

GLOBAL PERSPECTIVES ON MARINE BIOTECHNOLOGY SCIENCE AND TECHNOLOGY POLICY

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Scientific advances - the development of technology and tools to access and study marine organisms and ecosystems - are increasing our knowledge of marine biodiversity. Marine bioresources are a source of novel products and processes, yet remain largely untapped. Through biotechnology we have the potential to help to address the global challenges of food and energy security and of health, and to contribute to green growth and sustainable industries. But it is imperative that we maintain a sustainable relationship between the conservation and use of marine bioresources.

The application of biotechnology to the marine raises distinctive challenges for policy makers. The vast interconnected systems of oceans contribute to the regulation of the planet's temperature and atmospheric conditions and currents carry marine life, nutrients and wastes within and across national borders. Governance of our shared marine environment presents challenges related to both access to and development of marine resources.

The work at the OECD Division for Science and Technology Policy considers the twin tensions of ocean productivity and sustainability faced by those seeking to realise the potential of marine biotechnology. It seeks to identify the potential of the field and the support required to realise that potential, and explores the challenges - and possible next steps for policy development - to sustainable development, recognising the unique features of the marine environment and maximising the integrity and sustainability of that ecosystem for future generations.