

# Blueprint for Blue Economy Implementation

(Integrated Ocean Management Update 4)

*There is the potential for the Blue Economy (BE) concept, if properly implemented, to assist in overcoming long-standing deficiencies in sector-based management approaches (including inconsistencies in management of different activities by different groups, an incomplete suite of objectives, lack of attention to trade-offs and inability to evaluate cumulative effects) and to improve integrated planning and management of new or expanding industries. Implementation of BE should facilitate Sustainable Ocean Planning required to meet aspirations of the High Level Oceans Panel and Sustainable Development Goals.*

Many nations aspire to development of the Blue Economy (BE), however, the concept remains vague and there is no practical framework for implementation or evaluation of success<sup>1</sup>. We propose a blueprint involving four steps: 1) articulation of common BE objectives (ecological, economic, social-cultural and governance), 2) Development of a governance framework in which BE objectives can be applied in management of all activities in an area, 3) address conflicts, risks and trade-offs, and 4) evaluation of cumulative effects and performance. We illustrate use of the blueprint in scenario development and comparison for offshore wind energy development.

Step 1 – Articulate a spectrum of candidate objectives<sup>2</sup>. Examples include:

- healthy, resilient and functional ecosystems providing essential ecosystem services
- habitats protected from negative impact during construction and operational phases
- recovery of endangered species
- enhanced economic output and benefit for all users
- equitable distribution of opportunities and benefits including to Indigenous communities
- long term, prosperous livelihoods that contribute to sustainability of coastal communities
- high standard of health and wellbeing for individuals, households and communities
- activities undertaken in a respectful, ethical and just manner that also seeks to overcome historical inequity and injustice
- consideration of historical and living aspects of heritage and culture
- improved energy security and support of Net0 target consistent with national and international climate change commitments
- integrated planning and management using principles of good governance
- transparent (visible to public), consistent, decision-making and regulatory certainty

Step 2 – Development of a governance framework linking all sectoral plans in a region (**Figure 1**)

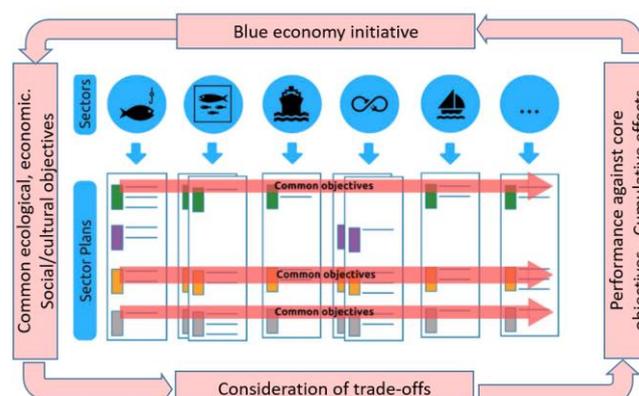


Figure 1. A proposed governance framework<sup>3,4</sup> that links and influences sector plans in a BE.

Step 3 – Identification of conflicts, risks and trade-offs between competing uses (**Figure 2**)

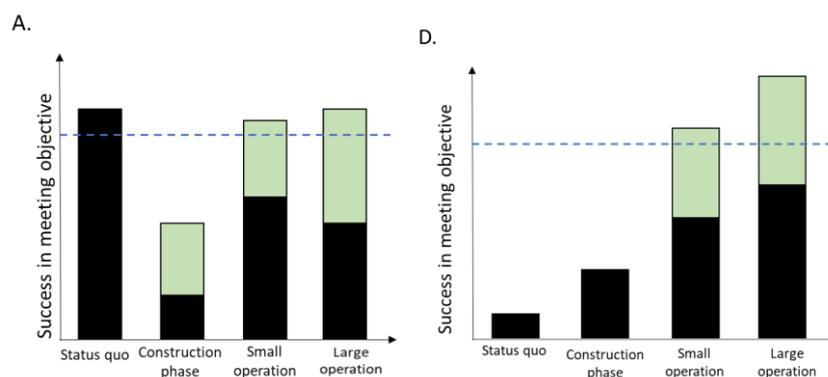


Figure 2. Examples of the anticipated progress towards meeting objectives (black bars) for some ecological (productivity and habitat – A); and economic (distribution of access and benefits -D), aspects for four phases of offshore windfarm development (status quo – no windfarm, construction phase, small operation and large operation). Black bars indicate the anticipated result in a ‘business-as usual’ situation, but green bars indicate the potential that can be realised with additional design considerations. The blue dashed line indicates a threshold below which deterioration might occur, and above which reinforcement might occur<sup>1</sup>.

Step 4 – Cumulative effects and performance relative to Objectives selected in Step 1 can be evaluated for each scenario (**Figure 3**).

Objective	Status Quo	Construction phase	Small operation	Large operation
1 Ecological – Productivity and habitat	Green	Red	Yellow	Yellow
2 Ecological – Recovery of endangered species	Red	Red	Yellow	Yellow
3 Economic - Value and livelihoods	Red	Yellow	Red	Yellow
4 Economic – Distribution of access and benefits	Red	Red	Yellow	Yellow
5 Social – Health and well-being	Red	Red	Red	Yellow
6 Social – Ethical activities	Red	Red	Red	Yellow
7 Social – Heritage and culture	Red	Red	Red	Yellow
8 Institutional – Energy security	Red	Red	Red	Green
9 Institutional – Good governance structure	Red	Yellow	Yellow	Yellow
10 Institutional – effective decision-making	Red	Yellow	Yellow	Yellow

Figure 3. Schematic summary of the success in meeting objectives for each of the four phases of windfarm development. Green represents outcomes that are likely to be above a threshold, yellow represents outcomes that could be above a threshold with additional attention, and red represents outcomes where the threshold is not likely to be achieved<sup>1</sup>.

**Further reading**

- Stephenson & Hobday (2024). Blueprint for Blue Economy Implementation. *Marine Policy*. <https://doi.org/10.1016/j.marpol.2024.106129>
- Stephenson et al (2021). The quilt of sustainable ocean governance: Patterns for practitioners. *Frontiers in Marine Science* 8: 630547. <https://doi.org/10.3389/fmars.2021.630547>
- Stephenson et al (2023). Integrating management of marine activities in Australia. *Ocean & Coastal Management*, **234**, 106465 <https://doi.org/10.1016/j.ocecoaman.2022.106465>
- Stephenson et al (2019). A practical framework for implementing and evaluating integrated management of marine activities. *Ocean and Coastal Management* **177**: 127–138. <https://doi.org/10.1016/j.ocecoaman.2019.04.008>

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