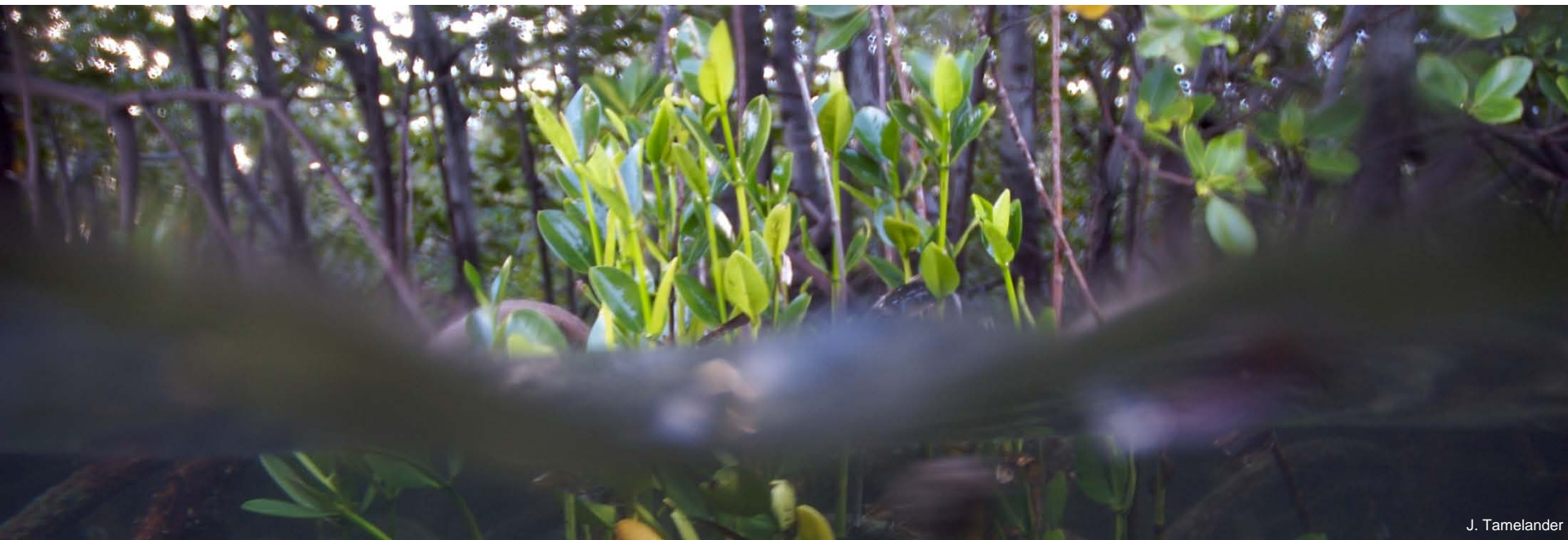


International Blue Carbon Policy Working Group

2nd workshop

10-11 January 2012

European Parliament, Brussels



J. Tamelander

International Blue Carbon Policy Working Group

Overview & meeting outcomes



What is Blue Carbon?

- Carbon stored, sequestered or released by coastal and marine ecosystems

→ Focus on coastal ecosystems

Mangroves

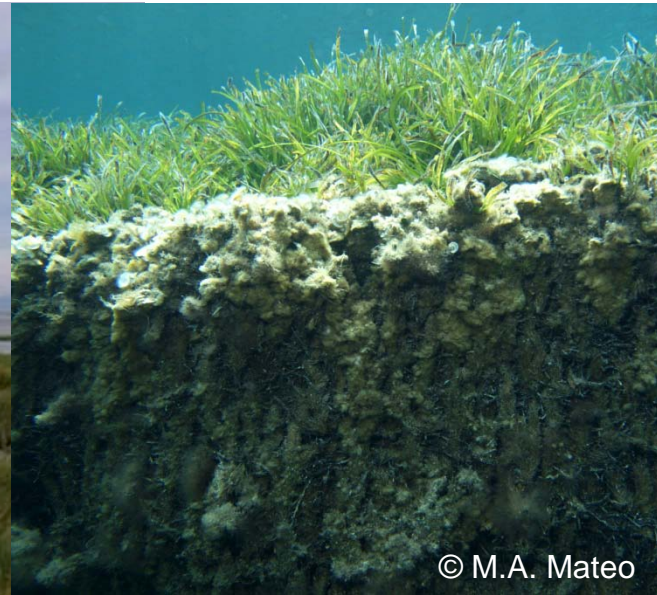


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Salt marshes



Seagrass beds



© M.A. Mateo

Why be concerned about Blue Carbon?

- Storage & ongoing sequestration of carbon in plants and sediment
- High rates per unit area – especial in sediment
- Emissions due to rapid loss of these ecosystems through human pressures
- Lack of comprehensive accounting of coastal carbon sinks and sources in national and international climate change efforts



nature
geoscience

LETTERS

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Mangroves among the most carbon-rich forests in the tropics

Daniel C. Donato¹*, J. Boone Kauffman², Daniel Muriyaro³, Sofyan Kurnianto³, Melanie Stidham⁴ and Markku Kanninen⁵

Opportunities & benefits of Blue Carbon activities

- Incentive for climate change mitigation activities
- Enhanced and more sustainable management of these systems
- Local communities engagement, employment & improved resource management and yields (e.g. adjacent fisheries)
- Climate Change Adaptation
- Conservation of biodiversity



What needs to be done?

- Need for a comprehensive approach to natural carbon management for climate change mitigation
- Provide scientific knowledge base and technical methods
- Develop policy and incentives mechanisms supporting these activities
- Explore opportunity to access currently largely unused climate change mitigation finance for coastal Blue Carbon activities
- Identify other incentive and finance opportunities for coastal Blue Carbon activities
- Create a comprehensive and coordinated global platform

The Blue Carbon Initiative

Overarching goal: Increased conservation, restoration and sustainable management of coastal Blue Carbon ecosystems

Minimizing Carbon Emissions and Maximizing Carbon Sequestration and Storage by Seagrasses, Tidal Marshes, Mangroves

Recommendations from the International Working Group on Coastal "Blue" Carbon

The natural coastal ecosystems of seagrasses, tidal marshes, and mangroves sequester and store large quantities of carbon in both the plants and in the sediment below them. If destroyed, degraded or lost these coastal ecosystems become sources of carbon dioxide emitted into the ocean and atmosphere. Much of this emitted carbon is thousands of years old and other processes in the ecosystem do not balance its rapid release into the oceans and atmosphere. Given the large quantity of carbon in coastal ecosystems relative to their area, these emissions are likely of global significance. This loss of a globally significant carbon pool is additional to the other recognized critical ecosystem services provided by coastal ecosystems.

Seagrasses, tidal marshes, and mangroves are being degraded and destroyed at a rapid pace along the world's coastlines. There is a need for active and effective measures to protect the large and vulnerable carbon pools stored in these systems, and to restore and reestablish their carbon sequestration capacity. **Immediate steps can be taken now by coastal communities, managers, policy makers and the scientific community.**

03/11

CONSERVATION
INTERNATIONAL



THE BLUE CARBON INITIATIVE: The Importance of Coastal Ecosystems for Mitigating Climate Change

Human-caused carbon in the atmosphere and oceans is the most significant cause of global climate change. Curbing climate change means both removing carbon from the atmosphere and oceans and avoiding new carbon emissions. An important piece of this solution is preserving and restoring coastal ecosystems.

What is "Blue Carbon"?

Blue Carbon is the carbon stored by coastal and ocean ecosystems. In particular, coastal ecosystems such as tidal marshes, mangroves, and seagrasses remove carbon from the atmosphere and ocean, storing it in plants and depositing it in the sediment below them by natural processes. These coastal ecosystems are very efficient at sequestering and storing carbon - each square mile of these systems can remove carbon from the atmosphere and oceans at rates higher than each square mile of mature tropical forests. Furthermore, coastal ecosystems have been found to store huge quantities of carbon in organic rich sediments - up to 5 times more carbon than many temperate and tropical forests. These ecosystems are found in all continents, except Antarctica.



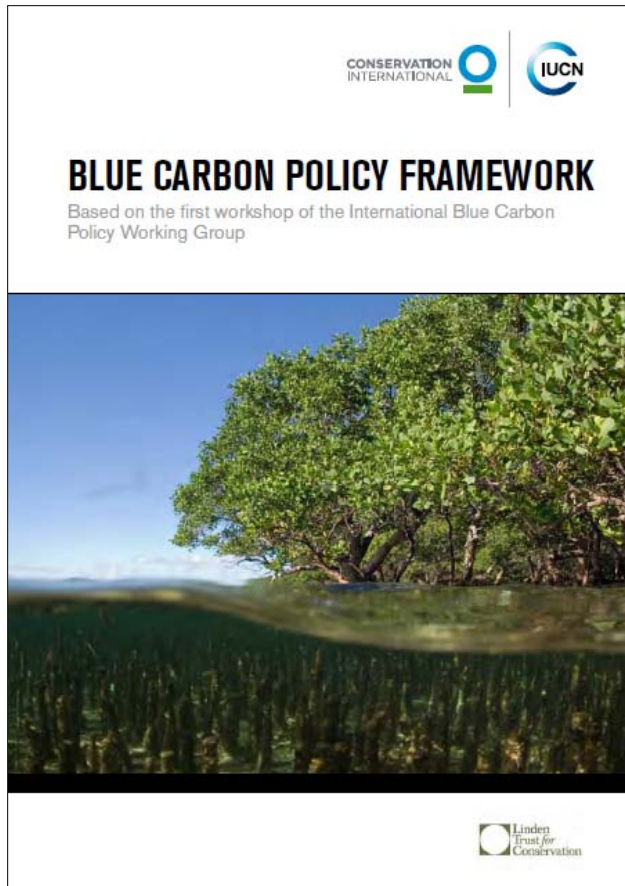
- International Blue Carbon Science Working Group
- International Blue Carbon Policy Working Group
- Blue Carbon research projects
- Demonstration projects
- Capacity building

Blue Carbon Policy Working Group

- Provide guidance for Blue Carbon policy and incentives mechanisms that support and finance management of coastal ecosystems for climate change mitigation:
 - Identify opportunities, limits and risks of advancing Blue Carbon in different international climate, coastal and ocean fora;
 - Identify activities and stakeholders;
 - Identify important milestones for achieving policy change;
 - Identify areas of current policy and economic research gaps.

First workshop in Arlington, VA 12-14 July, 2011

Blue Carbon Policy Framework



- Defines activities and a timeline to increase policy development, coastal planning and management activities that support and promote avoided degradation, conservation, restoration and sustainable use of coastal Blue Carbon *systems*;
- **Blue Carbon ≠ new or separate policy or financing scheme; inclusion of Blue Carbon activities into existing policy and financing processes whenever possible**

Other activities

- Suggested coastal carbon experts for **IPCC Task Force** to develop '2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands'
- Ensure **literature cut-off date** for publications for IPCC AR5 and IPCC Task Force on supplementary guidelines for wetland (ongoing)
- Identify need for Blue Carbon peer-reviewed science papers relevant for IPCC and other policy processes (Science Working Group)
- Submitted joint text to **UNFCCC SBSTA** - developments in research activities relevant to the needs of the Convention/research dialogue
- **Raised awareness** on coastal ecosystem management for climate change mitigation at relevant meetings, e.g. UNFCCC COP17
- **Provide relevant information** into other international fora: CBD, Ramsar
- ... and many more by partners and other organizations

Workshop Objectives

1. Revise & update the activities outlined by the Blue Carbon Policy Framework
2. Identify priority activities and products to support integration of Blue Carbon into policy for a
3. Identify additional analysis (policy, economic, social, technical) needed for longer-term implementation of the Blue Carbon Policy Framework
4. Revise & enhance guidance for Blue Carbon demonstration projects

Workshop Products

- Workshop report
 - Workshop background information
 - General discussion from the workshop & immediate activities
 - Discussion not for attribution
- Blue Carbon Policy Framework
 - Revised Blue Carbon recommendations
- Guidance for Blue Carbon demonstration projects
 - >> Review amongst workshop participants
 - >> Review by a few selected external experts