

Possible Pathways to a Green Economy for Oceans

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GLOC 2



Green Economy

- *“improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities”* UNEP
- low carbon, resource efficient & socially inclusive



Green Economy

- A big part of that transition involves policies and investments that decouple growth from the current intensive consumption of materials and energy use.
- While there has been some decoupling over the past 30 years, the gains have been far too modest to put the planet on a sustainable path and conserve finite resources.

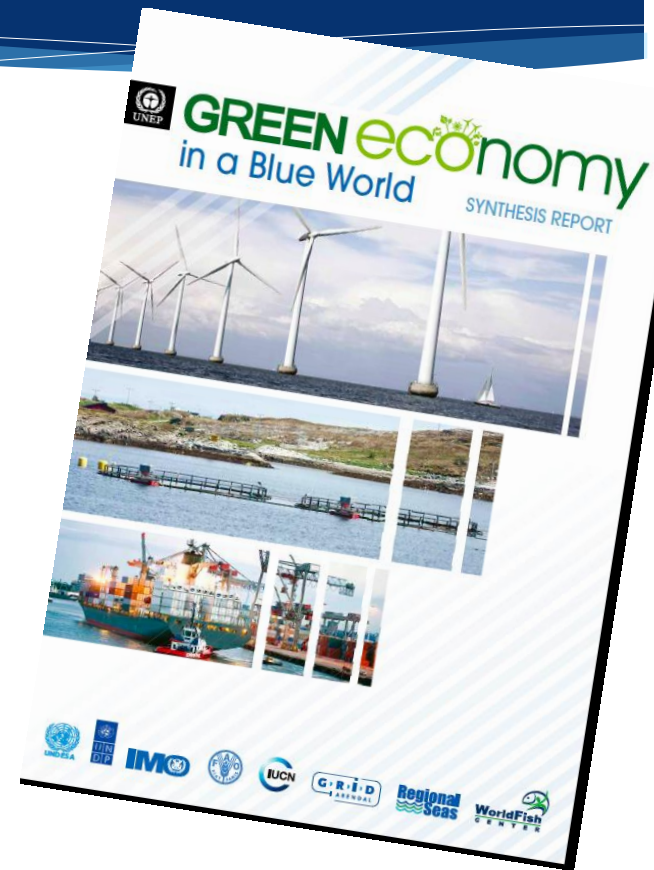
Does the Green Economy Apply to Oceans?

- “our considerations of the Green Economy should also encompass the recognition that marine, ocean, coastal and fisheries resources are the foundation of the economies of many developing countries including SIDS and coastal States and represents a primary pathway to future sustainable growth and poverty eradication” (G77 & China)



Green Economy in a Blue World

- Full GE report launch Feb. 2011.
- Calls from member states that indicated that oceans & coasts were lacking in the main report.
- The report highlights to the blue world will benefit from green economy approach
- Report analyses the challenges and opportunities in key marine.
- Synthesis report launched 24 January 2012, full report in May 2012.



Blue Economy = Green Economy?

- Similar
 - Green technologies
 - Low carbon sectors
 - Resource efficient
 - Low impact
- Separated from mainstream Green Economy
- Risk – decoupling

Marine Sectors

Following sectors are analysed

- I. Marine renewable energy (wind, wave and tidal power generation) – Led by IUCN
- II. Marine minerals – Led by GRID-Arendal
- III. Fisheries (small scale) and aquaculture – Led by FAO and World Fish Center
- IV. Tourism (coastal) – Led by Lund University and UNEP DTIE
- V. Transport (maritime) – Led by IMO
- VI. Nutrients – Led by UNDP
- VII. SIDS – Led by UNEP and UN DESA

Green Economy - Shipping

Considerable progress in greening the sector.

- Further greening of the sector
- a) incorporation of green technologies to reduce fuel consumption – lowering GHG emissions
- b) managing ballast water and hull fouling – impact of marine invasive species with estimated loss of USD 100 billion per year and response costs in the range of 4% of impact costs



“total value of the market for ballast water treatment equipment alone will range from \$13 billion to \$15 billion over the next nine years. Lifecycle costs will propel that number into the region of \$35 billion” Hyde Marine



Small scale fishing & aquaculture

Economic gain from restoring fish stocks - \$80B, 35M direct jobs, 300M livelihoods

Rapid growth in aquaculture

Ecosystem dependency

investment in organizational and technical assistance to shrimp farmers in India, apparently led to an increase of US\$8.9million in farm revenues over a five year period. The question remains if the positive outcomes from investment can also be achieved in terms of the environment (e.g. through reduced energy costs or improved feed use)



Tourism

Largest market segment: Coastal tourism

5 per cent of world GDP

6-7 per cent of total employment

Becoming less sustainable

Possible solution: “Greening” – energy, water and waste systems

In Mauritius the contribution of tourism rose from 3% GDP in 1995 to 17% GDP in 2007

Marine Minerals

Mining

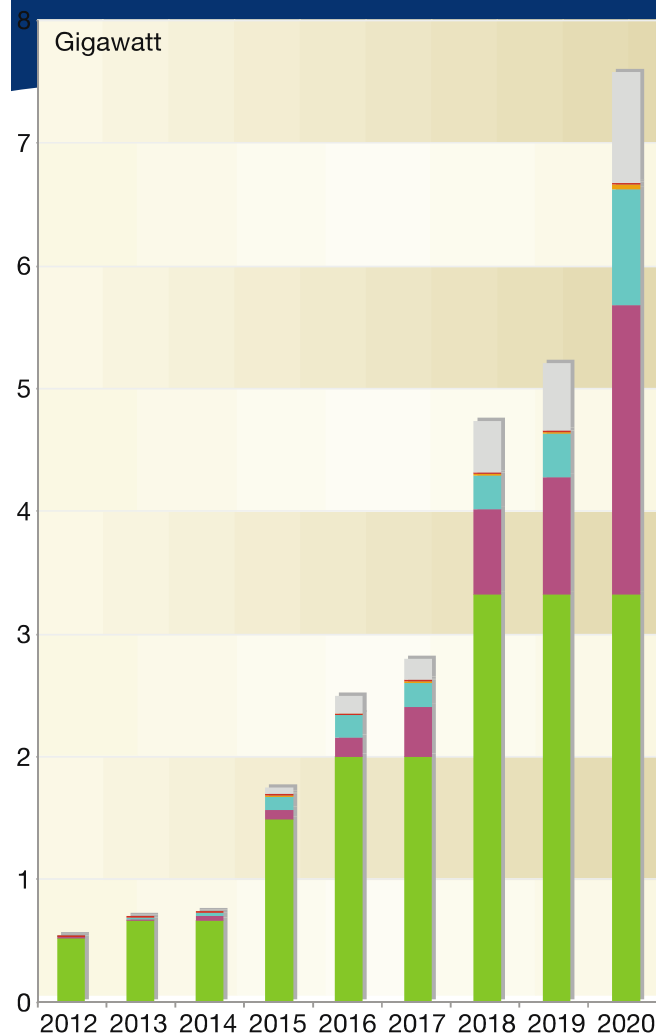
Long-term interest?

Opportunities

Value of non-renewable resources

A recent study estimated that the global market for marine-derived drugs was around US\$4.8 billion in 2011 and is forecast to reach US\$8.6 billion by 2016

Forecast capacity of marine renewable energy types



Marine Renewable Energy

Wind, wave, hydro turbine and based-biofuels

Reduce greenhouse gas emissions...

... increase energy security and provide socio-economic benefits

Financing mechanisms

Types of marine renewable energy systems:

- Tidal barrage
- Tidal current
- Wave energy
- Ocean thermal energy
- Osmotic energy
- To be specified

Note: calculations are based on a selection of countries

Source: Fraunhofer Institute for Wind Energy and Energy Systems, 2011.



Benefits

- many ocean industries and businesses stand to benefit directly from cleaner, more ecologically robust marine ecosystems – including biological diversity

Example:

- Carbon capture and storage – one of many benefits >>>>> **Blue Carbon**

UNEP led Blue Carbon report available www.grida.no/publications/rr/blue-carbon/



Green Economy Policies

Innovative policies to generate enabling conditions to unleash markets and direct private sector investments into a Green Economic transition.

- Sound regulatory frameworks, prioritize government spending and procurement in areas that stimulate green economic sectors and limit spending that deplete natural capital.
- Taxation and smart market mechanisms that shift consumer spending and promote green innovation.
- Public investments in capacity building and training, alongside a strengthening of international governance (IFSD).

What's Next?

- UNEP will work with countries to find the appropriate **means of implementation** – one size does not fit all
- Finding what are various **means of implementation** to contribute to national development
- Identifying the role and common messages for the UN agencies

Thank You

