



PLASMAR

Bases para la planificación sostenible de
áreas marinas en la Macaronesia

Product 2.1.1 ab

BLUE GROWTH PROJECTION &
IMPLEMENTATION OF MSFD IN MACARONESIA

PLASMAR Consortium



PROYECTO COFINANCIADO
POR LA UNIÓN EUROPEA
Investigación
e innovación



www.plasmar.eu

To cite this report:

PLASMAR Consortium. 2020. Activity 2.1.1.ab Blue Growth projection and implementation of the environmental legislation that applies on the sea. Technical report. Report prepared as part of PLASMAR Project (co-financed by ERDF as part of POMAC 2014-2020).

Reproduction is authorised provided the source is acknowledged.

LEGAL NOTICE

This document has been prepared as part of PLASMAR Project (co-financed by ERDF as part of POMAC 2014-2020), however it reflects the views only of the authors, and the Project partners or POMAC 2014-2010 programme cannot be held responsible for any use which may be made of the information contained therein.



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

Table of contents

1	Introduction.....	4
2	Partners involved.....	4
3	Results.....	5
3.1	Blue Growth analysis and projections	5
3.1.1	Madeira (DROTA)	5
3.1.2	Canaries (GMR)	5
3.1.3	Macaronesia full picture (ULPGC)	6
3.2	Implementation of the environmental legislation in the Macaronesian region	8
3.2.1	Madeira	9
3.2.2	Canarias.....	10
	To examine MSFD implementation state of the play REPORTNET was accessed during	10
	September - November 2017.	10
3.2.3	Macaronesia full picture (ULPGC)	11

*

1 Introduction

This report is the deliverable of PLASMAR Project activity 211ab: Finding the balance of Blue Growth Sustainable Development within Ecosystem Approach, within which partners analysed the presence, situation and main forecasted trends of the maritime sectors present in the archipelagos of Madeira, Azores and Canaries. This first project activity intends to identify the present uses of the maritime space (operational maritime activities) and define future needs of the marine space required for these or for new maritime activities to be developed.

Second action reported, includes various analyses on the status of implementation of the EU environmental legislation in the Macaronesian region. Based on the results of these studies, we expect to identify synergies and barriers to the development of the maritime sectors and environmental planning.

2 Partners involved

- Universidad de Las Palmas de Gran Canaria (As activity coordinator);
- Gestión del Medio Rural de Canarias, S.A.U.;
- Direção Regional dos Assuntos do Mar;
- Agência Regional para o Desenvolvimento da Investigação, Tecnologia e Inovação;
- Secretaria Regional do Ambiente e dos Recursos Naturais.
- Dublin Institute of Technology (Associated partner)



3 Results

3.1 Blue Growth analysis and projections

3.1.1 Madeira (DROTA)

The main objective of this report is the state of play of blue growth, including the forecasted growth of the maritime sector in the Autonomous Region of Madeira. This report was a result of an intensive survey in a way to understand the economic and social impacts of the blue economy. Quantifying and measuring the economy of the sea still a hard task for the Autonomous Region of Madeira, once the data are dispersed across a number of formal sources, particularly in the economic, business and employment dimensions.

The ARM has enormous potential for economic activities within blue growth, especially aquaculture and biotechnology, coastal and maritime tourism and renewable energy. As far as aquaculture is concerned, it is expected to continue to grow in the coming years.. With the land capacity to be crowded and the tour packages that are being offered, it is stipulated that in the coming years it will continue to grow. The regional maritime space offers unique characteristics for the development of renewable energies, as is the case of wave energy and offshore wind.

Report with name "[Blue Growth – for a better development of the sea – Report from Madeira Archipelago](#)" is available on at project web site, products section, technical reports:

<https://drive.google.com/file/d/19fFXAtJRrJ6ilcMIDAIRYeVyGIGBDxqT/view>

3.1.2 Canaries (GMR)

Blue Growth is the EU's long-term strategy to support sustainable growth of the marine and maritime sectors. It is the contribution of the Integrated Maritime Policy (IMP) in achieving the objectives of the EU Strategy 2020. The purpose of this work was to contribute to assess the current situation and trends of the main sectors related to blue growth in the Canary Islands (Spain) by reviewing open data, reports, publications, etc. Eleven sectors have been analyzed: Aquaculture; Marine biotechnology; Desalination; Marine renewable energies; Seabed mining; Nautical recreation and sports; Oil & Gas; Fishing; Naval Repair, Infrastructure and Port Services, Maritime Safety, Services to Offshore Platforms and Supplies; Maritime transport and coastal tourism. The main conclusion of this analysis is the enormous difficulty involved in obtaining basic data economic and employment for the correct monitoring of these sectors. In general, there are few useful open data resources that cover reasonable periods of time. In other cases, data are only accessible after its request-delivery, and this procedure may be too long. In addition, it usually happens that official statistics are not offered disaggregated (by sectors of interest) and free. Sometimes, although specific NACE codes for subsectors exist, data is not collected at source in a disaggregated manner, which makes any detailed analyses impossible. On the other hand, there are statistics of interest that are collected by institutes, associations, clusters, etc. but availability needs to be agree prior to access to data. Finally, we believe that it is necessary to implement a tool (e.g. observatory) to collect process and disseminate basic data in order to carry out the necessary monitoring of regional, national and EU policies related to blue growth.

	NACE-code	NACE-data	Employment	GDP, GVA...	Production
Aquaculture	ok	!	ok	x	ok
Marine biotechnology	x	x	x	x	x
Desalation	x	x	!	x	!
Marine renewable energies	x	x	x	x	x
Seabed mining	x	x	x	x	x
Recreational & sports nautical	x	x	x	x	x
Oil & Gas	x	x	x	x	x
Fishery	ok	!	!	x	ok
Naval Repair, Infrastructure and Port Services, Maritime Safety, Offshore Platform Services and supplies	!	!	!	!	!
Marine transport	ok	!	ok	x	ok
Marine tourism	!	!	!	!	!

ok complete information
! incomplete information
x not available

NACE: statistical classification of economic activities in the European Community.
GDP: Gross Domestic Product
GVA: gross value added

Figure 1. Availability of information by sectors in Canary Islands.

The information presented here is developed in depth in a technical report available at <http://www.plasmar.eu/language/en/products/> > Technical Reports > Activity 2.1.1.a.

GMR Canarias S.A.U. 2017. Principales sectores del “blue growth” en Canarias: situación y tendencias. Informe preparado como parte del Proyecto PLASMAR (co-financiado por FEDER en el marco de POMAC 2014-2020). 127 pp

https://drive.google.com/file/d/1VTLPCHYOP5GF1dMMv2_9d2ZsM_QBIKNF/view

Explanation of the monitoring method in relation to the descriptor (or descriptors)

3.1.3 Macaronesia full picture (ULPGC)

The lead partner, ECOAQUA Institute at Las Palmas de Gran Canaria University was in charge of delivering a summary report of the global / European context for each of the maritime sectors and compiling the summaries for each region within this final report. This report includes results delivered and reported for Madeira, Canary Islands, but also Blue Growth projection for Azores archipelago.

Report “[Macaronesian Blue Growth: current status and future needs – Final report for task 211a.](#)” is available at project web site, products section, technical reports:

https://drive.google.com/file/d/1zj8QFZdd3K_zTxMsKk50bb_0yQv1E2cX/view

The paper with title “Status and outlook of the Blue Economy sectors across the Macaronesian Region” was submit to scientific journal. It is excepted to be published till end of the project.

ANALYZED SECTORS	EU State / World prospect	MADEIRA State / Prospect	AZORES State / Prospect	CANARIES State / Prospect
Aquaculture			RD&I	
Blue biotechnology			RD&I	
Renewable ocean energy		RD&I	X X	RD&I
Deep-sea mining		X X	RD&I ?	RD&I ?
Coastal & maritime tourism (incl. cruises)				
Fisheries				
Maritime transport				
Shipbuilding & shipgear		X X		
Offshore oil & gas (in deep water)		X X	X X	X X
Desalination			X X	

Figure 2 - Blue Growth projection for EU, Madeira, Azores and Canary Islands

3.2 Implementation of the environmental legislation in the Macaronesian region

One of the PLASMAR objectives is to develop and apply ecosystem-based approach methodology on Blue Growth sectoral development, in order to find the balance between maritime sectors development and environmental planning, supporting socio-economic growth and ensuring environmental services. This specific action, (2.1.1b), includes various analyses on the status of implementation of the EU environmental legislation in the Macaronesian region. This study lists the requirements of the EU environmental directives which are applicable to marine and coastal areas, current implementation status, including applied actions. Finally, based on the results of these studies, we expect to identify synergies and barriers to the development of the maritime sectors and environmental planning.

It is necessary to understand what is already done on the implementation of the environmental policies to be applied, so it can be considered and potentially reused in the Maritime Spatial Planning process.

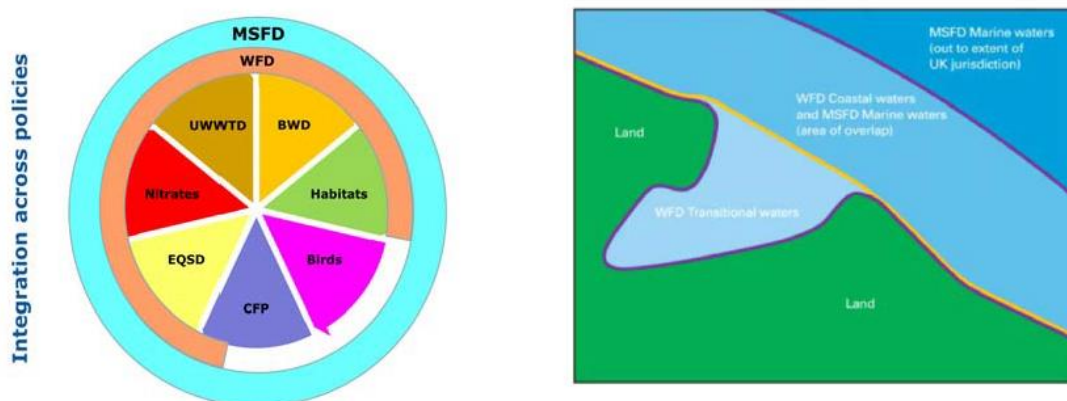


Figure 3 - Towards integrated marine environmental information; overlaps of MSFD and WFD (sources: a Working Group on Data, Information and Knowledge Exchange report 2012; b.UK Department for Environment Food & Rural Affairs)

On the project website is available Introduction document:

[Technical report on implementation of the environmental legislation in the Macaronesian region](#)

and document with analysis of Marine Strategy Framework Directive 2008/56/EC:

[Estudio jurídico de la Directiva de ordenación del espacio marítimo: una aproximación.](#)

3.2.1 Madeira

This study lists the requirements of the EU environmental directives that apply on marine and coastal areas and presents the current state of play of the implementation, including the actions that have been applied for the Madeira Archipelago.

This study is focused on the implementation of the Marine Strategy Framework Directive 2008/56/EC (MSFD), European legal instrument on Integrated Marine Management, as the Directive requirements overlap with the European environmental legislation that partially applies to the sea.

Regarding the accessibility, REPORTNET portal (reporting document repository and an integrating part of the European Environment Information and Observation Network) was chosen as a main tool and information source point. REPORTNET hosts data and information reported during the first cycle (2010 – 2018) of the MSFD implementation process.

To examine MSFD implementation state of the play REPORTNET was accessed during September 2017 – January 2018.

Report “[Technical report on implementation of the environmental legislation in the Macaronesian Region – report for the Madeira Subdivision.](#)” is available on at project web site, products section, technical reports:

<https://drive.google.com/file/d/1kUAA-GsVsaRcq4rlqLqH1MyHIL1-ld7G/view>

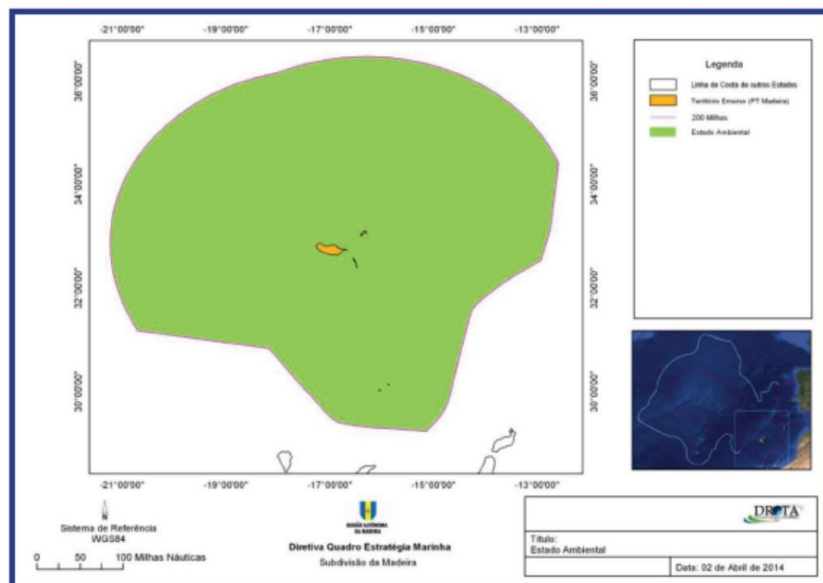


Figure 4 - Assessment on eutrophication (Quality Descriptor 5)

3.2.2 Canarias

Study 2.1.1.b lists the requirements of the EU environmental directives that apply on marine and coastal areas and presents the current state of play of the implementation, including the actions that have been applied for the Canary Islands. It is necessary to understand what is already done due the implementation of the environmental policies, so it can be considered and potentially reused in the Maritime Spatial Planning process.

Study is focused on the implementation of the Marine Strategy Framework Directive 2008/56/EC (MSFD), European legal instrument on Integrated Marine Management, as the Directive requirements overlap with the European environmental legislation that partially applies to the sea.

Regarding the accessibility, REPORTNET portal (reporting document repository and an integrating part of the European Environment Information and Observation Network) was chosen as a main tool and information source point. REPORTNET hosts data and information reported during the first cycle (2010 – 2018) of the MSFD implementation process.

To examine MSFD implementation state of the play REPORTNET was accessed during September - November 2017.

Report "[Technical report on implementation of the environmental legislation in the Macaronesian region – Canary Islands](#)" is available on at project web site, products section, technical reports:

https://drive.google.com/file/d/1ZoRFoUIJ791sxFM2KxST4_R8WPubmjNi/view

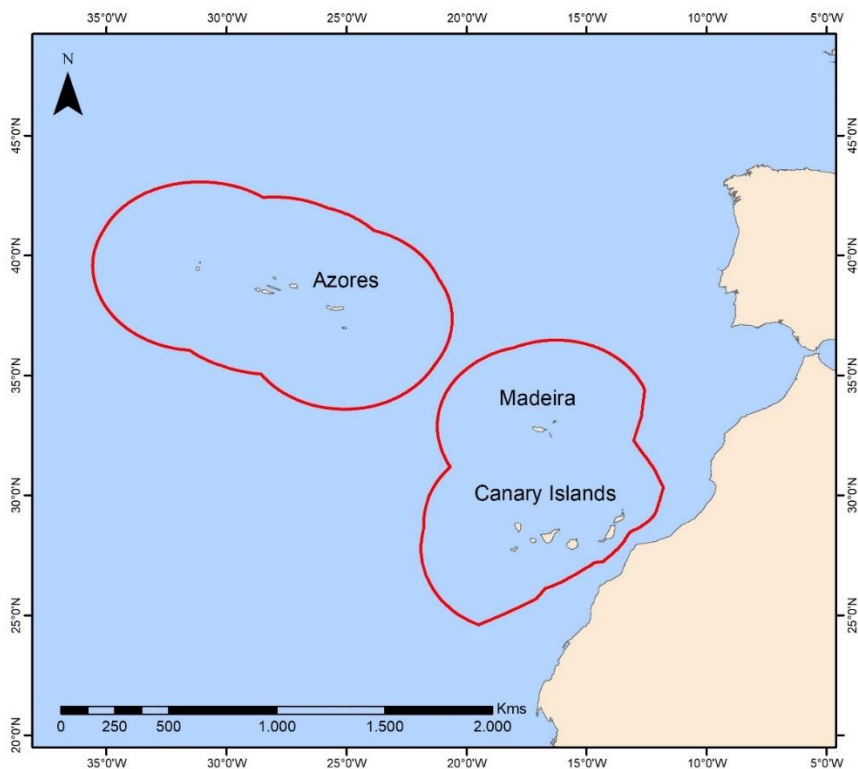


Figure 5 - Union polygon of reported EEZ Canarias with reported EEZ Madeira

3.2.3 Macaronesia full picture (ULPGC)

The lead partner, ECOAQUA Institute at Las Palmas de Gran Canaria University with PLASMAR consortium finalized summery analysis, integrating the results of MSFD implementation at Canary Islands, Madeira and Azores and how can be applied in the within the current MSP process. This analysis was documented as a scientific paper, with title “Implementation of the Marine Strategy Framework Directive in Macaronesia and synergies with the Maritime Spatial Planning process” that was submitted on mid of March 2020, with expectation to be published till end of the project.

Abstract

The relationship between the Marine Strategy Framework Directive 2008/56/EC (MSFD) and the Maritime Spatial Planning (MSP) process and Directive 2014/89/EU (MSPD) has already been analyzed to understand which is the dominant process or where there is an overlap, to recognize/identify common principles at policy level. Following these studies, we evaluate here the first implementation cycle of MSFD (2012–2018) and its potential contribution to the MSP process. To be explicit, we apply empirical in-depth assessment of the Macaronesian marine region, analyzing the level of MSFD implementation for the Azores, Madeira and the Canaries, identifying what is relevant for the MSP. The results of this study are documented within the PLASMAR project, and integrated with ongoing Macaronesian MSP.
