




Working with Cities to Plan, Deliver and Upscale Nature-based Solutions

Daniela Rizzi
Senior Officer Nature-based Solutions and Biodiversity, ICLEI Europe




Grégoire Dubois

1



ICLEI, Local Governments for Sustainability



- USA Office
Denver, USA
- Canada Office
Toronto, Canada
- Mexico, Central America & Caribbean Secretariat
Mexico City, Mexico
- South America Secretariat
São Paulo, Brasil
- World Secretariat
Bonn, Germany
- Berlin Office
Berlin, Germany
- Brussels Office
Brussels, Belgium
- European Secretariat
Berlin, Germany
- South Asia Secretariat
New Delhi, India
- Africa Secretariat
Cape Town, South Africa
- East Asia Secretariat
Seoul, South Korea
- Korea Office
Seoul, South Korea
- Indonesia Project Office
Jakarta, Indonesia
- Japan Office
Tokyo, Japan
- Kaohsiung Capacity Center
Seoul, South Korea
- South East Asia Secretariat
Manila, Philippines
- Oceania Secretariat
Melbourne, Australia

Legend:
■ Project Office
■ Country Office
■ Secretariat office

2

ICLEI, Local Governments for Sustainability



2250+ LOCAL
AND REGIONAL
GOVERNMENTS

24 OFFICES
WORLDWIDE

ACTIVE IN
100+ COUNTRIES

IMPACTING
MORE
THAN **25%** OF
PEOPLE LIVING
IN CITIES

5 INTERCONNECTED
DEVELOPMENT
PATHWAYS

3

THE FIVE ICLEI PATHWAYS






**LOW EMISSION
DEVELOPMENT**



**NATURE-BASED
DEVELOPMENT**



**EQUITABLE AND
PEOPLE CENTERED
DEVELOPMENT**



**RESILIENT
DEVELOPMENT**



**CIRCULAR
DEVELOPMENT**


The **FIVE ICLEI PATHWAYS** reflect ICLEI’s approach to achieving a sustainable city as well as local contributions to implementing the goals laid out in international frameworks such as the Sustainable Development Goals. Any of our individual projects or initiatives can be oriented along one or more specific pathways. We also look at how the pathways connect to bring about change in an **INTEGRATED** way. For example, we consider how nature-based development contributes to resilience, or how to bring equity into low emission development.

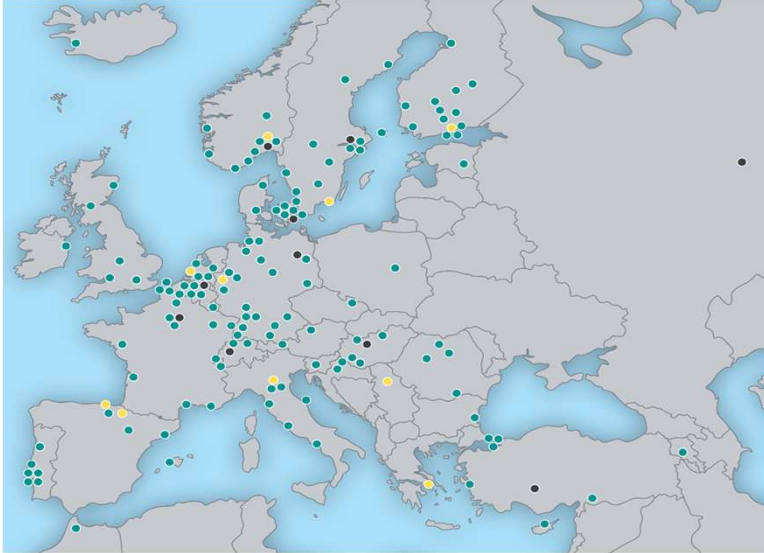
4


ICLEI EUROPE

<http://iclei-europe.org/>

REPRESENTS LOCAL GOVERNMENTS AND ASSOCIATIONS OF ALL SHAPES AND SIZES








160+ MEMBERS
35+ EUROPEAN COUNTRIES

















- Local Government
- Association of Local Governments
- Associate Partner

5

OUR THEMATIC AREAS

ICLEI's thematic areas in Europe, such as climate, biodiversity and nature-based solutions and mobility, depending on the specific context in which we work, connect the 5 Pathways with the daily working fields of European local governments. Social equity and inclusion run through our work.



Biodiversity & Nature-Based Solutions		Circular Economy & Waste		Climate Change Adaptation & Urban Resilience		Climate Change Mitigation	
Cultural Heritage		Energy		Finance & Investment		Food	
Indicators & Performance Measurement		Infrastructure, Buildings & Construction		Integrated Management		Mobility & Transport	
Procurement & Economy		Smart Cities		Urban Governance, Participation & Social Innovation		Water	

6

OUR THEMATIC AREAS



ICLEI's thematic areas in Europe, such as climate, biodiversity and nature-based solutions and mobility, depending on the specific context in which we work, connect the 5 Pathways with the daily working fields of European local governments. Social equity and inclusion run through our work.

Biodiversity & Nature-Based Solutions 	Circular Economy & Waste 	Climate Change Adaptation & Urban Resilience 	Climate Change Mitigation 
Cultural Heritage 	Energy 	Finance & Investment 	Food 
Indicators & Performance Measurement 	Infrastructure, Buildings & Construction 	Integrated Management 	Mobility & Transport 
Procurement & Economy 	Smart Cities 	Urban Governance, Participation & Social Innovation 	Water 

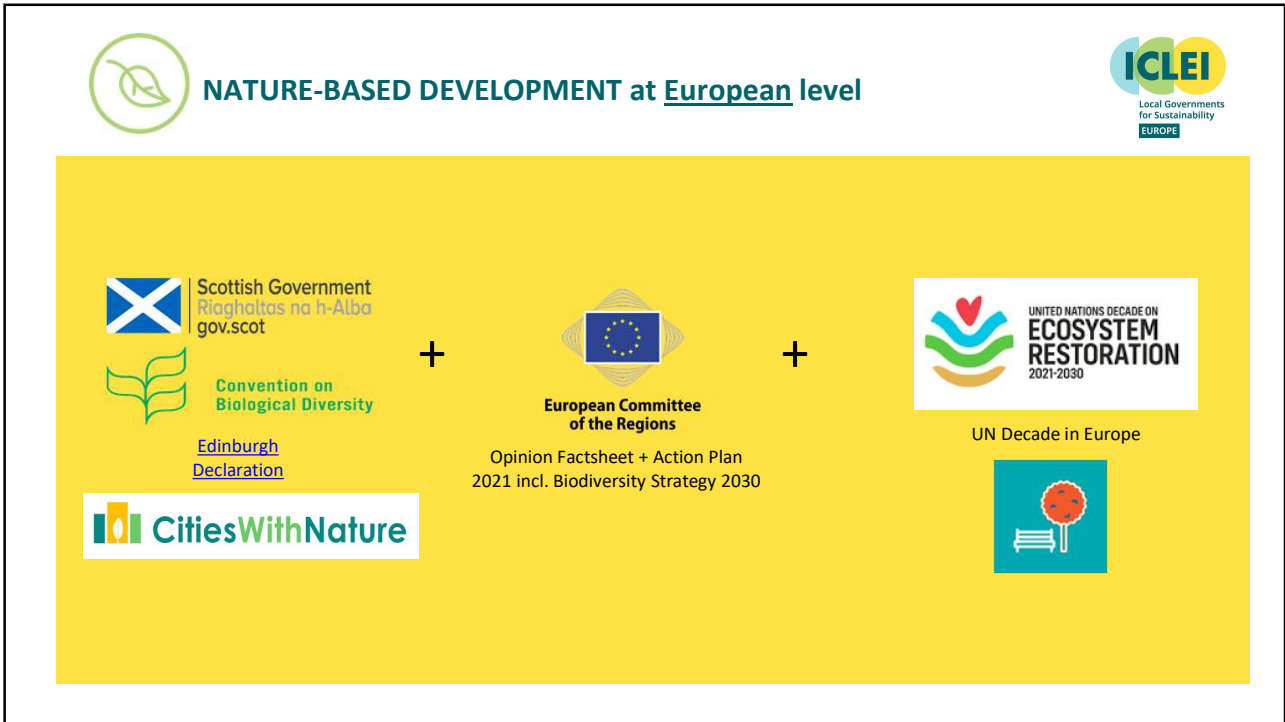
7



NATURE-BASED DEVELOPMENT at global level



8



9



10

FACILITATING KNOWLEDGE EXCHANGE

ICLEI facilitates **knowledge exchange** between key stakeholders in the development of urban sustainability from local authorities to businesses, citizens and academia. We work with a number of partners and networks:

- European Commission
- European Parliament
- European Committee of the Regions
- European Investment Bank
- European Bank for Reconstruction and Development
- ISO Standard setting on Sustainable Cities
- EEA European Environment Agency
- Other city networks



11



NATURE-BASED DEVELOPMENT in European projects



Platform + National NBS Hubs
in 27 EU MS


**FACILITATING
KNOWLEDGE
EXCHANGE, platforms
and campaigns**



UrbanByNature
The Global Programme for Urban Nature Pioneers

Regional Hubs + European
Hubs in UK, B and PL

12




Network Nature

a new one-stop-resource
for the **nature-based solutions**
community

...gathers resources, projects, best practices and tools under one roof,
...maximises the **impact and spread** of nature-based solutions.


networknature.eu



Consolidate, expand and support a community of practice

Upscale the use of NBS across science, business, policy and practice

Raise awareness



13



Network Nature



National NBS Hubs / EU Member States

<https://networknature.eu/>

Why?

- Address regional/national needs, specificities and barriers for nature-based solutions, enable knowledge transfer;
- Build relationships with national/regional partners;
- Create long-lasting structures for NBS uptake and mainstreaming with local interface across policy, practice and research;
- Create nuanced understanding of benefits and risks of NBS across climatic, geographic, ecological, political and economic contexts.

What?

Map potential stakeholders (until May 2021)
Map relevant actors in research, policy (ministries), and private sector on national/regional level in 27 EU MS

Establish NBS hubs (from May 2021 to May 2023)
Identify potential hubs based on interest and willingness of stakeholders to move NBS agenda forward; programmatic and strategic support to organise 6 (macro-)regional events (host workshop, present platform activities) (Lead: ICLEI)

Dedicated online space @ NN
Online space for exchange / resources, etc. (facebook group) and to present themselves

14



Network
Nature

<https://networknature.eu/>

NBS Task Forces

TF 1: Data management and EU NBS knowledge repository;

TF 2: NBS Impact evaluation framework;

TF 3: Governance, business and finance models;

TF 4: NBS Communicators

TF 5: Co-creation and governance

Aim:

The H2020 NBS project clustering aims to strengthen networking, knowledge sharing, and collaboration to foster synergies between projects. In doing so, it aims to increase the projects' impact on mainstreaming NBS, while saving resources around common areas of work. Ultimately, this should lead to a strong evidence base for NBS at EU level.

15

CitiesWithNature

<https://www.citieswithnature.org/>




[HOME](#) / [ABOUT](#) / [JOIN](#) / [UPDATES](#) / [CONTACT](#)

[CitiesWithNature Registry](#)


WELCOME TO CitiesWithNature

**Now, more than ever,
there is a need to unite
and embrace nature,
reconnect communities
with nature, become
CitiesWithNature!**

Become part of this unique initiative that recognizes and enhances the value of nature in and around cities across the world. It provides a **shared platform** for cities and their partners to **engage and connect**, working with shared commitment towards a more sustainable urban world.


[WHY JOIN?](#) [JOIN THE JOURNEY →](#)


16



UrbanByNature

Connecting Nature






UrbanByNature

The Global Programme for Urban Nature Pioneers

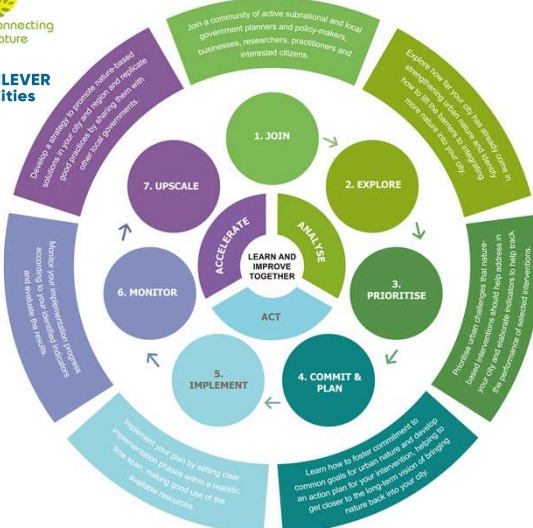
<https://connectingnature.eu/urbanbynature>



ICLEI

Local Governments for Sustainability

EUROPE




- **Exchange with cities globally**
- **Learn how to plan and implement** urban green and blue interventions for and with citizens
- **Support collective action** towards a sustainable, inclusive and resilient urban future
- **Gain access to tools and approaches** for NBS planning and implementation
- Strengthen the pathway towards **global sustainable development** and climate goals

17

Informing local and subnational governments...

Local and subnational advocacy for nature




ICLEI

Local Governments for Sustainability

EUROPE

- This is an officially recognized platform of the CBD Secretariat to inform local and subnational governments about the CBD process and to collect impulses for subnational governments.
- Offer: Monthly webinars (first Thursday of the month) by ICLEI CitiesBiodiversityCentre (CBC) to inform municipalities and regions about news and ongoing processes as well as opportunities for engagement.


<https://subnationaladvocacyfornature.org/>



The voice of local and subnational governments
in the United Nations Convention on Biological Diversity & associated Conventions


18

Act Local!




NATURVATION
cities – nature – innovation

**Nature-based Urban
innoVATION**




Network Nature

Advancing nature-based
solutions together




ICLEI
Local Governments
for Sustainability
EUROPE




CONEXUS
Urban nature connects us

**CO-producing Nature-based
solutions and restored
Ecosystems: transdisciplinary
neXus for Urban Sustainability**




**CLEVER
Cities**

**Inclusive. Green.
Sustainable.**




proGReg

**Nature-based solutions
for post-industrial
areas**




REGREEN
NATURE-BASED SOLUTIONS

**Fostering nature-based
solutions for smart, green and
healthy urban transitions in
Europe and China**




**GO GREEN
ROUTES**

**Resilient Optimal Urban
natural, Technological and
Environmental Solutions**



NICE

**Innovative and Enhanced
NBS for Sustainable Urban
Water Cycle**



MULTISOURCE
enhanced natural treatment solutions

**ModUlar Tools for
Integrating enhanced
natural treatment
Solutions in Urban
water Cycles**



REGREEN
NATURE-BASED SOLUTIONS

REGREEN Fact Sheets: NBS implementation



ICLEI
Local Governments
for Sustainability
EUROPE



REGREEN
NATURE-BASED SOLUTIONS

**THE REGREEN FACT SHEETS
- FROM START TO FINISH**

SDGs are incorporated in the green depicted in all of the fact sheets.

SDGs are incorporated in the green depicted in all of the fact sheets.

SDGs are incorporated in the green depicted in all of the fact sheets.



REGREEN
NATURE-BASED SOLUTIONS

**GREEN ROOF STRATEGY
OF HAMBURG**

Annual SDGs



REGREEN
NATURE-BASED SOLUTIONS

**POLLINATOR-FRIENDLY
FOOD FOREST, DORTMUND**

Annual SDGs

CONTEXTUALIZATION OF THE REGREEN FACT SHEETS

The context in which these fact sheets were conceptualized was a task of the REGREEN project, which entailed showcasing inspiring examples of NBS from cities around Europe to serve as a reference on NBS planning and implementation across REGREEN's activities. The fact sheets aimed to emphasize good practices, barriers and lessons learned. This process was carried out through a series of discrete steps:

- Agreeing among experts what constitutes "inspiring practice"
- Agreeing scopes and priorities for the assessments of NBS cases
- Questionnaires and interviews to describe NBS good practices

AGREING AMONG EXPERTS WHAT CONSTITUTES "INSPIRING PRACTICE"

The following main topics were identified as subjects for the fact sheets, which aligned to the focal areas of interest for REGREEN:

- Social, economic, technical, managerial and financial good practices, enabling factors and barriers for design, construction, deployment and monitoring of NBS for restored and newly created ecosystems;

OBJECTIVES

The main goal of the city, the green roof was increased to create more green space. Additionally, the city wanted to improve the urban environment and to reduce the impact of climate change. The green roof was also intended to improve the urban environment and to reduce the impact of climate change. The green roof was also intended to improve the urban environment and to reduce the impact of climate change.

CHALLENGES

The lack of knowledge in regard to the safety of the green roof was a major challenge. The lack of knowledge in regard to the safety of the green roof was a major challenge. The lack of knowledge in regard to the safety of the green roof was a major challenge.

OBJECTIVES

The main goal of the city was to improve the urban environment and to reduce the impact of climate change. The main goal of the city was to improve the urban environment and to reduce the impact of climate change. The main goal of the city was to improve the urban environment and to reduce the impact of climate change.

DESCRIPTION

The main goal of the city was to improve the urban environment and to reduce the impact of climate change. The main goal of the city was to improve the urban environment and to reduce the impact of climate change. The main goal of the city was to improve the urban environment and to reduce the impact of climate change.



REGREEN Fact Sheets: NBS implementation



OBJECTIVES
The Farfale in Tour project in Turin combines biodiversity conservation with providing job opportunities for citizens, while also aiming at physical fitness. Connecting people with nature by creating and maintaining butterfly zones is at the core of the project. The Farfale in Tour demonstrates the potential of nature for improving health and well-being and social inclusion in a city.

DESCRIPTION
The project was founded after dozens engaged four patients with mental and physical illnesses could be involved in a project with increasing funding, covering green costs and providing jobs for citizens. The project was founded after dozens engaged four patients with mental and physical illnesses could be involved in a project with increasing funding, covering green costs and providing jobs for citizens. The project was founded after dozens engaged four patients with mental and physical illnesses could be involved in a project with increasing funding, covering green costs and providing jobs for citizens.



OBJECTIVES
The Thamesmead Nature Forum is part of the ICLEI Green Case project in London, which aims to create a new model for collaborative governance. The forum is a multi-stakeholder platform that brings together local residents, businesses, and public authorities to address local environmental and social issues.

DESCRIPTION
The Thamesmead Nature Forum is a multi-stakeholder platform that brings together local residents, businesses, and public authorities to address local environmental and social issues. The forum is a multi-stakeholder platform that brings together local residents, businesses, and public authorities to address local environmental and social issues.



OBJECTIVES
Let's make our school a growing place! is the name of a project in Santia, Italy, which aims to create a growing school. The project involves creating a school garden and using it as a platform for environmental education and social inclusion.

DESCRIPTION
Let's make our school a growing place! is the name of a project in Santia, Italy, which aims to create a growing school. The project involves creating a school garden and using it as a platform for environmental education and social inclusion.



REGREEN Fact Sheets: NBS implementation



OBJECTIVES
The Gorla Maggiore water park is a modern water park in Italy, which aims to provide a high-quality recreational experience for visitors. The park is designed to be sustainable and environmentally friendly.

DESCRIPTION
The Gorla Maggiore water park is a modern water park in Italy, which aims to provide a high-quality recreational experience for visitors. The park is designed to be sustainable and environmentally friendly.



OBJECTIVES
The Green Noise Barrier of Sachsenheim is a noise barrier in Germany, which aims to reduce noise levels and improve the quality of life for residents. The barrier is designed to be sustainable and environmentally friendly.

DESCRIPTION
The Green Noise Barrier of Sachsenheim is a noise barrier in Germany, which aims to reduce noise levels and improve the quality of life for residents. The barrier is designed to be sustainable and environmentally friendly.



OBJECTIVES
The Biotope City Vienna is a city in Austria, which aims to create a sustainable and resilient city. The city is designed to be sustainable and environmentally friendly.

DESCRIPTION
The Biotope City Vienna is a city in Austria, which aims to create a sustainable and resilient city. The city is designed to be sustainable and environmentally friendly.



REGREEN NATURE-BASED SOLUTIONS

REGREEN Fact Sheets: NBS implementation



REGREEN NATURE-BASED SOLUTIONS

GREEN CORRIDORS IN STUTTGART

OBJECTIVES

The City of Stuttgart faces air quality problems and its location in a mild climate valley basin with low wind speeds aggravates the situation. This led to the development of Climate Allies for the Stuttgart region which provides best information about wind, solar radiation, precipitation, temperature and cold air flow distribution. With this information at hand, the municipality decided to establish a network of corridors that could also help to ventilate the city.

DESCRIPTION

The city's topographic characteristics guided the designation of four pathways. These, mainly green corridors, distribute the air flow coming from different valleys throughout Stuttgart. They facilitate the air exchange in the city thereby reducing the pressure for cold air to sink into the city towards the valley areas at basin level. This, in turn, reduces heat islands, heat causing thermal stress and airflows in parks or pollution.

This network of corridors requires zoning and regulations to limit road works and other developments along all of the green belts inside the city. These pathways are connected to existing roads to reach local neighbourhoods. To ensure the air masses stay cold and clean, the already existing buildings on the wind corridor must respect a maximum distance between them as well as reflecting soil surfaces such as green roofs, green walls and other ventilation measures. The width would ideally be several times of height (depending on the climate current desired). The regulations make sure this objective is respected.

The municipality can analyze the volume and speed of the air flow in a model, which allows to replicate the air exchange rate in the valley basin and the reduction of the concentration of pollutants in the city of Stuttgart, and all of this in a matter of big cities. All the same emissions come from all of the cities. The idea is to replicate the city of Stuttgart can use a natural ventilation in the night with fresh emissions both in the city and in the surrounding area. From a number of stations, one of them is located in the city center and four other ones will be installed in the future.

Green corridors are particularly beneficial for cooling cities and improving air quality. They also offer other benefits: they promote urban biodiversity, connect surrounding rural and peri-urban areas with the city center, and improve outdoor well-being thanks to the availability of more green spaces.



REGREEN NATURE-BASED SOLUTIONS

RICHWATER® RECLAIMED WATER FOR IRRIGATION, MALAGA

OBJECTIVES

Rich Water is an innovative project that allows the reuse of wastewater for use in agriculture. In addition to its use in urban and agricultural irrigation, this water provides an excellent source for growing community gardens, parks and green roofs. It is an excellent means for the recovery of water for storage and phytoremediation, reducing environmental pollution and improving the quality of life of citizens. The project is based on the water treatment by membrane technology and operates in a single system: the water after treatment and storage is used for irrigation. The system is based on the water treatment by membrane technology and operates in a single system: the water after treatment and storage is used for irrigation. The system is based on the water treatment by membrane technology and operates in a single system: the water after treatment and storage is used for irrigation.

DESCRIPTION

RichWater® is an innovative project that allows the reuse of wastewater for use in agriculture. In addition to its use in urban and agricultural irrigation, this water provides an excellent source for growing community gardens, parks and green roofs. It is an excellent means for the recovery of water for storage and phytoremediation, reducing environmental pollution and improving the quality of life of citizens. The project is based on the water treatment by membrane technology and operates in a single system: the water after treatment and storage is used for irrigation. The system is based on the water treatment by membrane technology and operates in a single system: the water after treatment and storage is used for irrigation.

The availability of reclaimed water is an agricultural water by-product in the so-called "wastewater", making



REGREEN NATURE-BASED SOLUTIONS

GREEN LIVING ROOM LUDWIGSBURG

OBJECTIVES

The Green Living Room is a nature-based solution that can be applied to various urban situations while offering multiple benefits for the urban environment in terms of climate change adaptation, public realm improvement and natural awareness. In Ludwigsburg it was applied as a multifunctional structure that contributes to addressing urban environmental and societal challenges. It helps regulate the urban heat island effect by evapotranspiration of trees and shading, promotes urban biodiversity and green, reduces storm water runoff, fosters the reuse of water and provides a sustainable irrigation system, and enables air purification. City residents can get the most out of the structure by directly interacting with nature, which contributes to raising awareness towards the integrated delivery of ecosystem services.

DESCRIPTION

In 2019, a competition was launched among German cities for the installation of a Green Living Room within urban boundaries. The city of Ludwigsburg in Germany has quickly reacted to the challenge. An interdisciplinary team of architects, landscape architects and urban planners was selected to design a multifunctional structure in a central green area. The structure is designed to be a multifunctional space for recreation, education and social interaction. The structure is designed to be a multifunctional space for recreation, education and social interaction.

With the academic support of a local university and the work of the maintenance partners, the city of Ludwigsburg has quickly reacted to the challenge. An interdisciplinary team of architects, landscape architects and urban planners was selected to design a multifunctional structure in a central green area. The structure is designed to be a multifunctional space for recreation, education and social interaction.



REGREEN NATURE-BASED SOLUTIONS

REGREEN Fact Sheets: NBS implementation



REGREEN NATURE-BASED SOLUTIONS

THE REDUNA PROJECT IN ALMADA

OBJECTIVES

The Reduna project aims to restore the natural capacity of the area and provide a solution to the urban water management challenges. The project involves the installation of a multifunctional structure that contributes to addressing urban environmental and societal challenges. It helps regulate the urban heat island effect by evapotranspiration of trees and shading, promotes urban biodiversity and green, reduces storm water runoff, fosters the reuse of water and provides a sustainable irrigation system, and enables air purification. City residents can get the most out of the structure by directly interacting with nature, which contributes to raising awareness towards the integrated delivery of ecosystem services.

DESCRIPTION

The Reduna project aims to restore the natural capacity of the area and provide a solution to the urban water management challenges. The project involves the installation of a multifunctional structure that contributes to addressing urban environmental and societal challenges. It helps regulate the urban heat island effect by evapotranspiration of trees and shading, promotes urban biodiversity and green, reduces storm water runoff, fosters the reuse of water and provides a sustainable irrigation system, and enables air purification. City residents can get the most out of the structure by directly interacting with nature, which contributes to raising awareness towards the integrated delivery of ecosystem services.



REGREEN NATURE-BASED SOLUTIONS


LIVING LANDSCAPES IN EDINBURGH

OBJECTIVES

The Living Landscapes project aims to improve the urban environment and provide a solution to the urban water management challenges. The project involves the installation of a multifunctional structure that contributes to addressing urban environmental and societal challenges. It helps regulate the urban heat island effect by evapotranspiration of trees and shading, promotes urban biodiversity and green, reduces storm water runoff, fosters the reuse of water and provides a sustainable irrigation system, and enables air purification. City residents can get the most out of the structure by directly interacting with nature, which contributes to raising awareness towards the integrated delivery of ecosystem services.


DESCRIPTION

The Living Landscapes project aims to improve the urban environment and provide a solution to the urban water management challenges. The project involves the installation of a multifunctional structure that contributes to addressing urban environmental and societal challenges. It helps regulate the urban heat island effect by evapotranspiration of trees and shading, promotes urban biodiversity and green, reduces storm water runoff, fosters the reuse of water and provides a sustainable irrigation system, and enables air purification. City residents can get the most out of the structure by directly interacting with nature, which contributes to raising awareness towards the integrated delivery of ecosystem services.




REGREEN
NATURE-BASED SOLUTIONS

REGREEN Fact Sheets: NBS implementation




Local Governments
for Sustainability
EUROPE


<https://www.regreen-project.eu/news/regreen-factsheets-are-now-available-and-reday-to-download/>



25



Working with cities to upscale and outscale NBS



Local Governments
for Sustainability
EUROPE

NATURE-BASED DEVELOPMENT

Cities can engage:

GLOBALLY

- CitiesWithNature
- UrbanByNature - The Global Programme for Urban Nature Pioneers
- Cities Biodiversity Summit at COP 15 CBD

IN EUROPE

- Green City Accord
- NetworkNature: It is in our nature to network – we will expand the wider NBS community and support you in implementing and amplifying your nature-based solutions.
- Horizon2020/Horizon Europe Task Forces
- Representation with the European Committee of the Regions

Cities can join forces on:

- Horizon Europe upcoming calls
- ICLEI is an official partner of the UN Decade for Ecosystem Declaration

Cities can use:

- Pollinator's guidance

Cities can subscribe:

- UrbanByNature by ICLEI Europe
- CitiesWithNature
- Urban Resilience Newsletter by ICLEI

Cities can participate:

- Events: once-off plus regular (e.g. EURESFO, ESCT, Daring Cities)

26

Thank you!



Daniela Rizzi
Senior Officer Nature-based Solutions
and Biodiversity, ICLEI Europe



daniela.rizzi@iclei.org

