

## PERSPECTIVES FROM THE EUROPEAN COMMISSION DG MARE ON THE ROLE OF MARINE BIOTECHNOLOGY IN THE EC BLUE GROWTH STRATEGY AND THE INTEGRATED MARITIME POLICY (IMP)

Rodríguez Sebastián

Directorate-General for Maritime Affairs and Fisheries (DG MARE) – European Commission  
Joseph II 79, 02/047, B-1049 Brussels, Belgium  
E-mail: [sebastian.rodriquez-alfaro@ec.europa.eu](mailto:sebastian.rodriquez-alfaro@ec.europa.eu)

The Integrated Maritime Policy (IMP) seeks to provide a more coherent approach to maritime issues, with increased coordination between different policy areas focusing on issues that do not fall under a single sector-based policy e.g. 'Blue growth' and issues that require the coordination of different sectors and actors e.g. 'Marine knowledge'. Therefore the IMP seeks to coordinate, not to replace policies on specific maritime sectors.

The concept of the blue economy is a new one, looking at maritime sectors as a whole, rather than at individual sectors. The synergies between maritime and coastal activities are evident: skills are largely transferable between sectors, the sectors are to some extent inter-dependent, and they all rely on use of the sea in a sustainable way. Many of them also stand to benefit and grow from the development of new marine technologies and the growth of economic activity offshore.

'Blue growth' is a long-term strategy to support growth in the maritime sector as a whole. It aims to: identify and tackle challenges affecting all sectors of maritime economy, to highlight synergies between sectoral policies, to study interactions between the different activities and their potential impact on the marine environment and biodiversity and to identify and support activities with high growth potential in the long term.

An analysis of the employment-creation potential, as well as the potential of research and development to deliver technology improvements, has suggested that the following five value chains could deliver sustainable growth and jobs in the blue economy: blue energy, aquaculture, maritime, coastal and cruise tourism, marine mineral resources and blue biotechnology.

The blue biotechnology sector is expected to develop on three phases: In the very short term, the sector is expected to emerge as a niche market focused on high-value products for the health and cosmetic sectors. By 2020, it would grow as a medium-sized market producing metabolites and primary compounds (lipids, sugars) as inputs for the food and feed processing industries. In a third stage, in around 15 years' time and subject to technological breakthroughs, the biotechnology sector could become a provider of mass product markets.