



Building the Leadership for Nature-based Solutions for Coastal and Marine Ecosystems

Brussels, Belgium 5th June, 2023

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Junta de Andalucía

INTERNATIONAL UNION FOR CONSERVATION OF NATURE





Life Blue Natura

the voluntary blue carbon (offsetting) market



Junta de Andalucía
Consejería de Agricultura, Ganadería,
Pesca y Desarrollo Sostenible



Socios beneficiarios:



Cofinanciador:



The LIFE PROJECT BLUENATURA is an innovative European project that aims to find the mechanisms, tools and the knowledge to address all these challenges in order to improve marine ecosystem management and restoration projects using carbon financing mechanisms

OBJECTIVES



1. QUANTIFICATION OF ACTUAL CARBON DEPOSITS AND CARBON SEQUESTRATION RATES IN SEAGRASS MEADOWS AND TIDAL MARSHES IN ANDALUSIA.

2. ASSESMENT OF BLUE CARBON ENVIRONMENTAL SERVICES ASSOCIATED TO CLIMATE CHANGE MITIGATION, WITH BASIS ON PROJECTIONS OF CARBON FLUXES AND CARBON BALANCE IN CLIMATE CHANGE CONDITIONS.

3. EXPLORATION OF FINANCING ALTERNATIVES TO SUPPORT BLUE CARBON HABITATS PROTECTION AND RESTORATION PROJECTS, INCLUDING CARBON OFFSETT SCHEMES.

4. TRAINING, COMMUNICATION, AND AWARENESS RAISING INVOLVING KEY STAKEHOLDERS.

5. PREPARATION OF A STANDARDIZED METHODOLOGY FOR BLUE CARBON MONITORING.

Coastal marshes and *Posidonia* seagrasses in Andalusia

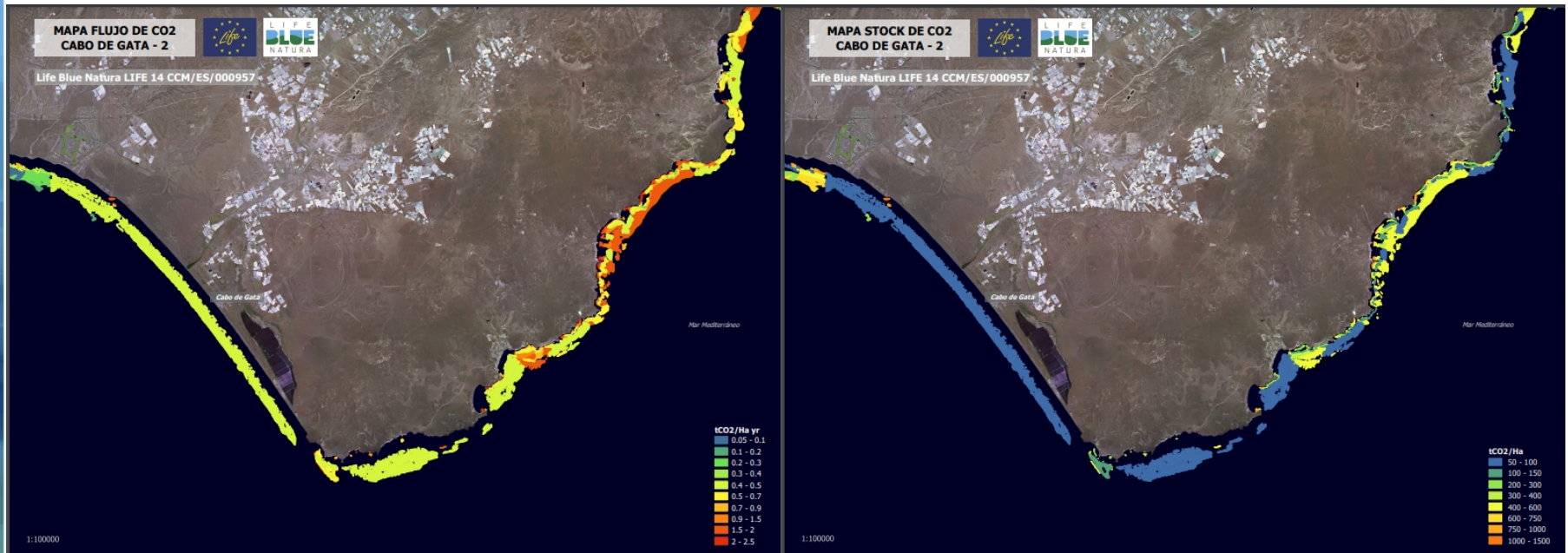


Aprox. 24.000 ha. of coastal marshes in Cadiz Bay and Odiel Marshes.

Aprox. 7.000 ha. of *Posidonia oceanica* and other marine phanerogams (*Cymodocea nodosa*, *Zostera noltii*).



QUANTIFYING CARBON DEPOSITS



SEAGRASSES: the total carbon stock in the top meter is 13,1 Megatons (*Posidonia oceanica* holds 97,4% and 95 % of the annual flux). The annual input of CO₂ to the sink is 14,384 tCO₂.

COASTAL MARSHES: the total stocks in the first meter sediment and average annual fluxes in the last century for both saltmarshes visited are of 2.14 MtCO₂ and 5.5 ktCO₂ yr⁻¹ respectively.

INCORPORATING BLUE CARBON ECOSYSTEMS INTO MITIGATION CLIMATE POLICIES

Andalucía: **NEW law on climate change** is being approved (2018)

This law creates a [voluntary Andalusian GHG emissions offsetting system](#), with a catalogue of offsetting projects. FOR FIRST TIME it has been included: conservation and restoration projects of blue carbon sink habitats, like seagrass beds and tidal marshes

LIFE Blue Natura became critical in the generation of the necessary tools for the inclusion of this “marine” offsetting projects in the catalogue, since **no tools for marine ecosystems existed before**

**Standars for
verifying carbon
credits**

**Drafting 2
carbon
offset
projects**

**Projects
catalogue**

It's necessary to verify that the emission reductions generated by the offset projects are actually occurring

- Standard Principles: Additionality, Transparency, Permanence.
- Methodologies: as accurate as possible.
- Verification and certification procedures and requirements.

Participation in the Standard is **voluntary** and implies acceptance of the technical, administrative and methodological provisions defined in the Standard



Calculator of EX-ANTE dioxide carbon absorptions in seagrass meadows and saltmarshes

Calculation methodology to be applied to conservation, restoration, or (re)forestation projects in ecosystems dominated by seagrass meadows and/or tidal marshes.



**METHODOLOGY FOR THE ESTIMATION
OF CARBON STOCKS AND EMISSION
FACTORS IN TIDAL SALTMARSHES AND
SEAGRASS MEADOWS**

**Help Manual for the Tool for Calculating
Carbon Dioxide Absorption in Seagrass
Meadows and Tidal Saltmarshes**

The Andalusian Environment Department has included 2 Blue Carbon projects in the Catalogue of Offset Projects.

BAY OF CADIZ project

**Recover the tidal cycle- hydrological
restauration**

Project Budget: 345.042 €

Baseline (present CO2 emissions)

18.137 t CO2. (50 years)

Net absorptions after the project

106.367 t CO2 (50 years)

3,24 €/tCO2

***Posidonia* Cabo-Gata project**

**Conservation/restoration actions:
implementation of an ecological buoyfield**

Project Budget: 273,060 €

Baseline (present CO2 emissions)

469 t CO2. (50 years)

Net absorptions after the project

685 t CO2 (50 years)

423 €/tCO2



Manual for the Creation
of Blue Carbon Projects
in Europe and the Mediterranean



1. BACK GROUND INFORMATION ON CARBON MARKETS, BASELINE AND CREDIT MECHANISMS; CARBON CERTIFICATION STANDARDS; COMMERCIALISATION OF CARBON CREDITS EXISTING BLUE CARBON PROJECTS
2. TOOLS TO ASSESS BLUE CARBON PROJECT ELIGIBILITY/FEASIBILITY, INCLUDING METHODOLOGICAL ASSESSMENT
3. DETAILS EXPLANATION OF CARBON PROJECT CERTIFICATION PROCESS FROM DRAFTING OF A PROJECT IDEA NOTE
4. CONSIDERATION OF DOUBLE COUNTING AND HOST COUNTRY COMMITMENTS TO INTERNATIONAL TREATIES

After the project

- Solid procedures with government support. There is a reliable framework
- Many organisations/entities have requested to offset emissions
- valuable natural heritage in Andalusia
- Scientifically-based methodologies for calculating absorption

Ongoing....

- Assignment of Absorption Units. Flexibility of legal framework
- Extremely long-term commitment required (> 50 years). Monitoring: + 8 years.
- Innovative legal/administrative arrangements for public-private partnerships.
- Innovative arrangements for coordination/colaboration between companies

#BlueCarbonHub

An aerial photograph of a coastal wetland area. The foreground shows a town with buildings and a large blue-roofed structure. A river flows through the middle ground, surrounded by marshy, brownish-green terrain. The background shows a large body of water under a clear sky.

WEBPAGE : www.life-bluenatura.eu

FACEBOOK/TWITTER/YOUTUBE: Life Blue Natura

ANDALUSIAN CLIMATE CHANGE PORTAL:

<https://www.cma.junta-andalucia.es/medioambiente/portal/web/cambio-climatico>

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