





MedCities Annual Seminar 2023

Sarajevo (Bosnia Herzegovina) and online 22-23 November 2023

Reversing biodiversity lose in urban environments in a context of climate crisis: ecosystem approach and nature based solutions

Municipality of Ancona - Dr. Fabio Vallarola







Nature based solutions to increase resilience in a biodiversity crisis

The Greenhouse Effect

climate.nasa.gov

- Contraction of the second se



The Climate change

Observed change in annual precipitation over land



(mm yr-1 per decade)











Project

The objective of the LIFE + A_GreeNet project is to adapt to the rising temperatures and heat waves in the cities of the Adriatic coast

(34.0936 inhabitants)

The impacts of high temperatures on the economy, the environment and people's health in Mediterranean area, particularly in the southern areas, are expected to increase in the coming years bringing catastrophic effects , especially on the urban population, should effective adaptation measures be not implemented.

Project total € 3.000.000,00 financed for 55% UE and for 45% from the Partnership



The LIFE programme is the only EU funding programme entirely dedicated to environmental, climate and energy objectives. It contributes to the shift towards a clean, circular, energy efficient, climate-neutral and climate-resilient economy, including through the transition to clean energy, to protect and improve the quality of the environment. To date, LIFE has co-financed more than 5,000 projects.





Partnership





LIFE20 CCA/IT/001752 **Progetto LIFE+ A_GREENET Adriatic Climate Urban Network**

RES GRARIA

LEGAMBIENTE





GreeNet

Objectives

1) increase the quantity of green spaces through the common tools of urban planning, by identifying possible solutions to the obstacles that have slowed down or prevented the plans implementation;

2) increase the quality of green spaces in order to enhance their capacity to set more favorable climatic conditions compared to the residential area; to provide shelter and protection to the most fragile population groups (i.e. children, the elderly and those living on minimum wages and incomes); to improve the aesthetic perception of the city; to encourage tourist attraction and socialization;

3) in order to fight the thermal stress on natural or semi-natural habitats, the project aims to **increase the resilience of the urban environment, air quality, health and well-being of people in denser urban areas** by connecting existing green areas and providing for new ones, thus creating a structural and functional green network;

4) to develop a multi-level and multi-actor governance, strengthening the administrative capacity regarding the climate adaptation of all governance levels involved in land planning and management (Region, Provinces, Municipalities) of both public and private parties, who are also asked to collaborate in the management and design of green areas and to increase their responsibility and awareness towards adaptation measures.







O

CI CONTRALIST

10 12

12830200

1000

A 13

STREET, STREET, STREET, ST

1000

Aims of the project Micro forestation & de-paving

Capofila di Progetto

ABRUZZO





10 12

1283020

Contractory I for the

1000



Planning Temperature monitoring system



GIS DATA CAPTURE





10 12

Distance.

-t - 1

STREET, STREET, STREET, ST



O







Catalog of Nature-Based Solutions (NBS)

The catalog of nature-based solutions (NBS) is based on urban typologies and classification in relation to the territory of the Middle Adriatic city,

These NBS, which will have to be implemented in planning tools and urban projects, have been identified through a review of databases and collections starting from the practices selected in one of the first Action of the project, the DA 1.1.1, (*Life SOS 4 Life, Life Metro Adapt, Horizon 2020 Urban Green Up, Life Heatland*) and other repertoires included in European projects such as: *Life Lugo + Biodinámico; Horizon 2020 Grow Green, the Natural Water Retention Measures (NWRM) catalog,* as well as several reports, manuals, such as *Ciria SuDS Manual, Susdrain* and various scientific publications.

The **35** identified solutions are grouped into **4 families**:

- A. Streets and outdoor spaces;
- **B.** Natural / semi-natural and anthropogenic green areas;
- C. Soil;
- **D.** Buildings and neighboring areas.



First indications for the tree species selection







NBS repertory

In order to make the catalog effectively usable and to simplify the possibilities of investigation of the proposed solutions, an interactive database was created. The database contains all the information cataloged on NBS solutions and can be reached at:

https://bit.ly/3uBmcFa

The book with all the final researches and the Nature Based Solutions as well as the NBS repertory with a first selection of tree species that can be used, is available on line in PDF format on the Life A-GreeNet project.

Project WEBSITE: https://www.lifeagreenet.eu/site/en/

Link to PDF : <u>https://www.lifeagreenet.eu/site/wp-content/uploads/2023/10/DA.1.1.2-Def-310322-2.pdf</u>

Az. C.1 Participation action



Participation: more than 21 meeting in the presence and in videocall involved more than 200 stakeholders in 13 mounths of work.

Capacity Building process that selected more than **50 proposal** for climate change adaptation activities in the cities involved in the project.

DOCUM	UIDE DEL BORSACCHIO APS Via Garipala, 27 - 64026 Rooeto (Agal Abruzzi (TE)		
And the second second second second	Firma Ser		
- ZORSACCHIO ARS	Avalo TRESIDENTE - MIRCO SEGIO BORGITII	DOCUMP	dello citto costiero del Medio Adrichor - Abrezzo e Mardie
UTAS MADITIONA	Firms Alas Saule Audo VICO SINDARO (DOLOCA)	500010	
TO USE ON LITERARY OF ITHE	Pros famille nosu de	to, 70 ICONA	Fino hattone bengini
	Press When for the formed	2520400421	Fino Ballo Bull
I TERAMO	Russ COUNTELLOAR IN SIVERING STEER	"P- CERMUNIONI	Roots PRESIDENTE
Di GIULIANOVI	+ more ASSESSORE VERDE AVBBLICS	TANTANT	Roots VI (3 STWING (D310 M)
N. WONTEPRANN	TVINO Seyes KILLA AURIFIETE	li Urbino Carlo Bo	Firma Ruelo Protettore elle Aprilio di Terza Missione e Public Engagena
DI MOMICI WIRK	Fino la la	delle Marche	Fine Stephine Cocco
- PONCONA	Roolo PRESIDENIE		Firmo
CAUNTY	Ruolo		Acolo
VCONSUM PERARA	A FIRME I HE POESIDENTE		Firmo
12 DORRARO	l Rusia / Prifes		Auolo
	Firms Wflin		firma
ARCHE	AND PRESIDENTE		Avolo
	Fino (15-00/11/10		Firma
we a future the track	Bob Micholik 5 Grathall To to		Arolo
A S. BIOURMAI LEATING	then After TAILE - CHORAINAN LEALLA	~	Fine
E Topalo	But Could Cucon a		Asolo
A- IBRAMO	Austo CONSTGUIGHO		Finna
/	Tomo para con		Avolo
ASA DELLE CULTURE ANCONA	Ruolo Gula Sertilli (su delega)		Fines
ate 1	Fine Sicles A.J.		Avoio
Demetre Suc Ji Amalot & Corbon	Reade Sallo		Fineo
nte	Fines yes (Gen'		Avolo
Alborn - Publicipication	Ruolo Delepstoper Herche Unibrie Aberezo		Firmu
	· · · · · · · · · · · · · · · · · · ·		Ruala
15			Firma
			Ituala





Az. C.3 Demostrations actions







Stadio Dorico: transformation of ex-stadium of Ancona football club in a Play ground and urban garden with depaving and micro forestation with NBS tools



Thank you !

ADRIATIC CLIMATE UNBAN NETWORK

Dr. Fabio Vallarola fabiovallarola@comune.ancona.it

