







RE-ACT SCHOOLS

Transformation of Schoolyards to Combat Climate Change Effects and Promote Healthy and Active Environments

June 26th 2025 Green Infrastructure Case Studies Re-Natura Mataró project







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Transformation of Schoolyards to Combat Climate Change Effects and Promote Healthy and Active Environments

June 26th 2025 Green Infraestructure Case Studies Re-Natura Mataró project



Municipality of Mataró #team



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Director of Public
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Services.



Carla BlanchArchitect in the Project and Works Service.

Re-Active Schools Project Manager



Karen MartínezGreen Infrastructure
Technician











Mataró #quick look















Mataró #quick view

129.613 inhabitants **+4,4%** last decade











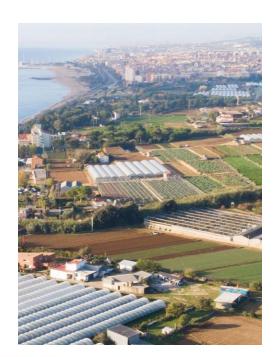






Mataró #quick view

















Mataró #city in transition





Angeleta Ferrer School











Mataró #local strategy framework

Focusing on adaptation and resilience to climate change

The Renaturalisation of urban space is one of the 28 strategic projects of the Local Action Plan of the Urban



Action Plan for Sustainable Energy and Climate (PAESC)



Master Plan for Mataró's Street Tree Canopy



Mataró Circular 2030 Strategy



MATARO

Agenda Urbana 2030

Urban **Planning** update (in progress)





Re-Natura **Project** (in progress)



Agenda of Mataró











Mataró #quick look







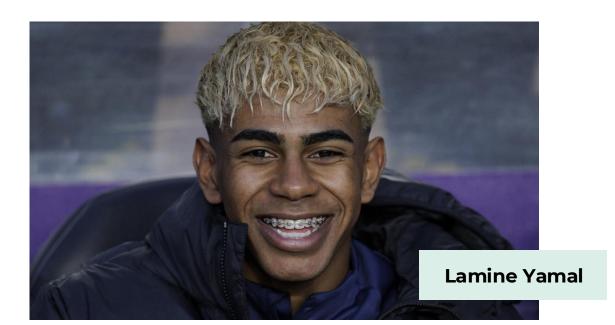








Mataró #quick look















Mataró #quick view















Mataró #working together















Mataró #green infrastructure elements















the project #objectives



GREEN INFRAESTRUCTURE PROJECT FOR ENHANCING BIODIVERSITY AND PROMOTING ECOLOGICAL RESILIENCE IN MATARÓ











budget (VAT included)

6.089.891 €

65,67 % funded by EU

timeline

01 / 07 / 2023 -31 / 12 / 2025



Urban renaturalisation, make cities greener and more nature-friendly



Boost biodiversity, protect and enhance urban ecosystems



Climate resilience, help cities adapt to climate change effects



Improve livability, create healthier, more pleasant spaces for people



Reduce flood risk, use green infrastructure to improve water flow



Connect green & blue spaces, link green areas with seasonal rivers and the sea















A // PDIVM

Strategic Green Infrastructure Plan for Mataró.



B// IMPLEMENTATIONS OF 6 SPECIFIC ACTIONS

Overall objective Contribute to the **renaturalization**

of Mataró

Main strategy Enhance the **green infrastructure**

and connectivity

Expected outcomes Improved biodiversity

Increased climate resilience

Enhance urban livability



C // 3 CROSS-CUTTING ACTIONS

Governance and Participation Plan Communication and Awareness Plan Measurement and Monitoring of Indicators















B1 Enhancing the ecological value of the Sant Simó Stream

budget 1.825.909 €

project area 19.021 m²





Eradication of invasive exotic plants

Enhancing native vegetation

Implementation of bioengineering solutions













B2 Argentona Stream socioenvironmental restorations

budget **908.333 €**

project area **32.000 m²**





Removing pavement to improve soil permeability

Socio-environmental upgrading of the streamside path

Water Quality improvement Groundwater Recharge











B3 Enhancing biodiversity and resilience in Central Park and New CP

budget **534.957 €**

project area 134.000 m²





- Trees provides shade - urban cooling - enhancement of ecological connectivity and biodiversity

Enhancing native vegetation













B4 Making Pollancreda Park greener

budget **627.000 €**

project area 13.086 m²





Biodiversity swales Supports pollinators and plants Miyawaki forests Fast, native, green











B6 Adapting urban green spaces to climate challenges

budget **750.000 €**

project area **65.350 m²**





Enhance soil permeability and ecological connectivity











the project #key factors



B5 TRANSFORMING SCHOOLYARDS INTO CLIMATE REFUGES AND BIODIVERSITY LEARNING SPACES



timeline

01/07/2023 - 31/12/2025



scope

31 schoolyards



PLANTING THE SEED:
A PROJECT TO INSPIRE MANY MORE



budget

750.000 € (VAT included)













the project #methodology

phase 0 current situation



phase 2 strategic actions

phase 3
pilot
actions

phase 4
expected
results



where do we are?



what do we have?



how should we act?



where should we focus on?



what will we have?





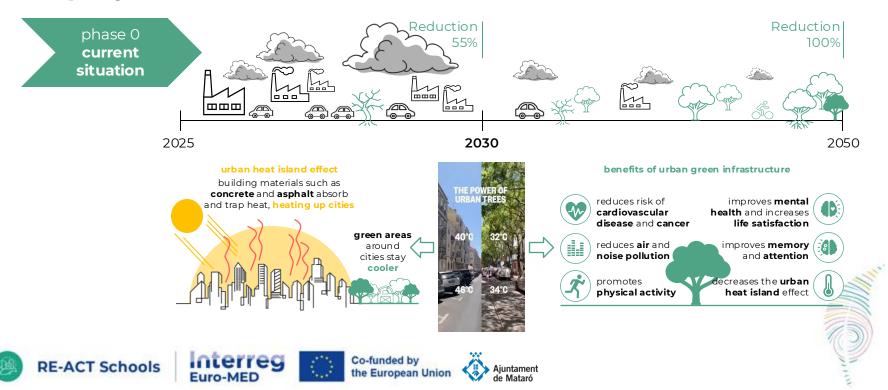








the project #where do we are?





the project #where do we are?

phase 0 current situation



121.220 m² schoolyards surface 31 alveolus



155.600 m²

comparable to the great lung of the city **Nou Central Park**



8.270 users de 0 a 11 years **6,41%** of population



156.569 m² educational equipment surface



121.220 m² schoolyards surface

= 17 football pitches

44% 52.906 m²

schoolyard surface sunny all day



Mataró beach surface























phase 1 diagnosis

physical environment identification

number of trees or shrubs

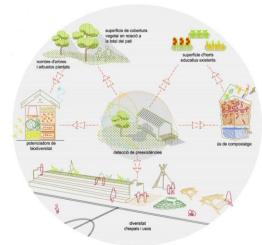
shaded surface area

composting use

biodiversity enhancing elements

surface of school vegetable gardens

ground permeability















phase 1 diagnosis

physical environment identification uses of the space

active area

semi-active area

quiet area















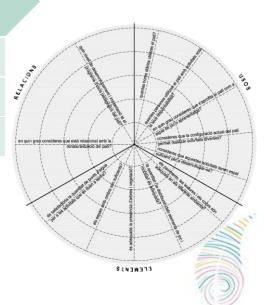
phase 1 diagnosis

physical environment identification uses of the space identification of needs

level of user satisfaction

usability of spaces

suitability of spaces













phase 1 diagnosis

physical environment identification

uses of the space

identification of needs

current state of the 31 schoolyard

























the project #how should we act?

phase 2 strategic actions

ways of action

improvement of land permeability

plant trees and shrub species

creation of school vegetable gardens

enhance biodiversity

use of waste and circular economy















the project #how should we act?

phase 2 strategic actions 5 ways of action catalogue of solutions

develop each line of action into several options

combine lines of action to enhance results



















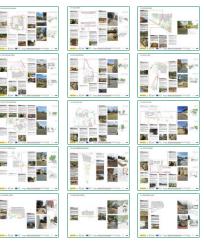
the project #how should we act?

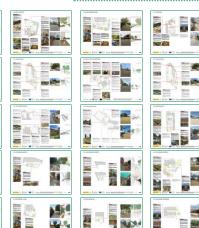
phase 2 strategic actions

5 ways of action catalogue of solutions

masterplan for each schoolyard opportunity for the future



















the project #where should we focus on?

phase 3 pilot actions

merging variables

current state and potential for improvement

budget available

target indicators of the grant

users' needs and wants















the project #where should we focus on?

phase 3 pilot actions

merging variables

engaging educational community

lst meeting // 11-2023 project goals and objectives





2nd meeting // 12-2024 build consensus around proposals

















the project #where should we focus on?

phase 3 pilot actions

merging variables

engaging educational community from planning to execution



july 2023 - initial state



june 2025 – current state execution process



november 2025 – expected result example Mare Nostrum School, BCN











the project #what will we have?

phase 4 expected results

45 trees from 8 species adapted to the climate of the future



joint decisionmaking process

buildina consensus on interventions with the educational community



4.210 m² new permeable surface better drainage,









waste regeneration

boosting

actions

biodiversity

thanks to the

combined impact of all

use of composters linked to school gardens



in raised tables or directly in the ground















to be

continued

883 shrubs

species

from 9 different



Thank you for your attention!





