1. Record Nr. UNINA9910767509303321

Autore	Moore David
Titolo	Aquaculture: Ocean Blue Carbon Meets UN-SDGS / / by David Moore, Matthias Heilweck, Peter Petros
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	3-030-94846-3
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (268 pages)
Collana	Sustainable Development Goals Series, , 2523-3092
Disciplina	628.532
Soggetti	Freshwater ecology Marine ecology Sustainability Freshwater and Marine Ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Diagnosing the Problem -- Cultivate Shellfish to Remediate the Atmosphere -- Aquaculture: Prehistoric to Traditional to Modern -- The High Seas Solution -- Farming Giant Clams in 2021: a Great Future for the ‘Blue Economy’ of Tropical Islands -- Coccolithophore Cultivation and Deployment -- Comparing industrial and biotechnological solutions for carbon capture and storage -- What should be done.
Sommario/riassunto	This book presents a solutions based approach to reducing and removing CO2 from the atmosphere transforming it into solid (crystalline) CaCO3 through the ability of marine organisms such as molluscs, crustacea, corals, and coccolithophore algae. The overwhelming advantage of this approach is that it promises enhanced climate mitigation in comparison to planting forests, industrial/engineering carbon capture and storage process. It also provides a sustainable food resource. Furthermore, it would improve the ocean's biodiversity at the same time as the excess atmospheric CO2 released by our use of fossil fuels is returned to the place it belongs - as a present day fossil, safely out of the atmosphere to the distant future. If the level of finance and global effort that are readily foreseen for forest management and flue gas treatments were applied

to expansion of global shellfish cultivation, curative amounts of carbon dioxide could be permanently removed from the atmosphere within afew decades. The concept presented in this book could have a profound influence on the life of the planet.