Blue carbon finance- Trends, challenges and opportunities

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Setting the Scene

- Blue Carbon Ecosystems: Projects and Markets
- Finance actors, formats and features
- Blue economy narrative and the green transition
- Blue Finance: opportunities
- Climate, biodiversity and nature-based solutions
- blue natural capital and sustainable blue finance

Blue Carbon

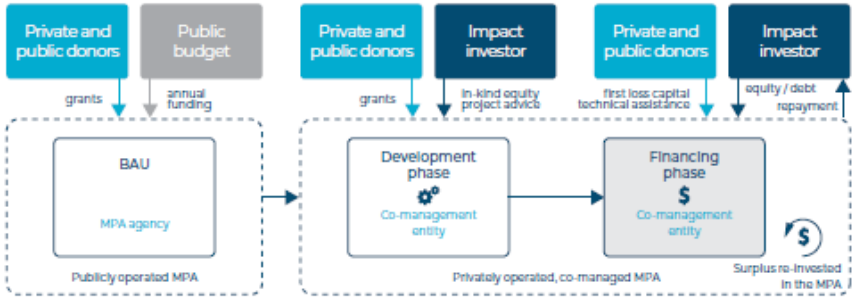
- Coastal ecosystems provide natural carbon sequestration and storage in mangroves, salt marshes and seagrass meadows, providing significant climate change mitigation in the order of 90 MtCyr−1.
- **Bertram et al (2021) Nature Climate Change | VOL 11 | August 2021 | 704–709.**
- The social cost of carbon (SCC), that is the present value of all climate damage of the emission of an additional ton of carbon, exceeds US$100 per ton probably significantly.
- **https://www.nature.com/articles/s41558-021-01089-4**
- This does not value the wide range of co-benefits of ecosystems in terms of resilience, adaptation, biodiversity, water quality etc.

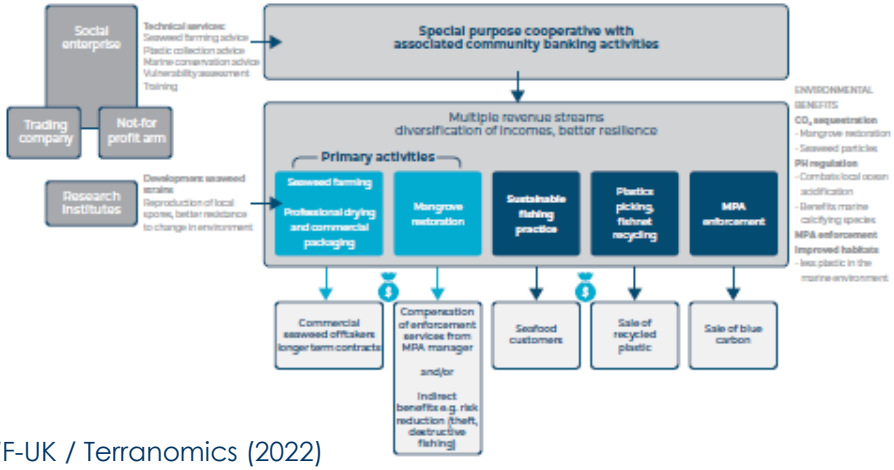
“ ...funders must provide [capital] for project design...feasibility, technical assistance, capacity building and...measurement to bring more projects to the bankability stage.“*

IUCN

BNCFF
Blue Natural Capital Financing Facility

BLUE CARBON ACCELERATOR FUND





and with BNCFF's Podcasts on ocean investments

* WWF-UK / Terranomics (2022)

Carbon Markets

- One carbon credit equal one tonne CO2e of avoided, reduced or removed emissions
- 4.7 Gt Co2e of carbon credits issued since 2007 (0.5Gt in 2021)
- Compliance markets (Kyoto, Paris Art 6.4 via NDCs, CORSIA)
- Voluntary markets (VCM) based on independent verification (Verra et al)
- Baseline GHG calculation plus achieved mitigation
- Demand: Corporates and others as part of net zero commitments and/or as “offsets”
- Supply: Project developers and others

Blue Carbon Markets

- Specific blue carbon credits based standards and methodologies for mangroves (REDD+, Tidal Wetland and Seagrass Restoration, Seascapes etc): Verra, Gold Standard, Plan Vivo etc
- Public frameworks (Australia ERF, Andalusia, France Bas-Carbone)
- A small market to date (1m tons of credits issued in 2021, traded at $15-30 per ton)
- A complex universe of parties involved, with high transaction cost
- High-quality standards under development, cost and MRV issues
- Latent demand if high-quality plus increased supply at higher prices
- Alternative finance opportunities for blue carbon projects

IFC (2023) DEEP BLUE OPPORTUNITIES FOR BLUE CARBON FINANCE IN COASTAL ECOSYSTEMS

- Voluntary carbon markets' issuances exceeded $1 billion in 2021. Mangrove restoration and afforestation/reforestation commands prices of between $15 and $35 per credit.
- "Nested" blue carbon in value chains: the carbon footprint of sectors such as agriculture, aquaculture, and tourism can be substantially reduced through the use of nature-based solutions
- Blue finance: The EU sustainable finance taxonomy, the Green Bond Principles, the Green Loan Principles, and IFC's Guidelines for Blue Finance: supported by transparency provisions on risks posed by environmental degradation, identified by the Task Force on Climate-related Financial Disclosures.
- Insurance and resilience: using natural wetlands to limit storm damage in coastal areas,
- Debt instruments (including bonds): Corporations and governments use green – and more recently blue – bonds focused on nature conservation, restoration, and sustainable use

https://www.ifc.org/wps/wcm/connect/a51d8bd5-a8e0-4f12-9d9b-b7ba9405d3e0/Deep+Blue+-+Opportunities+for+Blue+Carbon+Finance+in+Coastal+Ecosystems-Optimized.pdf?MOD=AJPERES&CVID=owse2nk

Latest trends

- After collapsing volumes and prices in 2022 cautious recovery in 2023, with buyers paying over three times more on average for high-rated credits ('AA') with SDG than those rated 'C' without SDG claims
- Efforts to develop specific segments and approaches
  - Japan: J-BE credits adhere to the Core Carbon Principles established by Integrity Council for the Voluntary Carbon Market (ICVCM) and use third-party examination and certification committee
  - China: Guangdong, seaweed, shellfish and justice
  - USA: Commodity Futures Trading Commission (CFTC) guidance on September 20, 2024, for designated contract markets (DCMs) for listing of voluntary carbon credit derivatives
  - Corporates: Assessment of the biodiversity impacts and dependencies of globally listed companies, high-impact within MSCI ACWI, broad dependencies on ecosystem services
  - UK: to consult on reforms to the voluntary carbon and emerging nature markets

Finance actors

- Banks (services, lending, derivatives)
- Institutional investors (asset-liability management)
- Family wealth (risk-return)
- Impact (risk-return with purpose)
- Development finance (banking with purpose)
- Corporates (value chain investment)
- Insurance (risk transfer and price discovery tools)
- Central banks and financial regulators

Finance formats

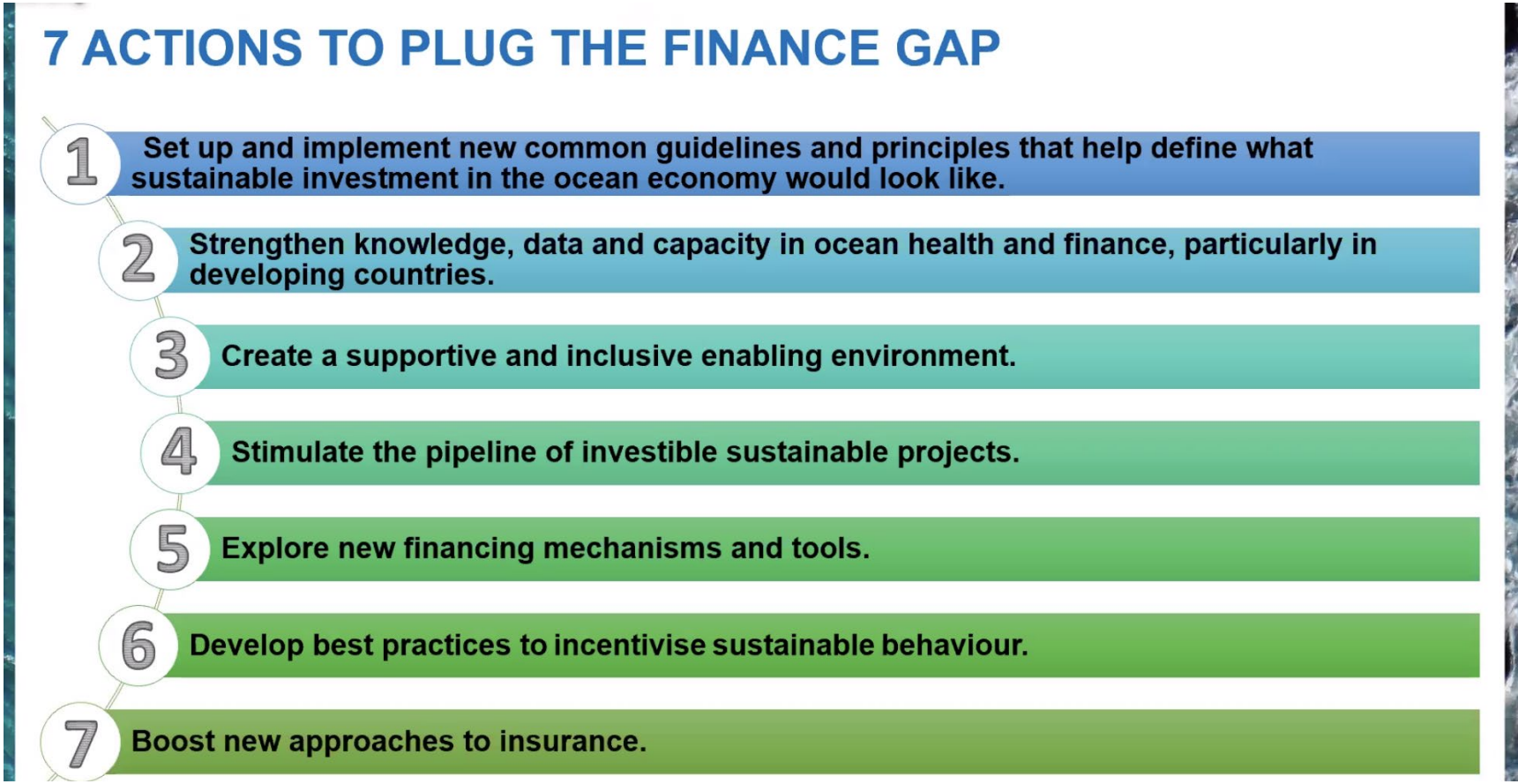
- Finance against business track record, assets and cashflows
- Traditional asset classes (bonds, real estate, listed shares)
- Established investment formats (REITs, Infrastructure)
- Project finance (Public finance institutions)
- Results-based finance (Public private partnerships)
- Value chain resilience and nesting

Finance features

- Equity, junior capital, senior debt
- Liquidity and exits
- Capital markets
- Price discovery mechanisms such as auctions
- Asset owners vs asset managers
- Regulation (capital allocation)
- Reporting (ESRS (EFRAG), CSRD and CSDDD)

Oceanpanel Blue Paper on Finance

www.oceanpanel.org/blue- papers/ocean-finance-financing-transition-sustainable-ocean-economy.



Blue Finance:

- Blue Finance as narrative, integrating ocean opportunities with sustainable financing
- Particularly important to those companies and areas with
  - strong interdependence with a healthy ocean
  - need to address climate and society issues as well as strategic considerations through innovative ocean solutions
- Key pathways to address the blue finance gap
- Impact assessment to facilitate ocean investment

Sustainable Blue Economy Finance Principles

- Developing Blue natural capital finance standards
- Multiple processes, frameworks, impact assessments
- Integrating Blue carbon finance into Sustainability Taxonomy
- Eg: Sustainable Blue Economy Finance Principles and Standards:
  - global guiding framework for banks, insurers and investors
  - Now hosted by: https://www.unepfi.org/blue-finance/
  - Guidance at https://www.unepfi.org/publications/turning-the-tide/

Nature and infrastructure

Nature-based Solutions

Back Blue
Ocean Finance Commitment

Driving investment into coastal livelihoods and blue natural capital through the Sea Change Impact Finance Facility (SCIFF)

ORRAA
Ocean Risk and Resilience Action Alliance

Perspectives

- Countries need to put in place, and are economically justified to do so, robust measures to protect remaining and restore existing blue carbon ecosystems.
- Equity perspective, those who contribute these benefits to the global common, and those at a local level help to ensure their quality, deserve support and funding
- Art.6 provides countries with the opportunity to develop transboundary mechanisms.
- Effective compliance markets can benefit from access to high quality credits.
- Emerging opportunities for enhanced blue carbon ecosystem finance:
    - “Nesting in corporate value chains”
    - “NbS in blue infrastructure”
    - “Transition for financial institutions”
    - “Nature as an investable asset class”