African biodiversity conservation in the climate change context

Pierre Failler

Conserving Aquatic Biodiversity in African Blue Economy

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How everybody is thinking about biodiversity now…

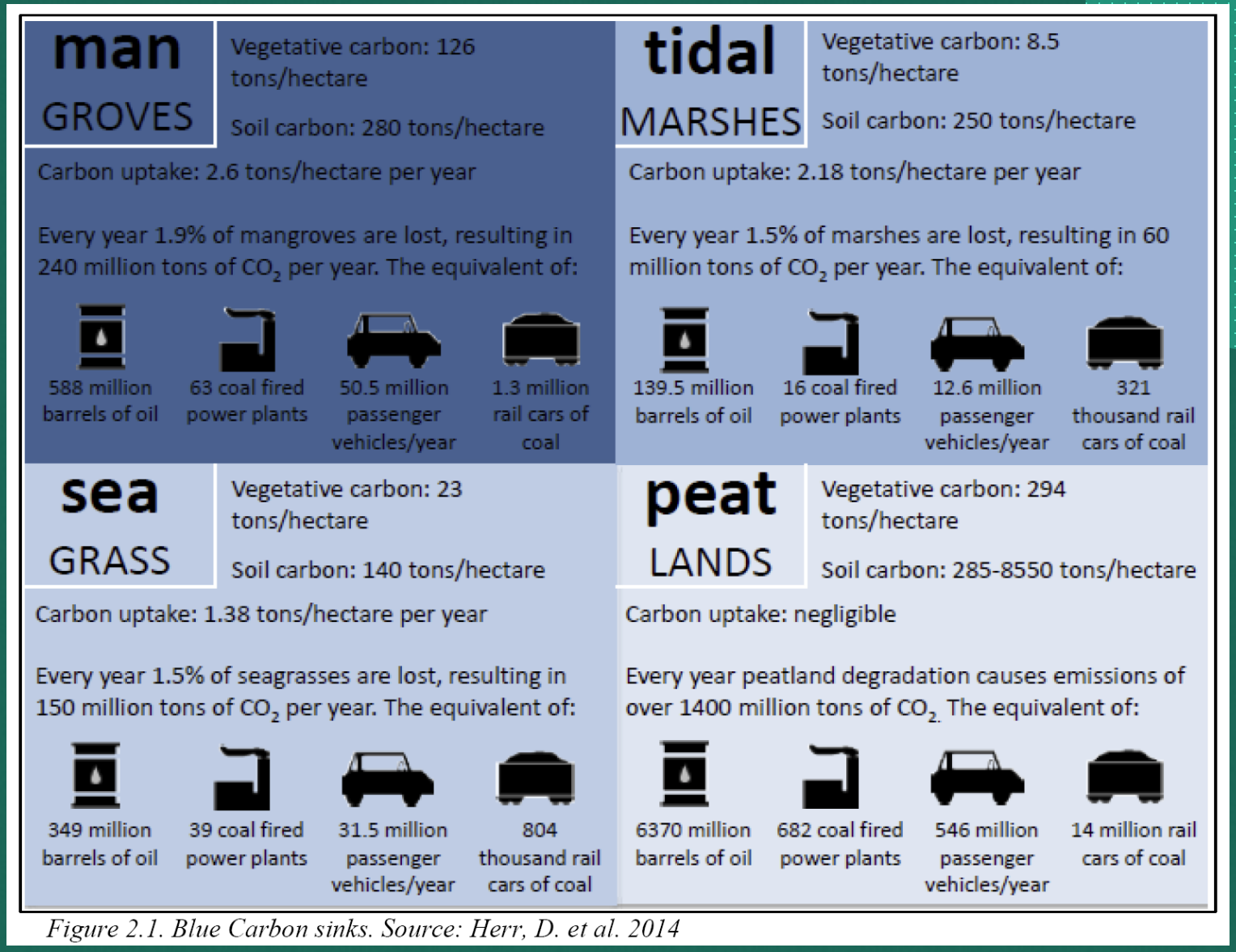
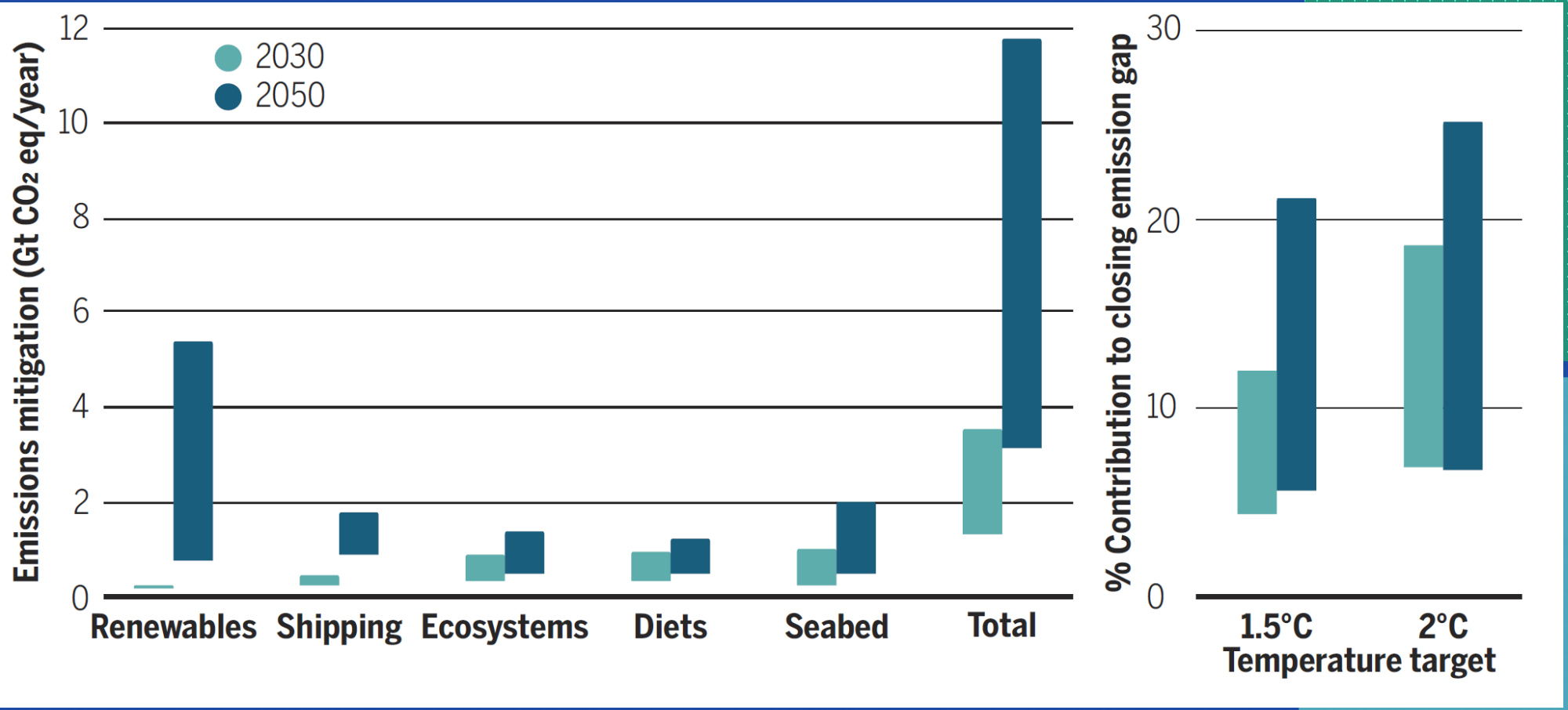


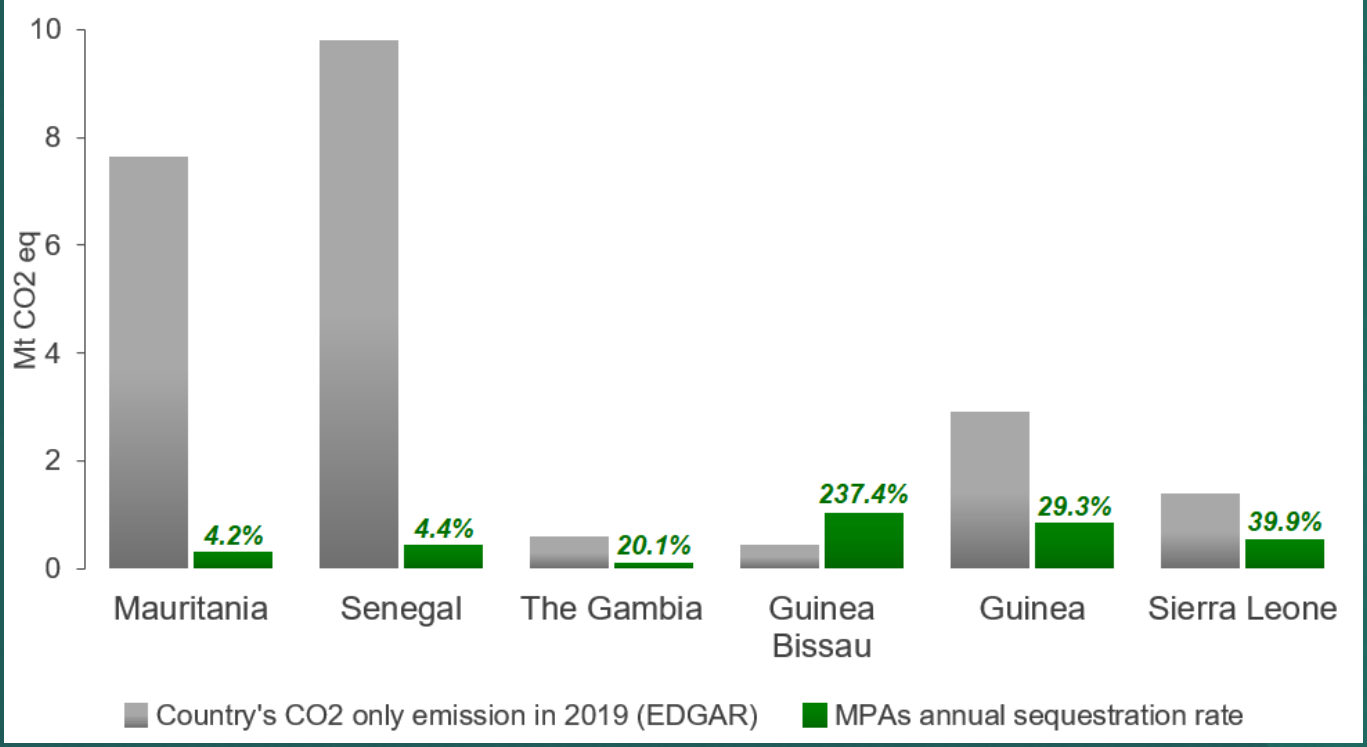
Figure 2.1. Blue Carbon sinks. Source: Herr, D. et al. 2014

Important ?



Ove Hoegh-Guldberg, Science 27 sept. 2019

Can be….



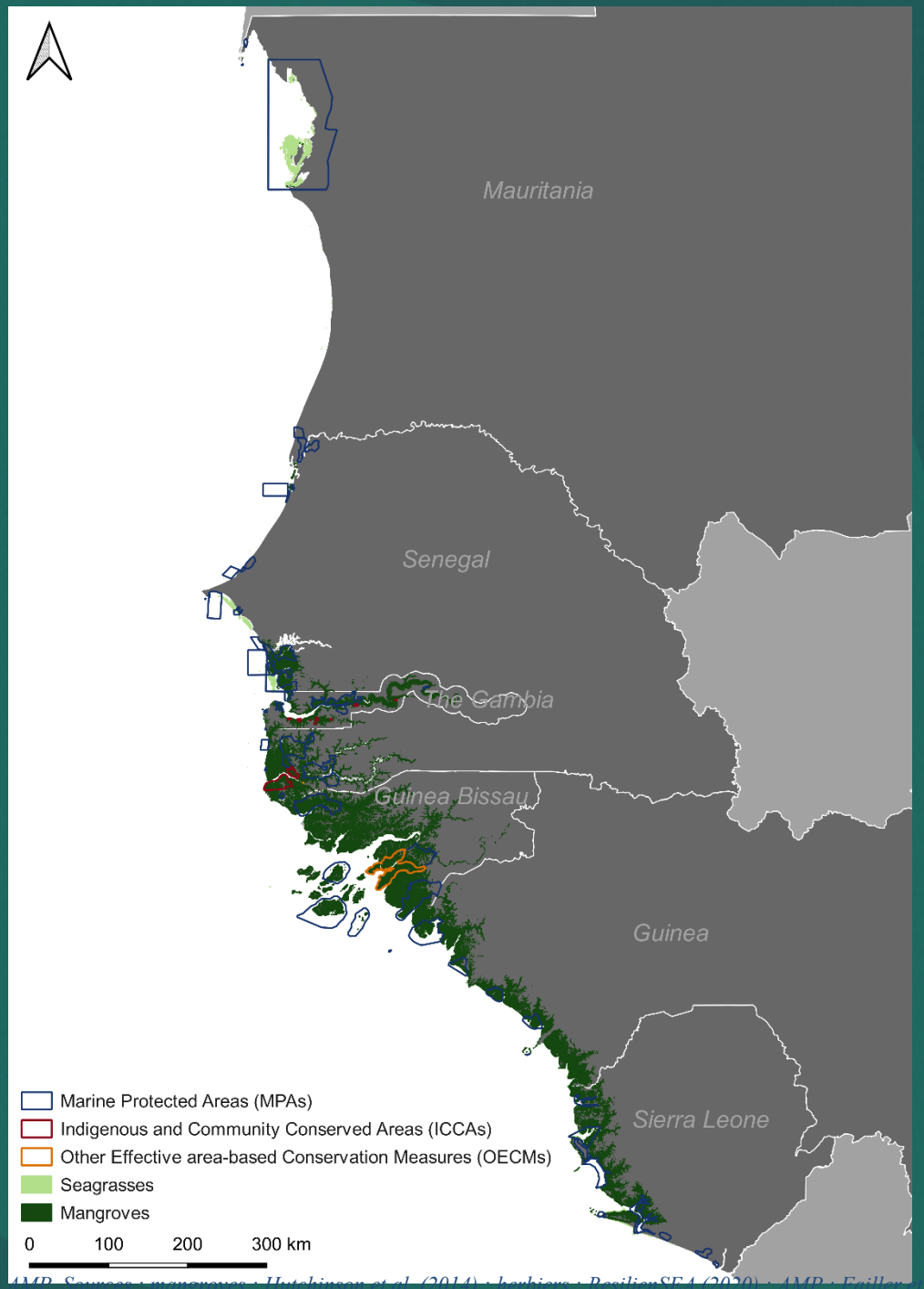


Figure 1 : Distribution des mangroves et des herbiers dans les pays de la zone d'étude et contour des AMP. Sources : mangroves : Hutchinson et al. (2014) ; herbiers : ResilienSEA (2020) ; AMP : Feillet et al.

Issues: lack of knowledge and poor health status

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Valuation of coastal ecosystem services in the Large Marine Ecosystems of Africa

Ewan Trégarot *, Grégoire Touron-Gardic, Cindy C. Cornet, Pierre Failler

Centre for Blue Governance, Department of Economics and Finance, Portsmouth Business School, University of Portsmouth, Richmond Building, Portland Street, Portsmouth, PO1 3DE, United Kingdom

Table 3

Economic value of marine ecosystem services per African Large Marine Ecosystem, expressed in million USD/year, adjusted by the habitat functionality index for each LME (estimated values), and comparison with reference values.

Large Marine Ecosystems (LME) and the additional region of Africa	Mangroves	Seagrass beds	Coral reefs	Kelp forests	Total
African Islands of the Indian Ocean	31	279	57,352	–	57,662
Agulhas Current LME	32,491	30,345	242,573	–	305,408
Arabian Sea LME	41	–	10,245	–	10,286
Benguela Current LME	3459	1876	–	445	5780
Canary Current LME	18,017	19,351	–	–	37,368
Guinea Current LME	30,282	45,379	–	–	75,661
Mediterranean Sea LME	–	15,822	–	–	15,822
Red Sea LME	426	21,752	206,411	–	228,589
Somali Coastal Current LME	5813	334	71,388	–	77,535
Total (reference values)	205,422	301,602	876,615	593	1,384,233
Total (estimated values)	90,561	135,137	587,967	445	814,111
%	44%	45%	67%	75%	59%

Biodiversity versus Climate change

- Money goes now to climate change not anymore to biodiversity
- Climate change should be used as a pretext to improve biodiversity

… And not to make selection of species that are highly climate change relevant (carbon sequestration and coastal protection)

- NBS (the biggest fashionable) should be carefully applied as we all know that Nature is the best NBS maker!