

# Opportunities for seagrass blue carbon in Katic MPA

Thomas Binet, [Binet.thomas@gmail.com](mailto:Binet.thomas@gmail.com)

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# What is blue carbon ?

- Carbon dioxide captured and stored in coastal ecosystems
- Play a role as “carbon sink” and thus contribute to atmospheric carbon reduction
- Seagrass meadows, mangrove and saltmarshes are key blue carbon ecosystems
- Blue carbon project can improve this capture and storage of carbon and compensate for carbon emission at an international level



# What is the potential for seagrass blue carbon in the med?

- 1.35 to 5 millions hectares of seagrass in the med
- Rate of loss of up to 5% in the med with *Posidonia* as the most threatened ecosystem (net loss of density of 20% over 10 years) by human activities (pollution, mechanical actions – trawling anchoring, dredging etc.) and natural causes (temperature rise etc.)
- Potential lies in avoided degradation : 4 tons of CO<sub>2</sub>/ha/yr for capture and 500 tons of storage



# Why are marine protected areas key sites for BC projects implementation?

- Gather resources and capacities for BC activities: mapping, monitoring, evaluation, etc.
- Benefit from management measures enforced (reduce costs associated to BC development – transaction and opportunity costs)
- Benefit from good scientific information for initial assessment



# What are the opportunities for BC?

- The most common carbon compensation scheme is compliance market from the UNFCCC and Kyoto Protocol
- Clean Development Mechanisms for developing countries to generate carbon credits to be sold to carbon producers (developed countries)
- REDD+ mechanism for reduced deforestation
- NAMAs: national appropriate mitigation actions
- Afforestation/deforestation methodology was developed for mangrove (but very few projects exist)

**But these do not consider blue carbon as a priority** (not even in the Cancun agreement)



# What are the opportunities for BC?

- A voluntary market has developed for companies and individuals
- Standards have included mangrove and wetlands in carbon compensation projects
- Ocean Foundation has launched an independent seagrass blue carbon market



The BC opportunities remain in voluntary markets for now

# What are the opportunities for BC in Katic MPA ?

- An independent project of seagrass BC assessed internally:
  - Requires sound management and monitoring
  - Requires good communication tools and transparency
- The inclusion of Katic as one BC project managed by a regional standard:
  - Benefit from regional expertise and sound methodology
  - Benefit from broader outreach (and more buyers)

# What would be the benefits from BC in Katic?

- Outreach: The first blue carbon project in the Med !
- BC project can generate 6 to 23 euros /m<sup>2</sup>/yr, which can be several thousands of euros per year, depending on the surface covered
- Benefit from a better scientific monitoring of seagrass and improved management measures
- Protection will conserve other seagrass services:
  - Habitat and nursery to most fisheries species
  - Ecotourism and diving opportunities
  - Erosion control
  - Water and waste treatment
  - Aesthetic value



# What are the main steps for BC project?

1. Get a detailed knowledge of initial state: total surface of seagrass and corresponding health status at year 0
2. Draft avoided degradation plan: identify actions to be implemented and required capacities for control and management
3. In parallel, choose the BC option (independent/regional) and get the partners involved
4. Develop adapted monitoring and evaluation of actions and results
5. Organize sale of credits