



Reference:

Currie, Carolyn V., *One Ocean - a New Regulatory Solution to Climate Change* (2024), *Global Business & Economics Anthology*, ISSN:1553–1392, Volumes I & II, December 2024, pp 55-69.

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DOI: 10.47341/GBEA.24125

One Ocean – a New Regulatory Solution to Climate Change ^(*)

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Abstract

Global heating is pushing ocean temperatures to new heights, fuelling more frequent and intense storms, rising sea levels, and the salinization of coastal lands and aquifers. Untreated sewerage and wastewater containing toxic chemicals and millions of tons of plastic waste are flooding into coastal ecosystems, killing, or injuring fish, sea turtles, seabirds, and marine mammals, and making their way into the food chain and ultimately being consumed by humans. More than 17 million metric tons of plastic entered the world's ocean in 2021, making up 85 per cent of marine litter, and projections are expected to double or triple each year by 2040, according to the latest Sustainable Development Goals (SDG) report.¹ According to UN estimates, by 2050, there could be more plastic in the sea than fish unless action is taken.² An innovative governance approach to ocean management is needed that builds ecosystem resilience to tackle the adverse effects of climate change and ocean acidification, and maintains and restores ecosystem integrity, including carbon cycling services. This paper discusses such an approach.

Keywords Climate change, pollution, carbon capture, oceanic biosphere, continental linkages, regulatory models, governance.

¹ <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

² <https://www.un.org/sustainabledevelopment/development-agenda/>