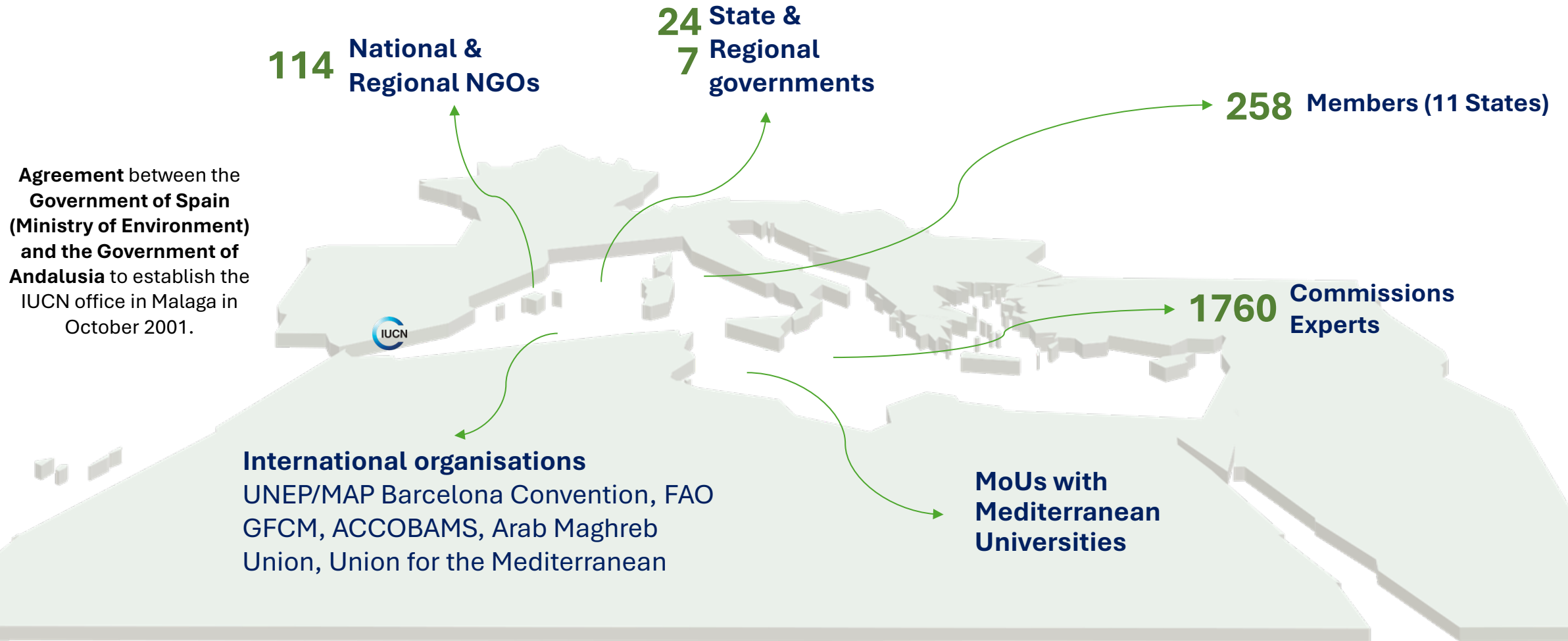




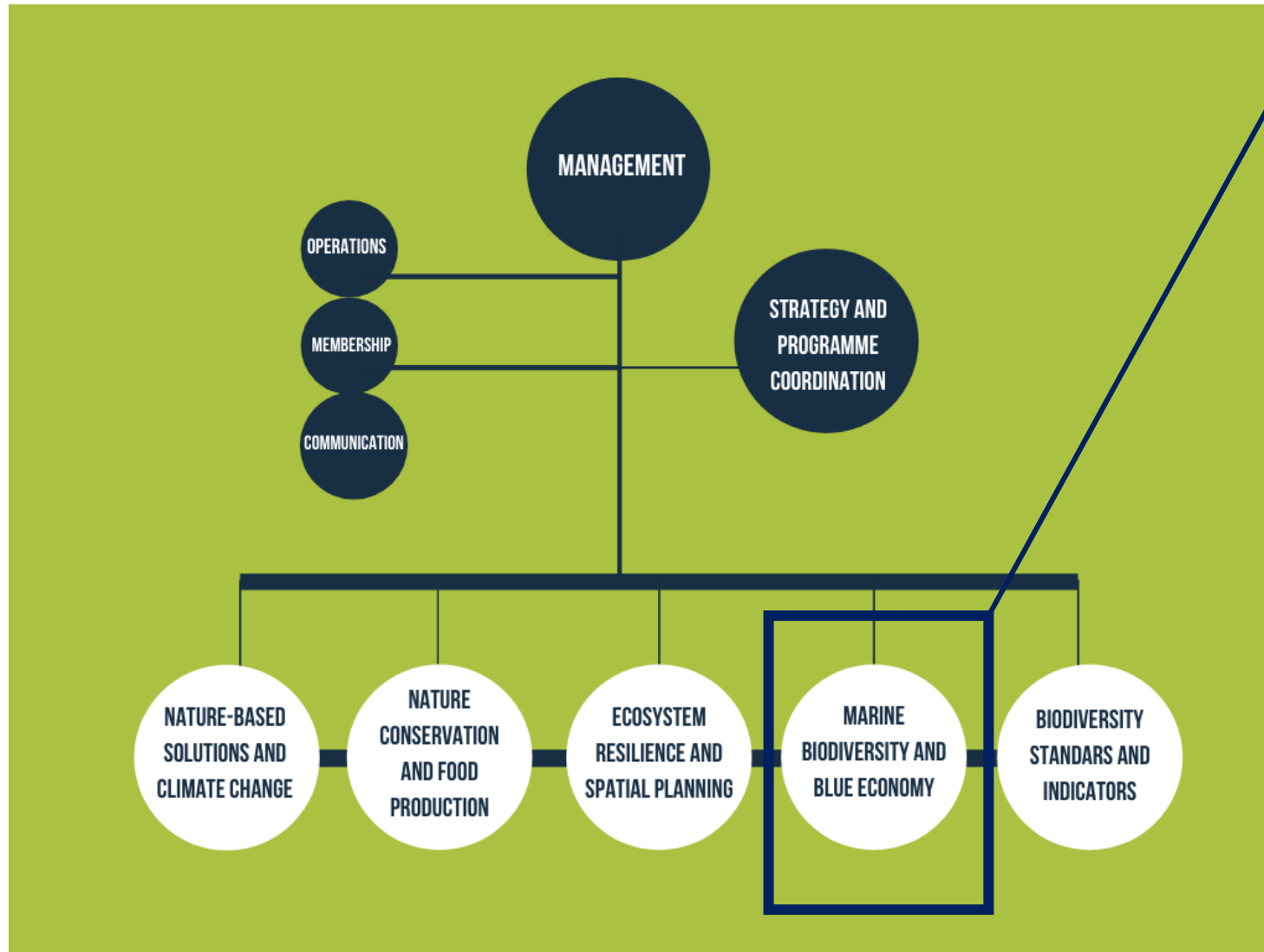
Posidonia in the Mediterranean:

An overview of IUCN-Med's initiatives in the region

IUCN in the Mediterranean: Our approach



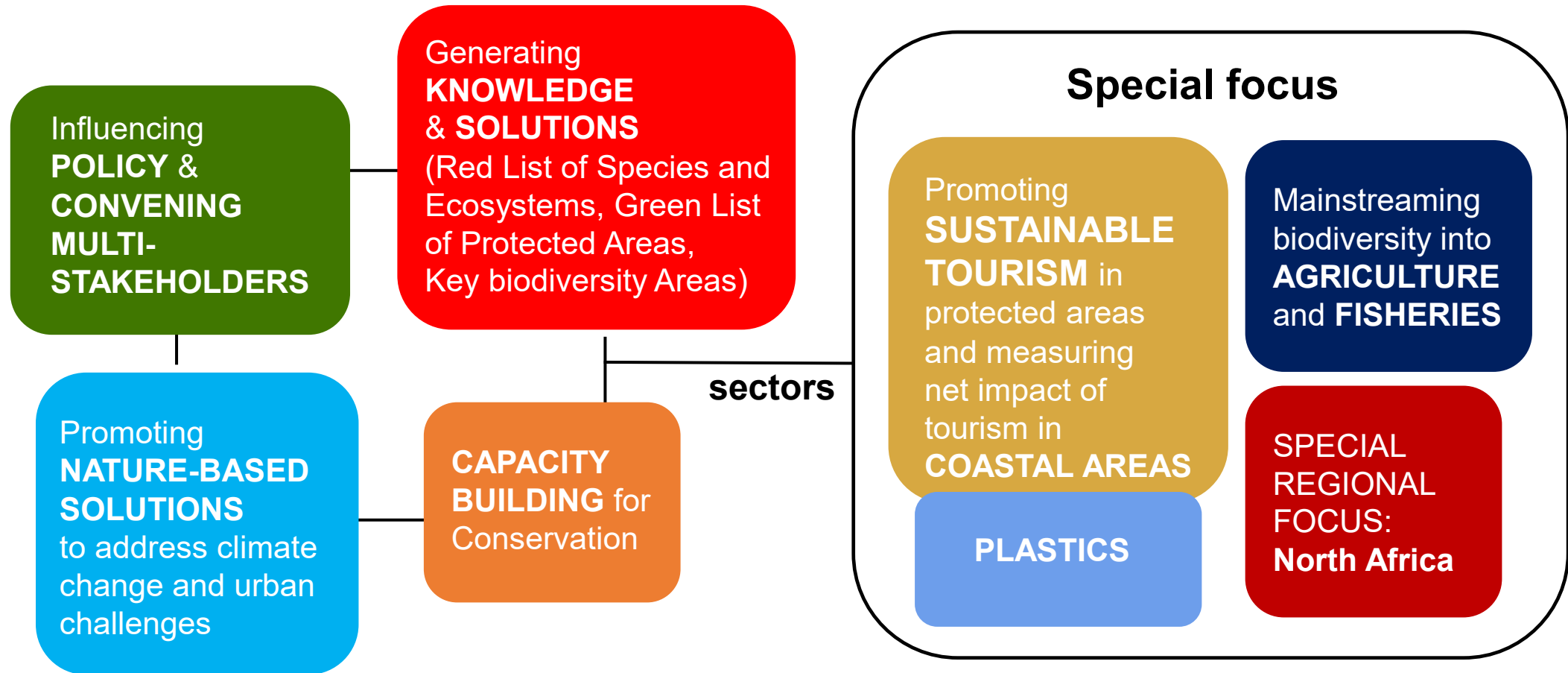
IUCN in the Mediterranean: Our approach



Marine Biodiversity and Blue Economy strategic line

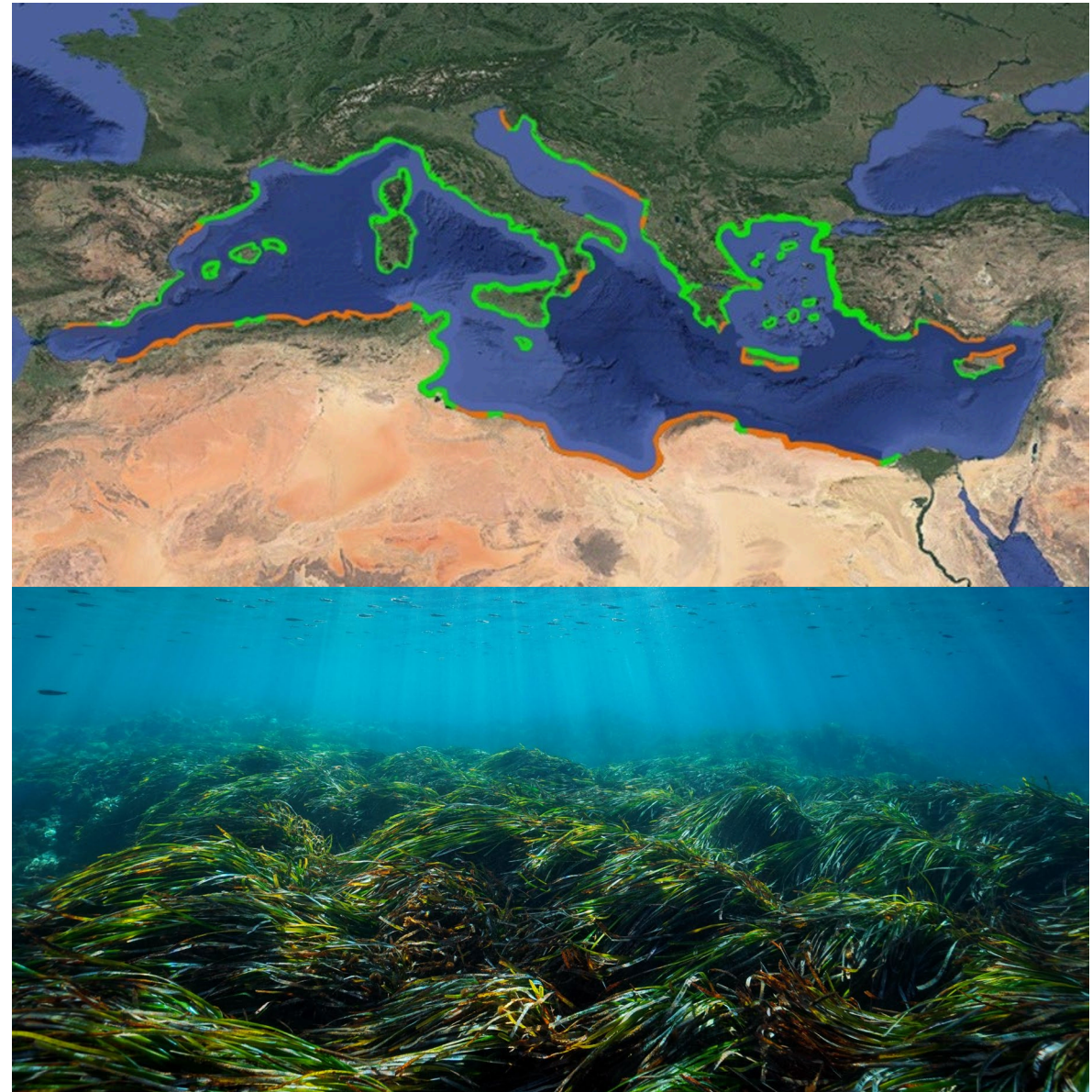
- Blue Carbon
- *Posidonia oceanica*
- Marine ecosystems
- MPAs & OECMS
- Ecosystems and species
 - Mediterranean Monk Seal
 - *Pinna nobilis*
- Marine pollution: Plastics
- Governance and Policies

IUCN in the Mediterranean: Our approach



Posidonia oceanica: The Amazon of the Mediterranean

- **Endemic** to the Mediterranean basin
- **Dense and extensive meadows** up to depths of 40-45m
- **Slow growth rate** of only a few cm/year
- Distribution **throughout the entire Mediterranean basin**
- **High carbon storage capacity**, particularly over the long term
- **Main threats:** Anchoring and recreational boating, coastal development (beach nourishment), pollution and contamination, plastics and marine debris, invasive species, climate change effects (e.g. temperature rise)



Where it started: LIFE+ POSIDONIA ANDALUCIA (2011-2016)

Objective: **Conservation of *Posidonia oceanica* meadows on the coast of Andalusia, Spain**

- Halt the loss of this key ecosystem on the Andalusian Mediterranean coasts
- Ensure long-term conservation through applied protective measures and informing coastal communities of the importance of seagrass meadows for their quality of life and sustainable development.



Results:

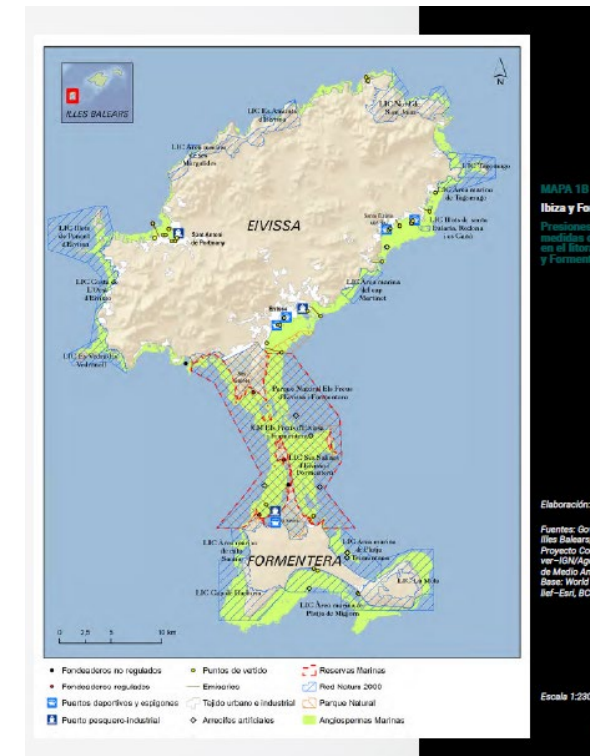
- ✓ Evaluation of state of *Posidonia* meadows along the Andalusian coastline
- ✓ Detailed mapping of existing meadows.
- ✓ Monitoring plan developed to allow early detection of the degradation of these ecosystems.



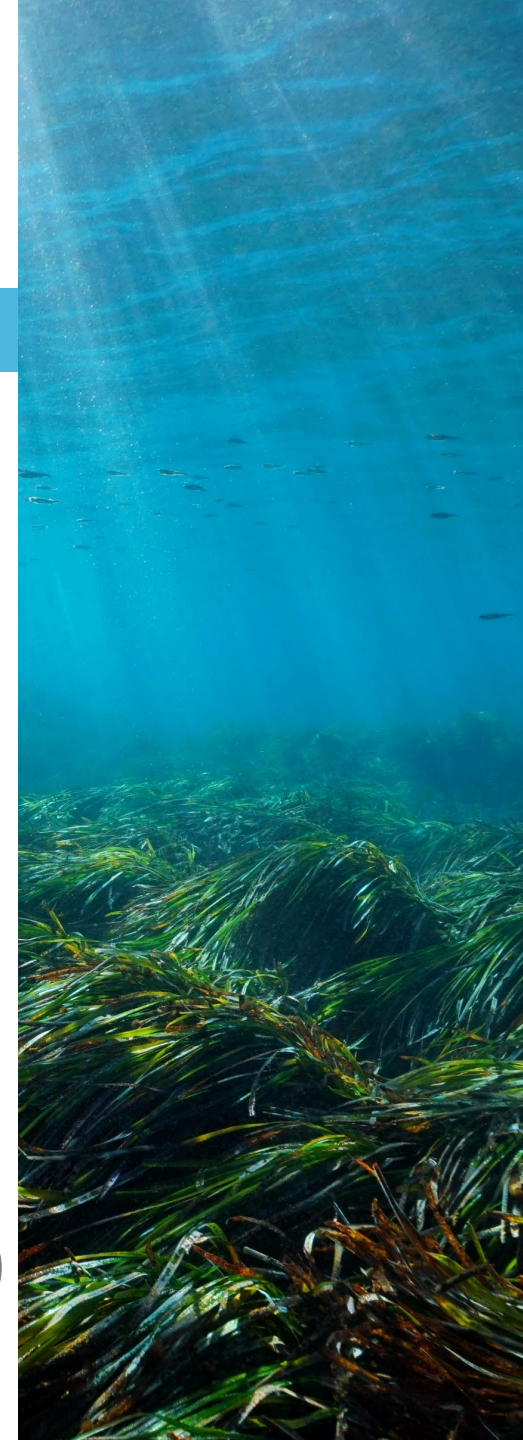
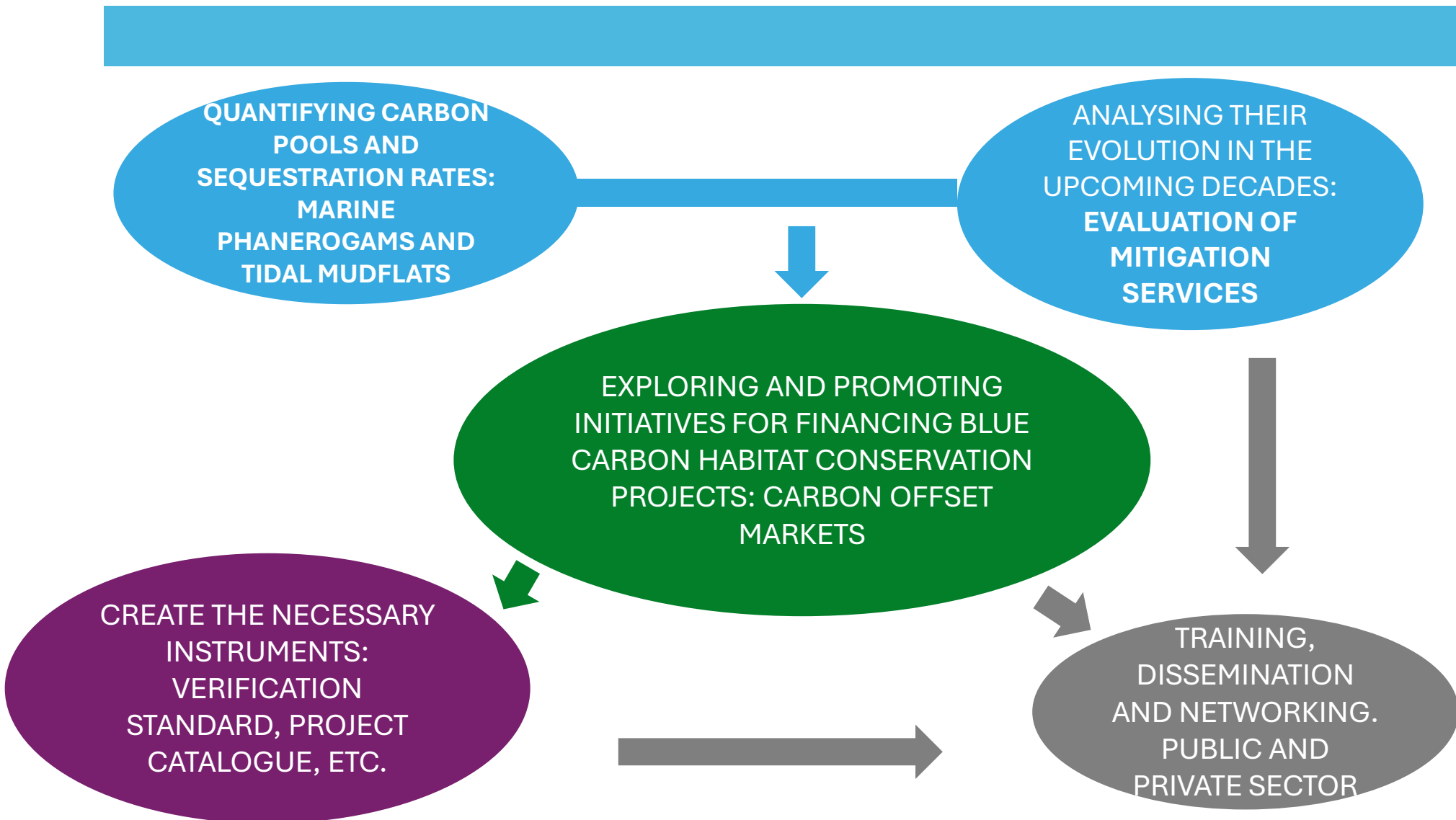


ATLAS

de las praderas marinas
de España



Collective work with over 89 institutions to present current and historical seagrass distributions, pressures and threats, conservation status, values and future work for each region in Spain (2016).



QUANTIFYING TO PREPARE THE INVENTORY OF ANDALUCIA BLUE CARBON



Strong science sampling design

11 sites, 50 stations

160 seagrass and soil marsh cores and aboveground samples

20 variables analyzed

In more than 7000 soil samples

Cartography of the wetlands and other seagrasses



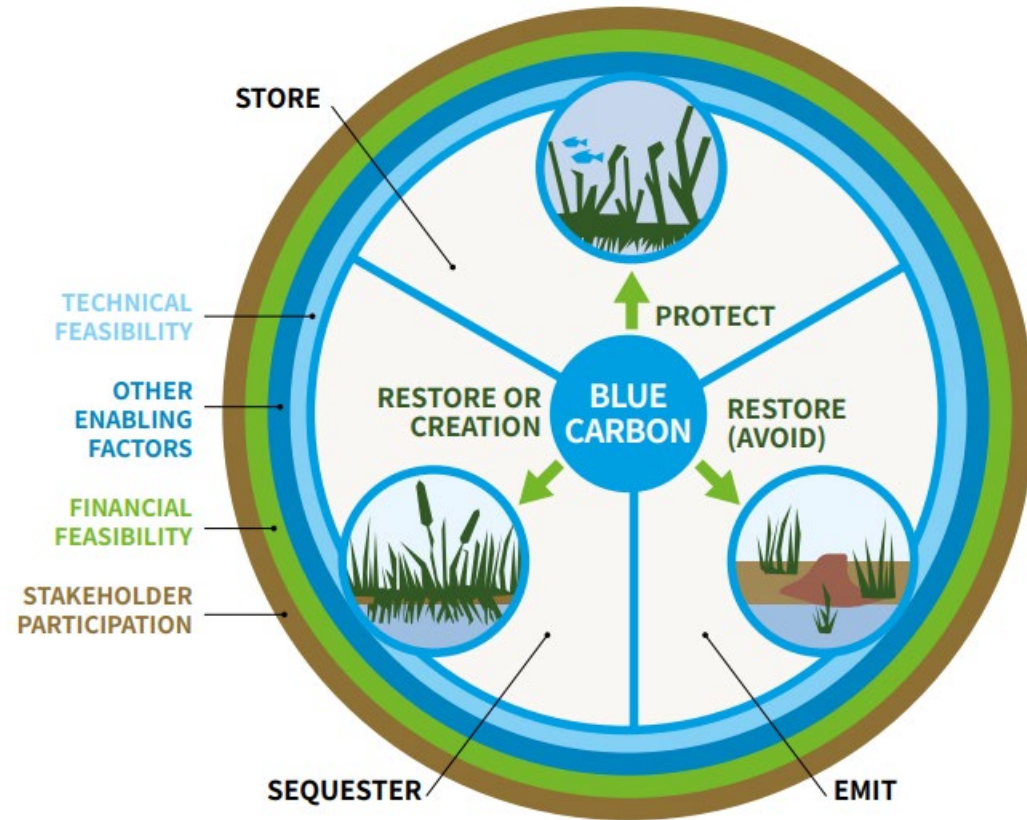
- **Definition and prioritization of criteria for the definition of BC projects and selection of specific criteria for wetlands and Posidonia**
- **Definition of projects and prioritization**



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



PLANNING A BLUE CARBON PROJECT



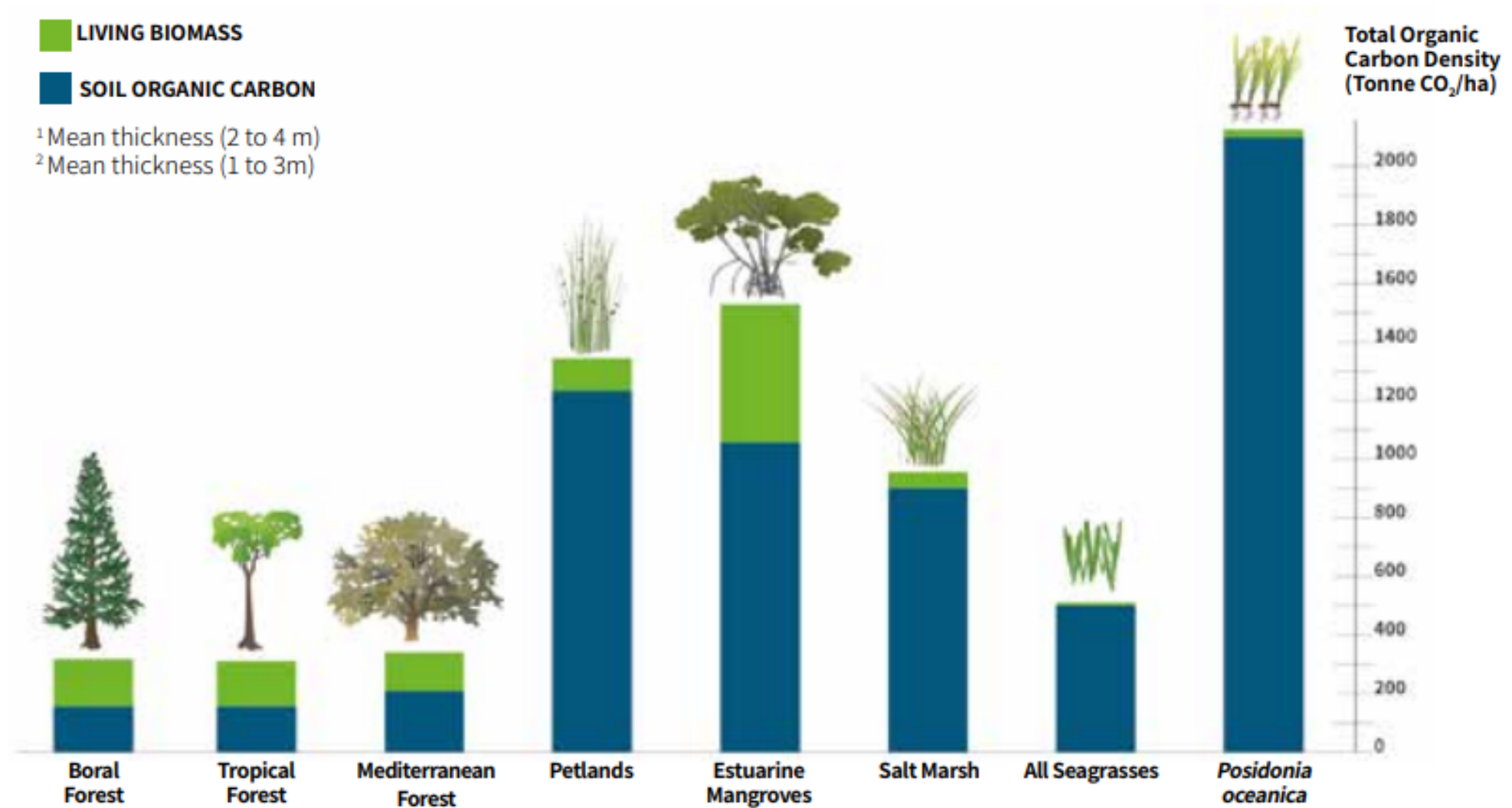


Figure 5: Comparison of soil C_{org} storage in the top metre of the soil with total ecosystem C_{org} storage for major ecosystem types. Here, the seagrass *Posidonia oceanica* is a unique seagrass in terms of the quantity of organic carbon that can be stored in its sediments and mat. Soil Data: Top meter sediment [12, 111, 112, 113].

Solutions for reducing the risk of coastal erosion



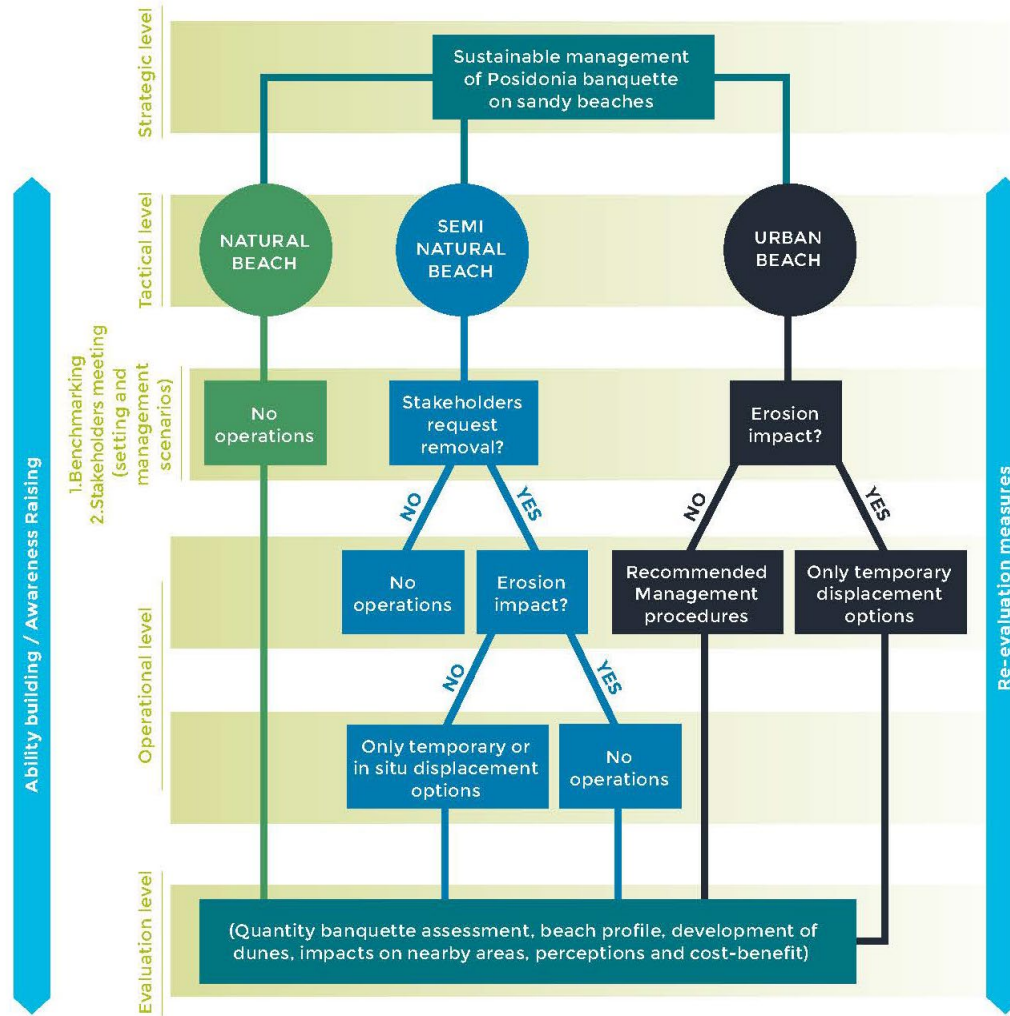
Main objectives:

- Analyse management practices in Mediterranean coastal areas with *Posidonia oceanica*
- Provide a synthesis of socio-economic assessment of ecosystem services
- Integrate and adapt tools for sustainable management of beach-dune systems
- Develop a set of best practices for a holistic and integrated approach to management
- Propose a governance model and common strategy for the management of beach-dune systems in Natura2000 marine areas and other coastal protected areas.



Cyprus, France, Greece, Italy, Spain

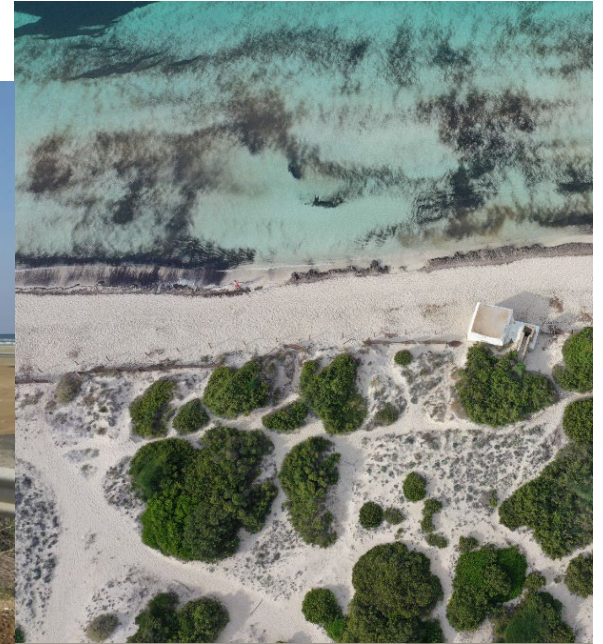
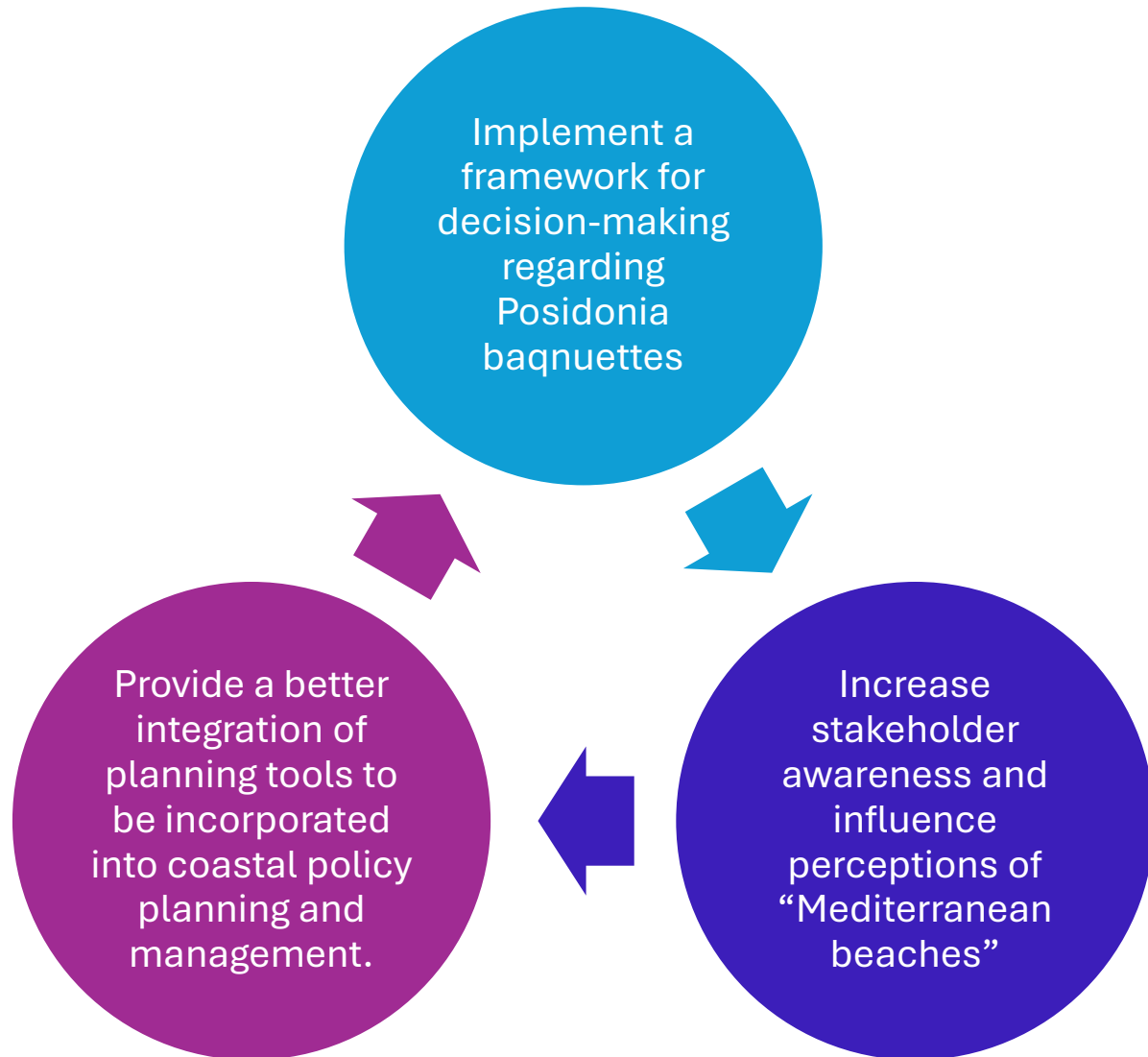
Governance framework for decision making on Posidonia banquettes on sandy beaches.



Governance framework for decision-making regarding Posidonia banquettes



Governance and management of Mediterranean Posidonia beach-dune systems (2019-2022)



What we achieved

**Knowledge
transfer**

Improve
stakeholders'
**knowledge and
capacities**

Toolbox

**Transferable
management
methods** in the
Mediterranean

**Policy
recommendations**

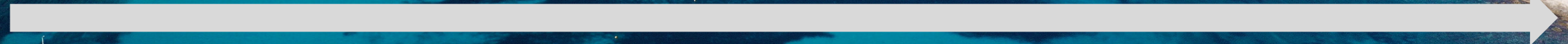
**Legislative
framework** for
sustainable
management
practices

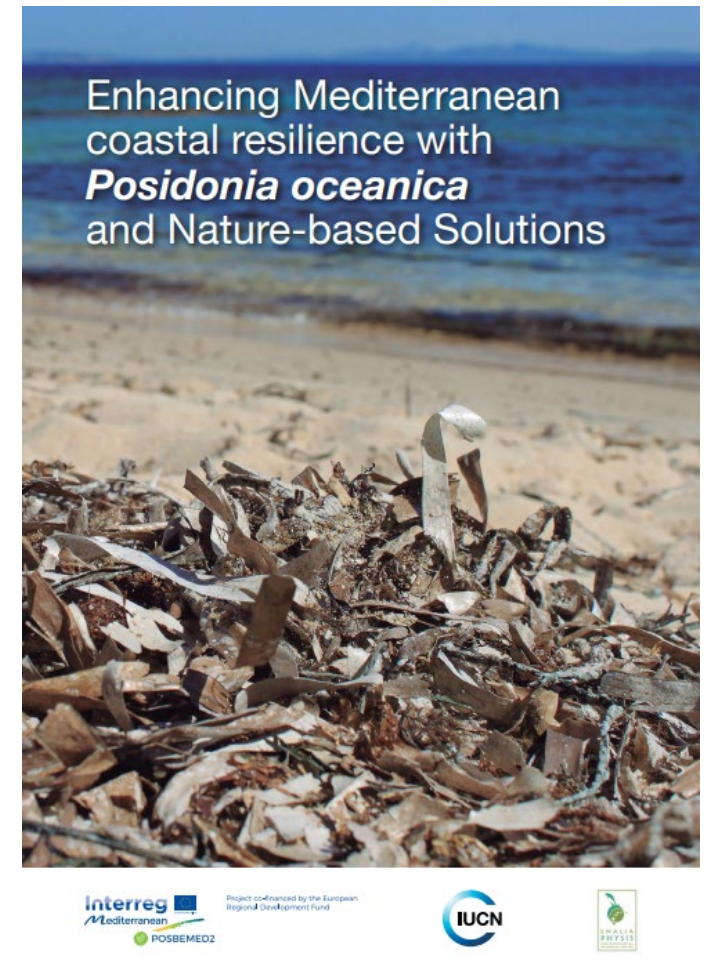
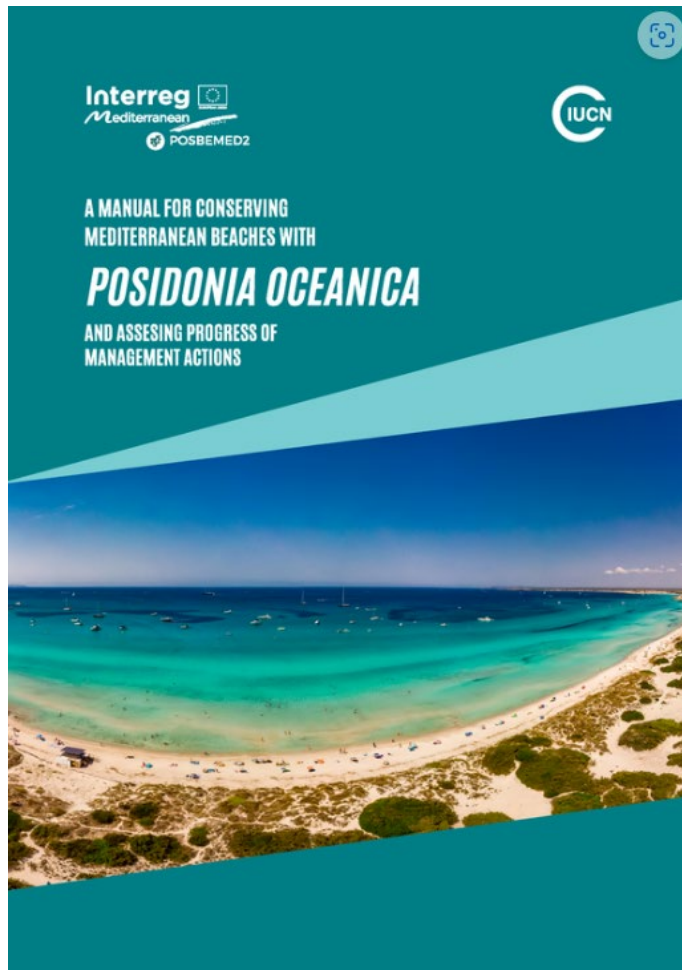
**Action
framework
plans**

Improve
**governance,
management
measures** and the
overall **resilience** of
Posidonia coasts

**Joint charter
of
commitments**

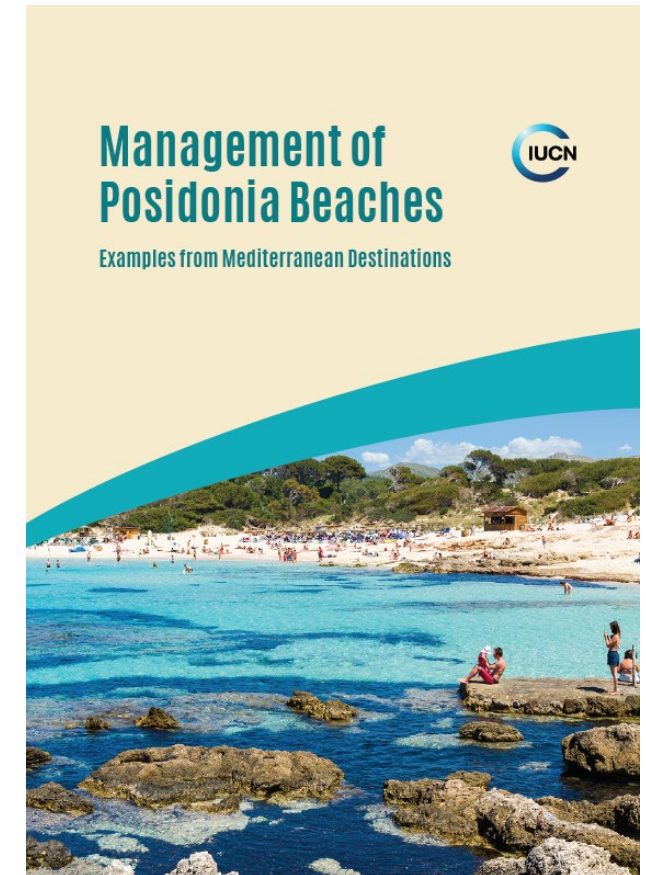
**Stable and
long-term
collaboration** to
promote
sustainable
practices beyond
the project





Valorising natural Mediterranean beaches as a tourism asset (2022-2023)

- Engaging with the tourism sector (destination managers, beach managers, regional initiatives) to highlight the unique value of Mediterranean Posidonia beaches as a natural asset
- Launch of collaboration for Ecosystem management in hotels (Iberostar Djerba, Tunisia)
- Capacity building:
 - Mediterranean-wide regional webinar (June 2023)
 - In-person workshop in Djerba, Tunisia (November 2023)



Filling data gaps in the southern Mediterranean: Case Tunisia

Nature-based
Solutions in a post-
Covid-19 Project
(Kerkennah Islands,
2019-2022)

Exchange visits
between Tunisia and
Spain to learn about
best practices
(2023-2024)

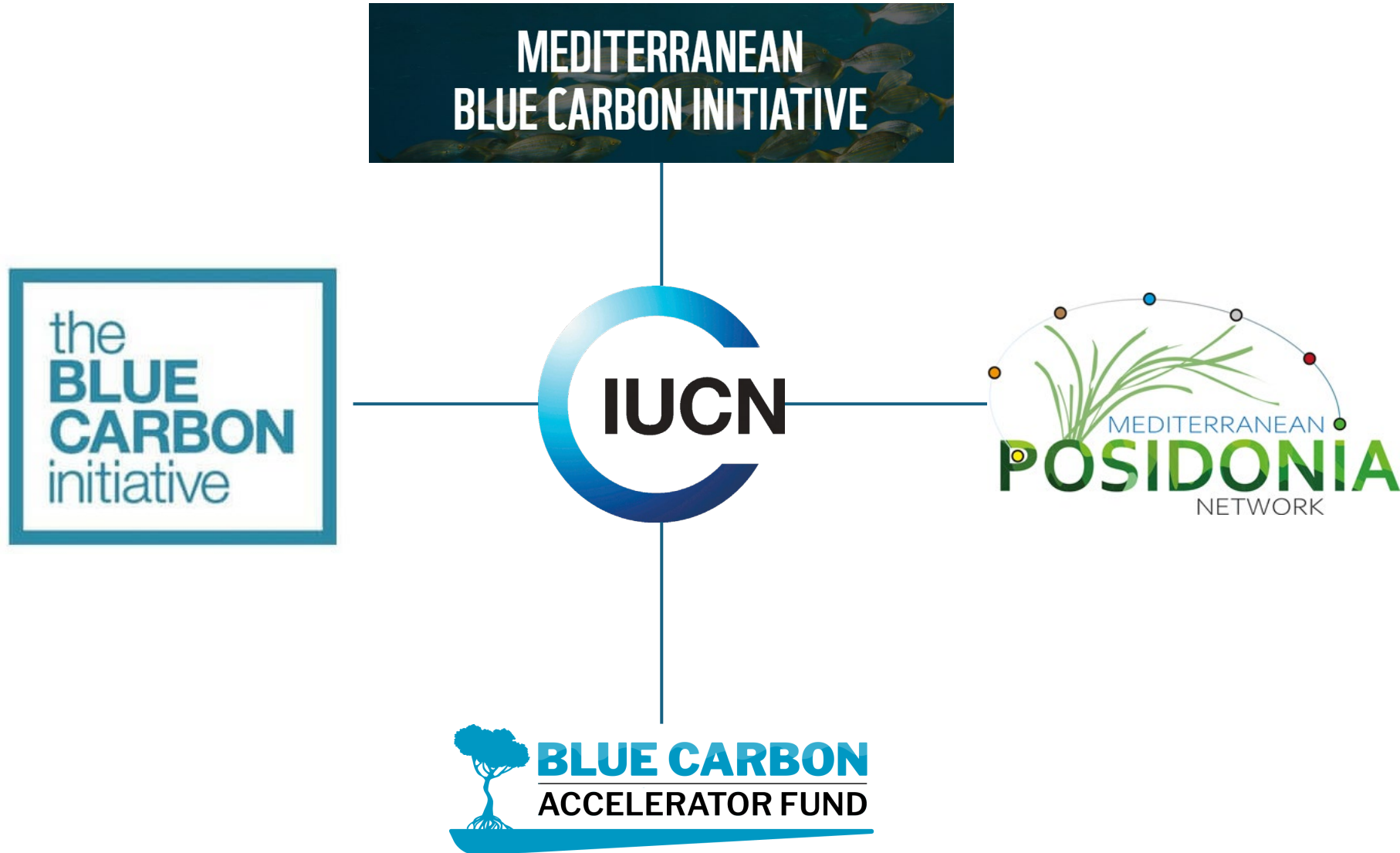
Collaborations for
sustainable
ecosystem
management in
hotels (2023)

Evaluation of
Posidonia carbon
sinks in Kerkennah
Islands (2021)

Evaluation of
Nature-based
Solutions and Blue
Carbon sinks in
Tunisia (2022)

For a Resilient
Future:
Mainstreaming NbS
for Blue Carbon
ecosystems in the
Mediterranean
(Workshop Nov.
2023 – Monastir)

Supporting regional and international initiatives



Blue Carbon Strategy for the Mediterranean

- **Regional (Mediterranean) strategy**
- Conservation of blue carbon ecosystems and supporting their **adaptation to climate change**, including passive restoration actions
- **Builds on existing policy frameworks** and planning and management strategies
- Embeds blue carbon as **a key element of coastal and marine policy planning and management**
- Promotes pathways for **blue carbon investment, financial mechanisms** and **blue carbon markets** and **blue carbon certification schemes**
- Progresses **long-term blue carbon research and projects**



POSIDONIA – A MEDITERRANEAN TREASURE UNDER THREAT

