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ADAPT OUR COAST FOR A SUSTAINABLE FUTURE



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December 2022



Status and Perspectives of Blue Growth Sectors across the Macaronesian Archipelagos

Wednesday, 14th September - 12:00: (Caparica A Room) - Accept for Oral

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Introduction

Coastal and offshore areas have high potential to improve the sustainable uses of their marine resources for the creation of jobs and economic values and, at the same time, preserving the health of marine ecosystems. Much attention is being paid to marine/maritime sectors at Worldwide and European levels as key elements underpinning responsible Blue Growth strategies.

The European Union (EU) charted out a long-term *Blue Growth Strategy* (COM/2012/0494 final) to support sustainable growth of the marine and maritime sectors, which linked to the *Integrated Maritime Policy* (COM(2007)575 final) and contributed to the objectives of the *EU 2020 Strategy* (COM/2010/2020 final). In 2021, *A new approach for the sustainable blue economy in the EU* (COM/2021/240 final) was presented as a major contribution to the European Green Deal (COM/2019/640 final) objectives and support for the transitions envisioned both to attain Europe's 2030 targets and to foster the post-pandemic Recovery Plan for Europe (COM/2020/442 final).

In this work, developed within PLASMAR Interreg project (MAC/1.1a/030–2017-2020), the review of the main marine/maritime sectors linked to European Macaronesian Archipelagos of Azores, Madeira and the Canary Islands was conducted with a comparative analysis of the situation, trends, and perspectives, taking into consideration the European, national and regional Blue Growth initiatives.

Materials and methods

The **study area** covers the European Macaronesian region, which includes three archipelagos of volcanic origin located in the Central-East North Atlantic Ocean: Azores, Madeira (Portugal) and the Canary Islands (Spain). Although each archipelago has different land surface areas, they share being small, isolated, of volcanic origin and being surrounded by large maritime spaces; besides, all three have their own autonomous governments. From the socioeconomic viewpoint, such as population size and economy, they are also different, with unequal distribution of population density between islands, economic development, and pressures on the terrestrial and marine ecosystems. These islands are recognized as endowed with high biodiversity areas and one of Europe's main biodiversity hotspots (Myers et al. 2000).

The **sectors and subsectors** identified as part of the BE in the Macaronesian Sea and analysed for each archipelago are: Fisheries, Marine aquaculture, Marine biotechnology, Coastal & maritime tourism, Maritime transport, Ship repair and maintenance, Extraction of aggregates, Deep-sea mining, Offshore oil & gas, Renewable ocean energies, and Desalination.

The **collection of data and information** on the BE activities for each of the studied archipelagos was undertaken between 2017 and 2019 through the review of most up-to-date relevant sources available (scientific publi-

cations, official reports and statistics, as well as grey literature, such as unpublished reports or expert consultations). Methodological approaches applied by project partners were slightly different depending upon available literature and data, and were collected in project reports (Lopes et al. 2017; GMR 2017; Bilbao et al. 2018). A project report compiled the main results for all sectors and regions, including an overview of the global and European situation and trends (Fernández-Palacios et al. 2017).

Results

The reviews undertaken provided a detailed overview of the status and factors affecting each of the considered marine and maritime activities and are the basis for the preparation of a comprehensive analyses of the state of the art and needs of the BE in the European archipelagos of the Macaronesia. For most of the analysed sectors, the available data made possible to prepare an overview table with general activity indicators (such as gross value added, jobs, etc.) and other specific indicators.

We have summarized the extracted results on the state and prospects of the identified BE sectors for each of the three archipelagos in a table (shown during presentation). To facilitate its reading, we have adapted the nomenclature for the state of each sector in the EU from that used by “The 2018 annual economic report on the EU BE” (EC 2018), while the classification of the world outlook of each sector has been adapted from the report “The Ocean Economy in 2030” (OECD 2016). The symbols displayed for each archipelago and activity were based on our own data and considering also other relevant reports (EASME 2017b,c,d; Cetecima 2018).

After the identification of the extant marine/maritime sectors and their development perspective, the datasets and associated information were incorporated in the on-going maritime spatial planning processes in each archipelagic waters. Following the implementation of sectorial regulations defined by the regional/national administrations, the different marine/maritime sectors have an ample range of activities to develop under an ecosystem approach.

DISCUSSION AND CONCLUSIONS

This study represents the first effort in the European Macaronesia to take stock of the status and look at the prospects of growth of different sectors of the maritime economy and with view to setting the bases for responsible MSP processes at a regional level in three autonomous regions from two different Member States.

These archipelagos have a good representation of most BE sectors although with different sizes, development level and trends, mainly due to different size of the local economies. Some sectors within the BE show a common status and trends for all the three Macaronesian archipelagos (fisheries, biotechnology, tourism, transport). Others bear specific significance only in one or two of the three archipelagos (aquaculture, ship repair and maintenance, extraction of aggregates or desalination).

Progress in data compilation on the BE sectors is underway in the EU (EASME 2017a) and annual results are being published by the European Commission[1]. Nevertheless, the main focus to collect statistical data for the BE sectors (mainly though NACE codes) is at the national level. During this review, our focus was at the archipelagic level. Data gathering was laborious, and results were incomplete and with limited comparability between archipelagos. For the EU Macaronesian Region there is a need to keep the statistics for the regional level unaggregated to serve as guidance for regional coordination, even more in the case of isolated archipelagos as these, where the situation differs greatly from continental Europe.

The application of methodologies to measure the progress of the BE sectors in terms of sustainability are very much needed to guide informed decision-making, and specific efforts such as the Blue Economy Sustainability Framework (CINEA 2021) are being made. The adaptation of methodologies, criteria and indicators for the specific case of the islands in the Macaronesian Region is a new line of research contribution that needs to be attended urgently.

The available RD&I in the three archipelagos, aligned with a new impetus in terms of policy and regulatory framework under the ecosystem approach – with the BE and Circular Economy policies in place for the EU, national and/or regional context–, would underpin a favourable investment seascape, promoting social and economic benefits. This new approach may result in the true diversification of the local economies towards

resilient blue communities. The future post-pandemic context will provide a unique opportunity to promote the BE sectors and subsectors through the support provided by the EU Green Deal and recovery and resilience plans, as well as with the actions envisioned under the United Nations Decade of Ocean Science for Sustainable Development (2021-2030)[2].

The BE sectors should be a comprehensive part of the Maritime Spatial Planning processes and, here again, the Macaronesian archipelagos –because of their size, actors involved, networking, expertise and interest already expressed– should be able to act as a major player at regional and international levels. As part of EU's ORs, the Macaronesia has the potential of demonstrating the importance of the marine economy within Europe and towards other island systems, such as Small Island Developing States (SIDS).

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