



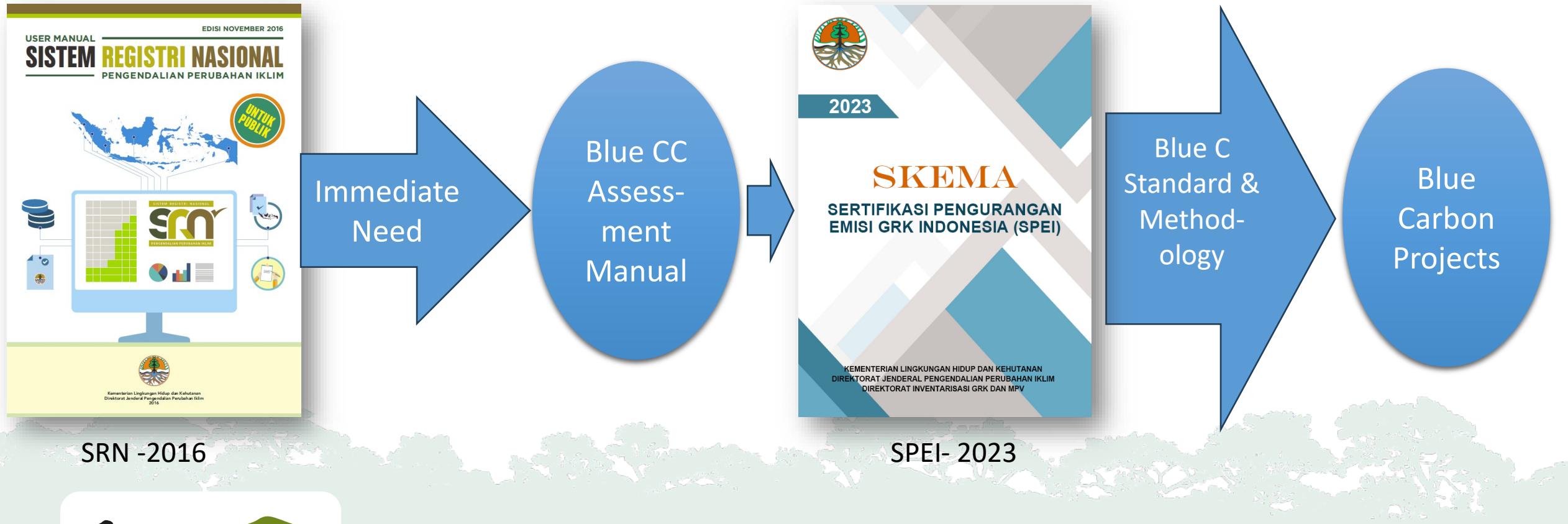
Governing BC Action

Daniel Murdiyarso

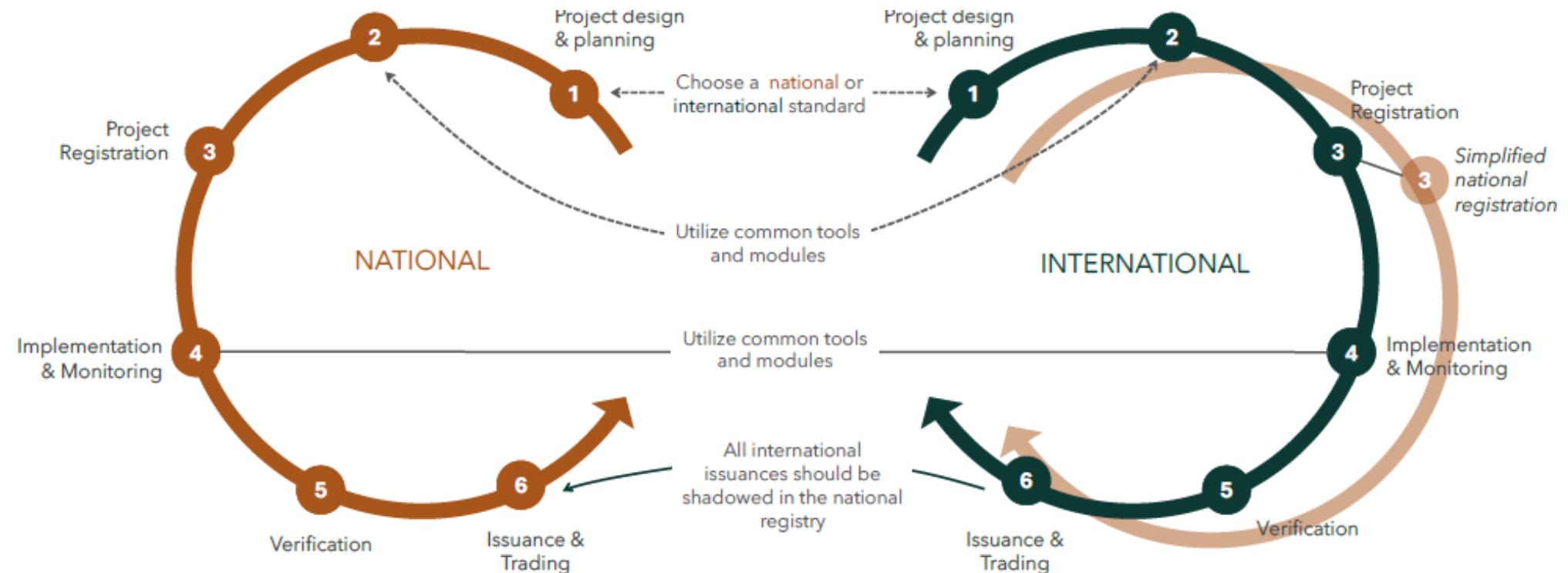




Policy Intervention



Harmonizing International Standards/Methodologies

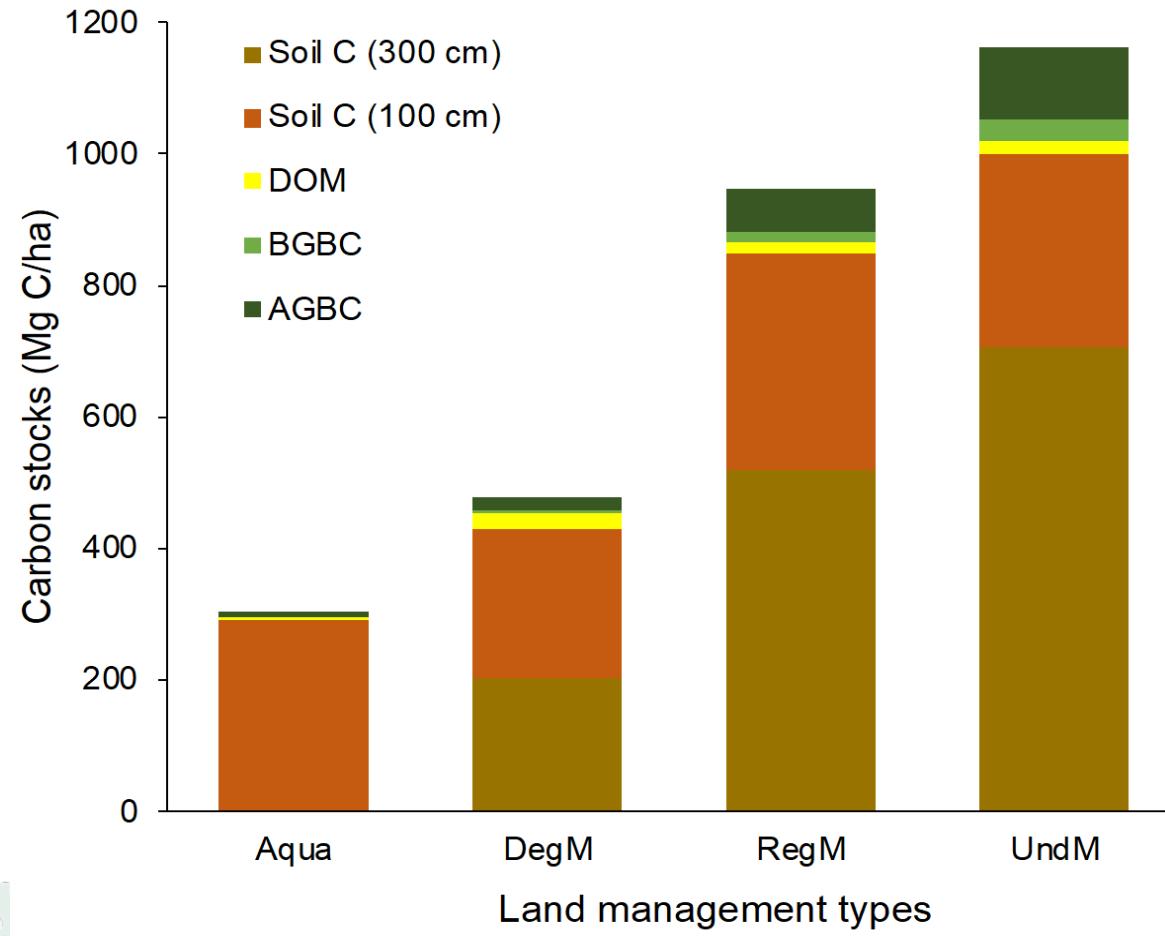
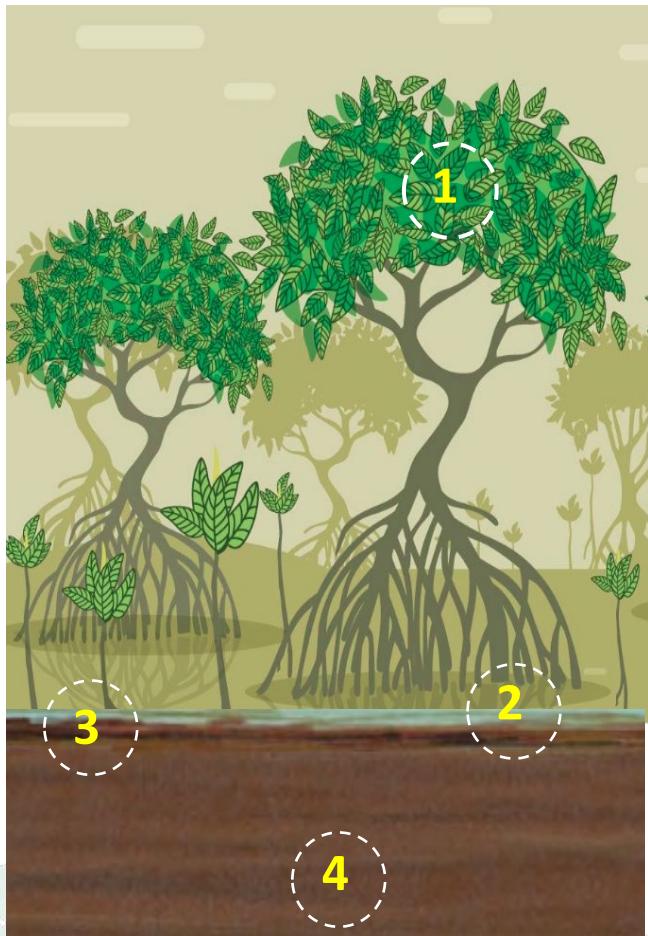


LEGEND

- ↔ Harmonized approaches between cycles
- Flow of beneficial information
- Future improvements to national cycle

Silvestrum Climate Associate, CIFOR-ICRAF 2024

Disproportionately large carbon storage



Murdiyarno et al. 2023 Carbon Balance & Manage



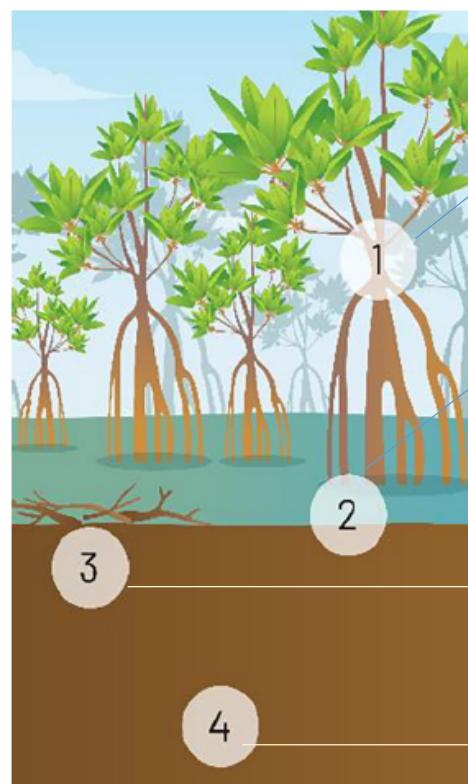
New Emission Factors

Refining greenhouse gas emission factors for Indonesian peatlands and mangroves

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Editorial Board Member B. L. Turner

For countries' emission-reduction efforts under the Paris Agreement, it is important to have accurate baseline emission/removals levels and reporting mechanisms. For Indonesia, which holds among the largest mangrove forest in the world, it is particularly important to produce high-accuracy greenhouse gas inventories at the national level/forest reference level. Here we refine greenhouse gas emission factors (EF) of peatland and mangrove forests in Indonesia. We used scientific challenges to support climate policy process of national emission reduction targets by 2030 and beyond. Based on the stock-difference and higher-tier EF for drained and rewetted peatland, peatland and mangrove on peatland to improve future greenhouse gas inventories. We suggest that these refinements will be essential for Forest and Other Land Use net sink by 2030 and earlier.

Nationally Determined Contributions | IPCC | nature-based

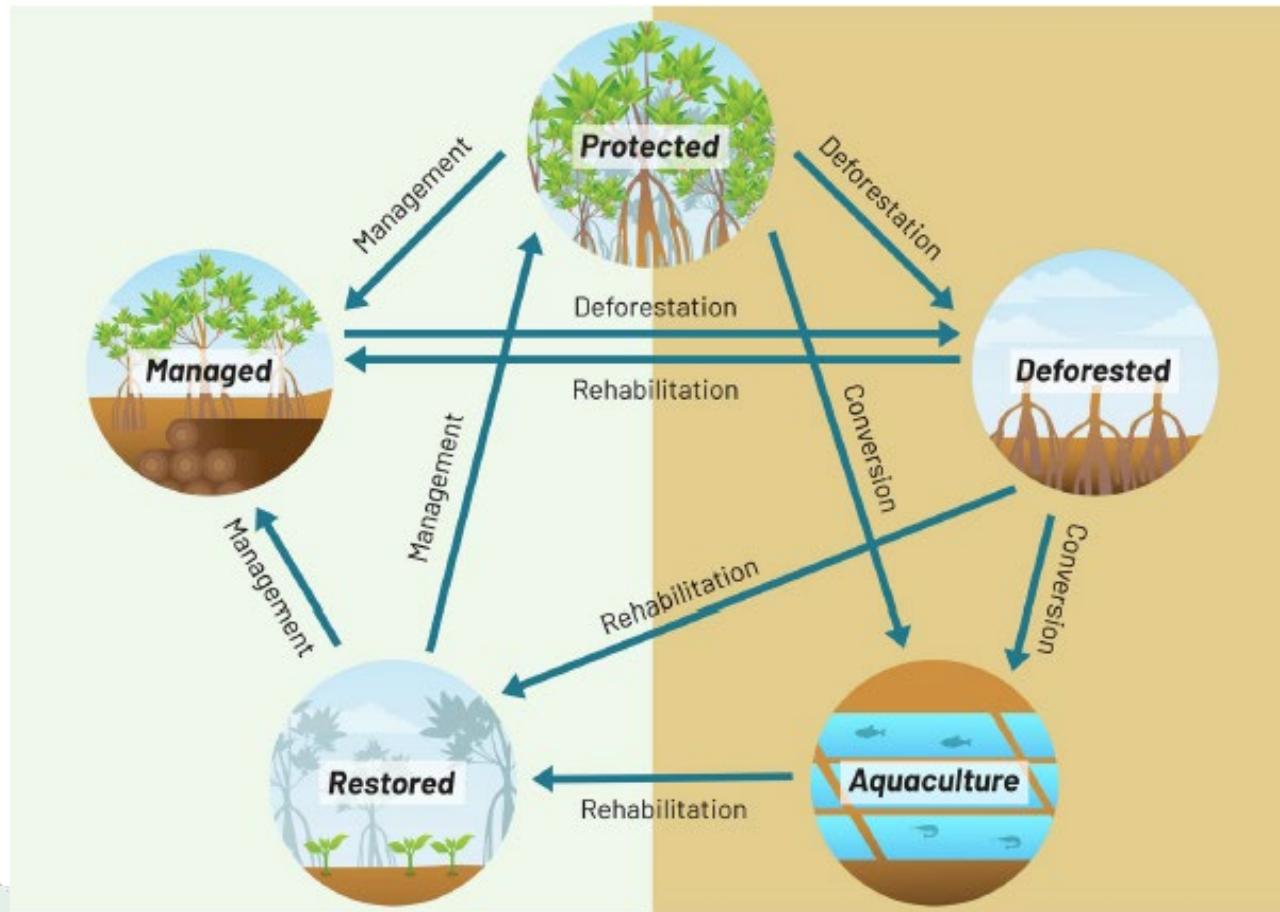


IPCC default value	Undisturbed mangrove	Regenerated mangrove	Degraded mangrove	Aquaculture (fishpond)
94.1 (4.3-188) [187, 204]	101.67 (4.79) [92, 111]	58.06 (8.17) [41, 75]	20.98 (6.05) [7, 35]	11.01 (3.86) [2, 20]
46.1 (2.1-92.4)	28.70 (1.65) [25, 32]	15.80 (3.77) [8, 24]	6.01 (1.43) [2, 10]	2.64 (1.30) [-0.5, 6]
10.7 [7, 15]	14.47 (1.22) [12, 17]	13.49 (2.52) [8, 19]	24.34 (6.67) [8, 41]	3.39 (2.72) [-31, 38]
286 (55-1376) [247, 330]	258.44 (32.40) [193, 324]	296.41 (20.11) [255, 338]	215.66 (38.07) [133, 299]	259.08 (90.53) [26, 492]

All units are in Mg C ha⁻¹. Note: Numbers in brackets are range of the IPCC default values and the SEs for other columns; numbers in square brackets are the 95% CIs.

Murdiyarsa et al. 2024 PNAS

LUC Trajectories



- Adaptation and coastal resilience
- Biodiversity conservation
- Gender and livelihood equity

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