues relevant to green roofing technical implementation.
- Promoting the re-use of the abandoned building, representing a first step in proposing innovative uses of green infrastructure by implementing the green roof in a small part of the roof
- Long-term goal is to extend it further to other parts of the roof.

### Target groups (beneficiaries)

- local residents
- local network of farmers (Codiretti), manage a local food market within the WOW area
- customers of the farmers market
- local NGOs
- students and teachers of surrounding schools,
- disadvantaged people

### Main responsible partner

NGO OrtiAlti coordinated, designed and managed the implementation of the green roof and will maintain the roof until the proGREG project end.

### Contact

✉ [info@ortialti.com](mailto:info@ortialti.com)  
🌐 [www.ortialti.com](http://www.ortialti.com)



### Area of implementation

Roof section of a public building located, previously known as VOV102 now named WOW. Originally a factory, the building is owned by the City of Torino and currently unused and abandoned.

GPS coordinates: 45.017254, 7.644881

### ProGREG partners involved

Heritage Management Department, City of Turin (Owner of the building)

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

### Other stakeholders involved

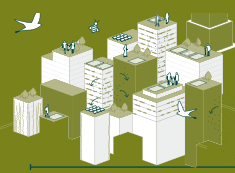
Associazione Parco del Nobile (local NGO of beekeepers)

### Implementation budget

Total implementation budget and proGREG funds: 53.500 €

### Timeframe

Start  
February 2020



Completion  
June 2020





## Living Lab Turin, Italy

### NBS description

This NBS transformed a stretch of road into a green corridor connecting the residential area with the Mirafiori Castle and Piemonte Park. The construction work was accompanied by a strong engagement process and planting grasses, shrubs and trees, as well as placing landmarks/signs for providing information of the site. Through various activities, events and visits, local residents connected to the site. This has created a sense of identification and affection, and will further stimulate care and community ownership.

### Aim & goals

The NBS addresses societal and environmental issues in the Mirafiori district:

- to create an ecosystem path capable of redeveloping formerly unattractive areas
- to establish NBS in an area with high risk of „heat island effects“
- to foster processes of residents' involvement, participation and awareness
- to increase biodiversity by planting pollinator friendly species

### Target groups (beneficiaries)

Citizens living in the area, e.g. residents of social housing and smallholders, communities with economic and social difficulties, physical and mental disabled people in care homes

### Main responsible partner

- City of Turin - Mobility and Infrastructure Department, Urban plan Service: Project design and coordination
- Fondazione di Comunità Mirafiori: Citizen engagement

### Contact

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### Area of implementation

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

GPS coordinates: 45.013366, 7.633085

### ProGReg partners involved

- University of Turin (Department of Life Sciences and Systems Biology, DBios and Department of Agricultural, Forest and Food Sciences, DISAFA)
- Associazione Miravolante – local community association (proGReg Linked Third Party)

### Other stakeholders involved

- ATC (Housing Agency)
- Casa Farinelli (house for displaced families)
- AIAPP – Italian Association of landscape architecture
- Catholic Parishes of the neighborhood
- ASL Città di Torino (public healthcare agency)
- I Passi Social Cooperative

### Implementation budget

Total implementation budget and proGReg funds: 82.000 €

### Timeframe

Start  
August 2020



Completion  
June 2022

## NBS 7 Establishing protocols and procedures for environmental compensation



### Living Lab Turin, Italy

#### NBS description

This NBS allowed the municipality of Turin to identify, collect and display tools and concrete cases to improve the administration and management of city-owned public green assets. Green areas should be considered as „urban commons“. In contemporary cities this means shared management can link different realms, supporting to build a sense of community among local residents and joint responsibilities. In addition, engaging the private sector contributes to boosting the development of green areas that can provide win-win solutions.

#### Target groups (beneficiaries)

- Urban planners
- City administration departments interested in using such tools and solutions
- Private companies interested in environmental and green issues as a form of social responsibility action

#### Main responsible partner

City of Turin, EU Funds and Innovation Department

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#### Other stakeholders involved

Different administration departments of the city of Turin were involved to collect experiences and identify local context needs for developing strategic public-private partnerships for greening the city as follows:

- Green
- Environment
- Public and Private building
- ICT
- Urban planning.

#### Total implementation budget

Total implementation budget: ca **25.000 €**  
proGlgreg funding: 20.000 €  
private sector co-funding: 5.000 €

#### Timeframe

Start January 2019 → Completion December 2022





## Living Lab Turin, Italy

### NBS description

Researchers of the University of Turin supported this NBS to train people affected by mental diseases to become scientific disseminators and carry out project activities in parts of the Mirafiori district: creating and taking care of pollinator gardens, observing and recording butterfly species, manage a website, breed caterpillars, taking part in public events and educational activities in schools, social housing.

### Aim & goals

The NBS pursues three key goals: 1) promote butterflies conservation in the city of Turin through the creation of a network of green areas. 2) improve social inclusion of vulnerable groups 3) build scientific evidence of pollinator populations with citizens, notably butterflies.

NBS activities aim at:

- managing green areas by selecting suitable plants (food plants and nectar sources) for the life cycle, allowing butterflies to cross the urban area. Otherwise insects encounter insurmountable barriers.
- Actively involving and training fragile people with mental disabilities against isolation and social stigma.

### Target groups (beneficiaries)

Key beneficiaries are pollinators and mentally disabled people.

The NBS also addresses other disadvantaged people such as social housing residents. Local citizens take part in project activities involving public green areas, public events and online challenges.

### Main responsible partner

University of Turin - Department of Life Sciences and Systems Biology (DBios)

### Contact

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### Area of implementation

Nine butterfly gardens:

1. Centro Aquilone (Housing community for disabled people with intellectual disabilities): 45.009894, 7.636412
2. Scuola Torrazza: 45.015945, 7.656806
3. Casa Farinelli : 45.015232, 7.634801
4. Casa del Mondo Unito: 45.018837, 7.609188
5. Presidio Valletta: 45.015602, 7.631016
6. Via Nomis di Cossilla: 45.038668, 7.626691
7. Spazio WoW: 45.017665, 7.64481
8. Association "Bunker": 45.08395, 7.70481

Two transects were built in Orti Generali (45.00916, 7.62559) and one along the Green Corridor (45.011449, 7.632619).

### ProGREG partners involved

- City of Turin
- NGO Orti Generali
- NGO Fondazione Mirafiori

### Other stakeholders involved

- Cooperativa La Rondine
  - Cooperativa Il Margine
- Both organizations are NGOs focusing on mental disabilities.

### Implementation budget

Total implementation budget: 59.000 €  
proGREG funding: 22.000 €  
University of Turin (DBios): 37.000 €

### Timeframe

Start  
April 2019



Completion  
December 2022