

# The 'Blue Growth Strategy of the Port of Vigo'

## Port of Vigo 4.0 - Going forward



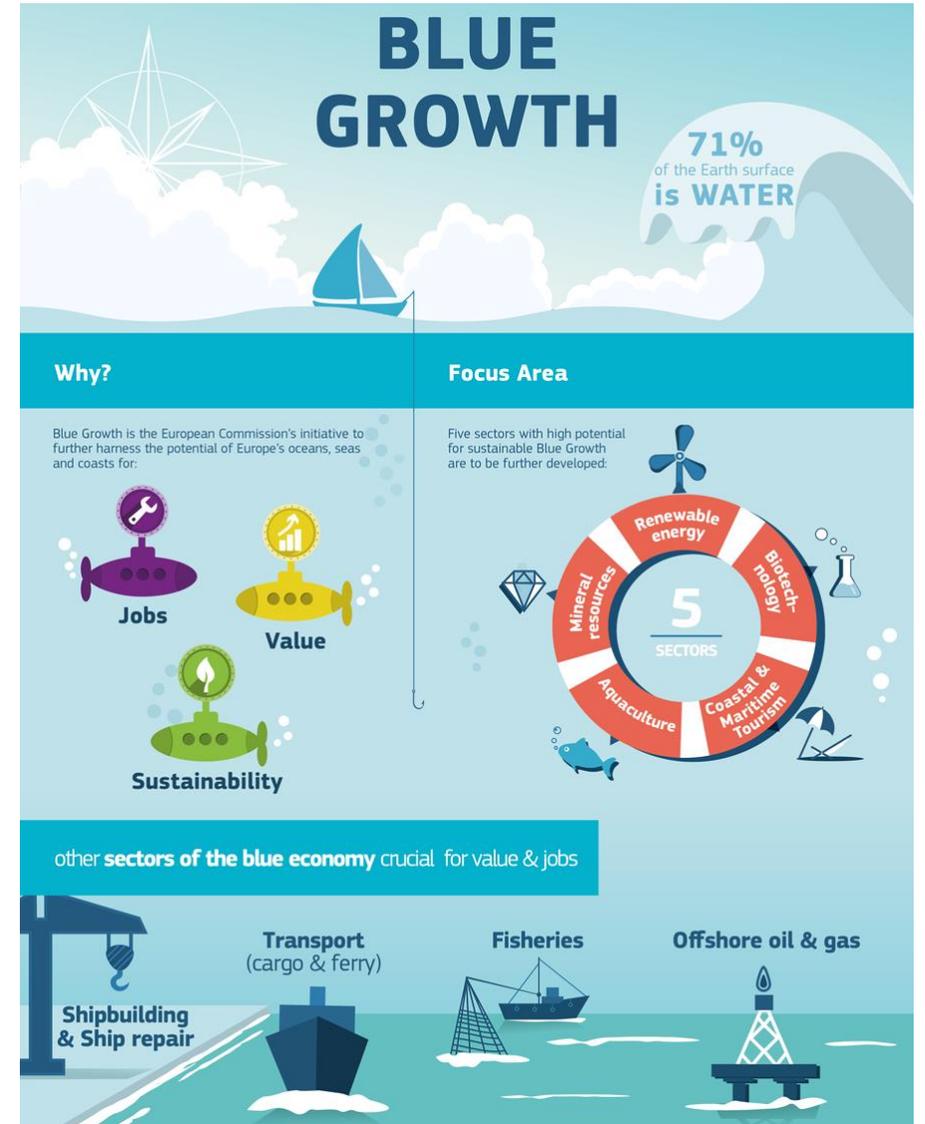
# BLUE GROWTH

Roma, 11th May 2018

# Blue Growth Vigo 2020 – Introduction

Blue Growth in the strategy promoted by European Commission to Foster European economy recovery. This strategy pretends launching Maritime Economy or Blue Economy by growing employment and economic growth in a sustainable way.

**Port of Vigo is the first Port in the European Union to implement Blue Growth strategy from a holistic perspective together with all sectors of its area of influence.**



# Main areas of Blue Growth.



- **FAO** identifies 4 areas, selected to promote growth, improve conservation, build sustainable fisheries, as well as a catalyst for policy development and foster cooperation between countries.

- Aquaculture
- Capture fisheries
- Seafood systems
- Eco-system services

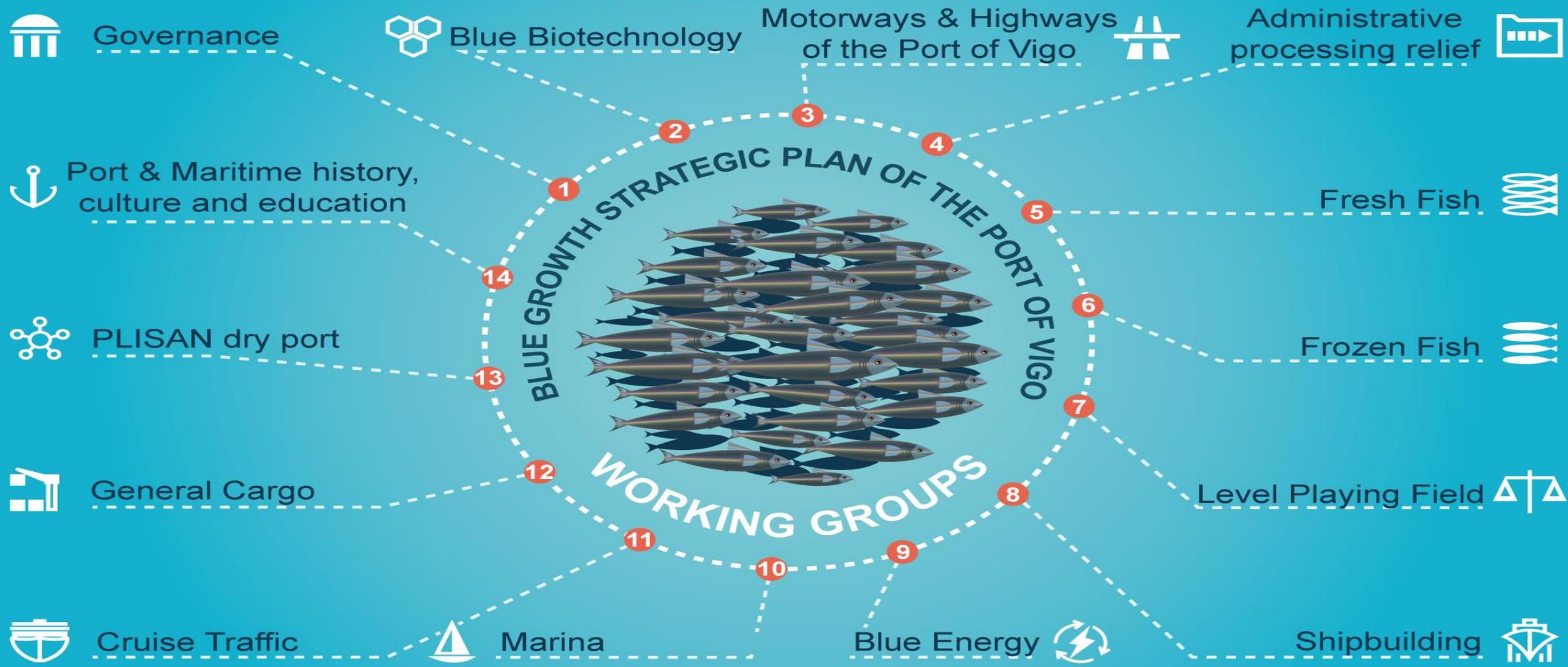


- **European Commission** emphasizes five sectors. These are selected from EC understanding of that value chains provide sustainable growth and employment.

- Blue Energy
- Aquaculture
- Coastal, maritime and cruise tourism
- Marine mineral resources
- Blue biotechnology

- **PORT OF VIGO**, sectors are to be identified in each geographic area as each of them have proper characteristics to be referred. From Port of Vigo we have identified many other sectors related to different value chains represented in our area of influence.

# A reminder of Vigo's Blue Growth Working Groups



Working Groups established by the Port Authority of Vigo according to the sectors defined by the European Commission

# Vigo Dialogue: Currently more than 300 participants in the Working Groups (are living).



- More than 20 meetings of working groups, and some of them have already met 4 times in 2 years
- More than 300 people involved in meetings, discussing on relevant issues related to competitiveness and sustainability
- Issues go beyond to those previously established.
- Working groups have become a chance for stakeholders to exchange ideas, issues and proposals.
- A **REAL DIALOGUE** has been established. Working Groups have become a **COMMUNICATION CHANNEL**
- Sustainability requires driving Real Dialogue to become a **PERMANENT DIALOGUE**

If you want to travel fast, walk alone, but if you want to travel far, walk together.

## Partners:



COMISIÓN EUROPEA

FAO

Spanish GS of Fisheries



July 2017. DG Mare, Brussels



Diciembre 2017. FAO. Roma



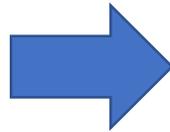
Abril 2017, General Secretary at Vigo

# Impact of BG implementation on sectorial development. Example

**One graphical examples** on how we carried out the analysis in each working group. The main drivers of the Port of Vigo's Blue Economy

✓ *Frozen Fish and transformation sector industry complex*

✓ *Automobile industry and motorway of the sea*



## Two sectors with high impact:

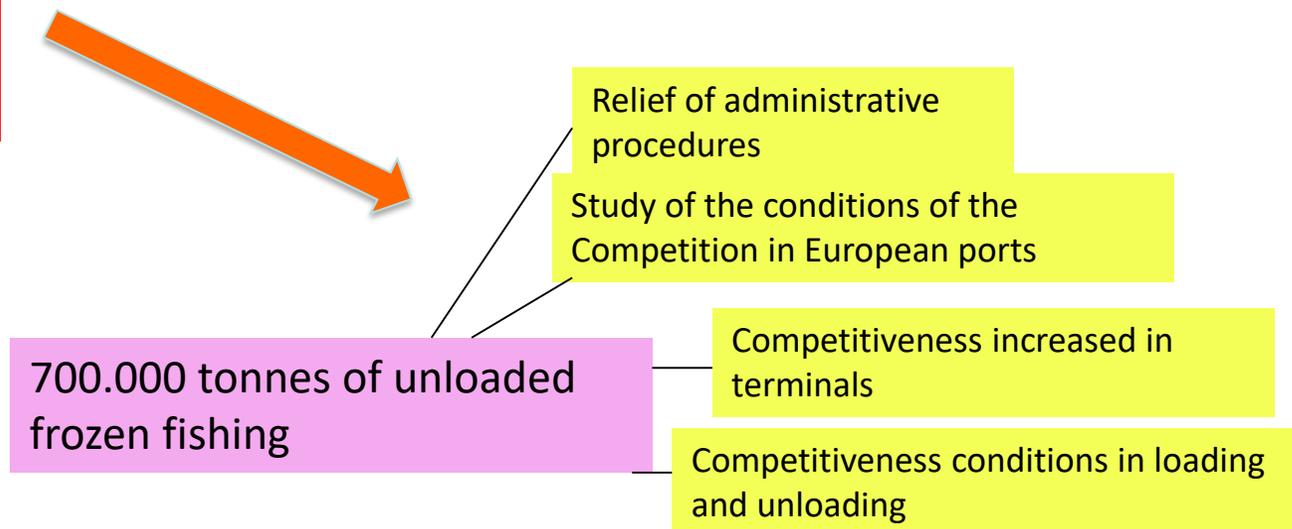
- **Social impact.** High level of professionalized employment. Relevant dependence from the society as a source of employment.
- **Economic impact:** high interrelation and dependence with different economic activities. Relevant source of income for hinterland
- **Environment impact:** impact on environment is managed.



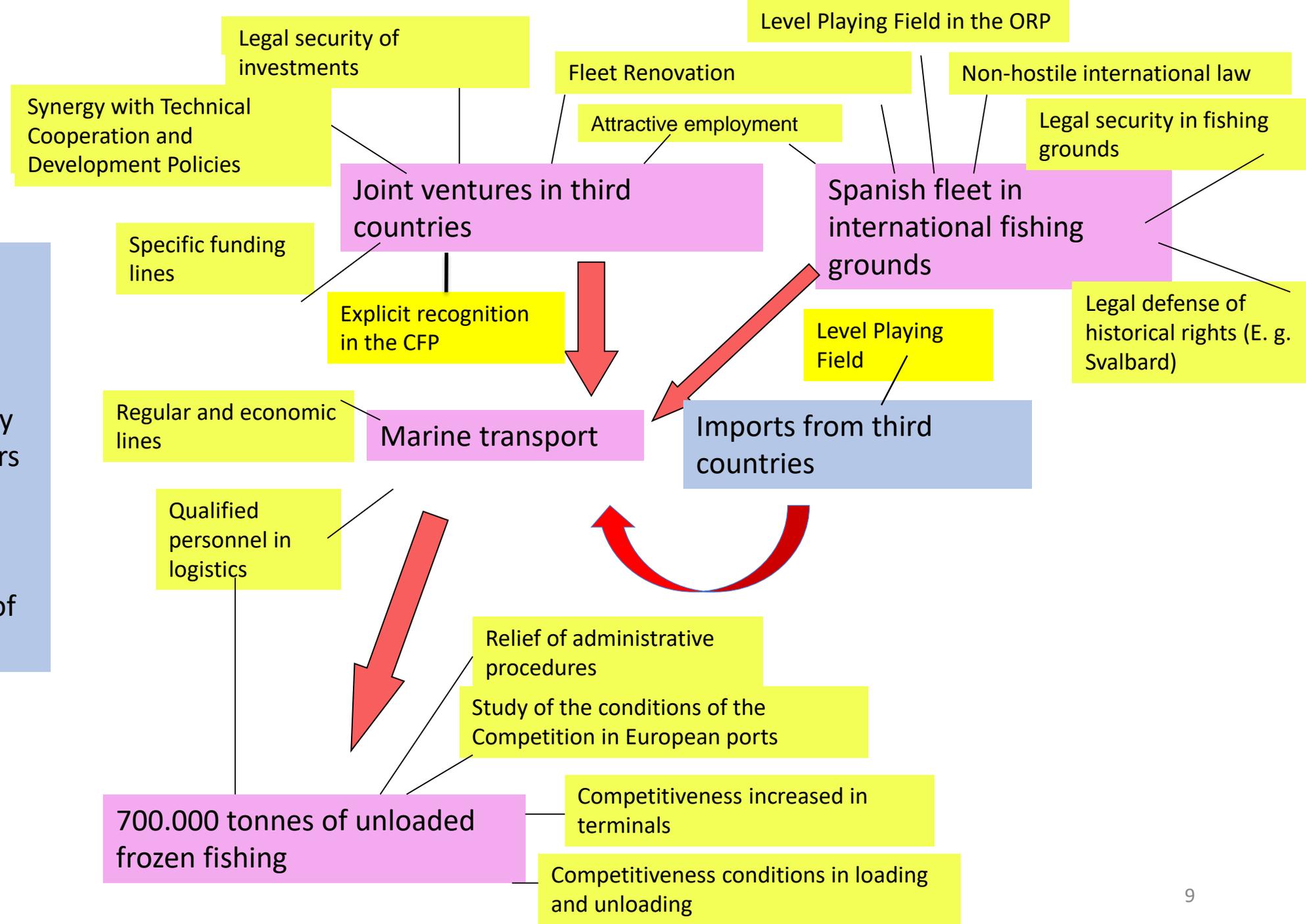
# Illustrative example of Blue Growth analysis in the case: Frozen fishing discharges in Port of Vigo

- ✓ If the objective were to maintain the level of the fishing discharges around 700.000 tonnes per year...a single-factor analysis would only be considered in terms of improving competitiveness.
- ✓ This should be on the basis of better conditions of stowage and all other factors related to the discharge, in order to improve the speed of operations and to minimize costs.

**NOT Blue Growth  
Analysis: Factors of  
Analysis**



To keep the Port of Vigo competitiveness (maintain or increase 700.000 tons/annual discharge) it is necessary to ensure that its suppliers are also competitive. Therefore it is also necessary to analyze the competitiveness factors of the whole chain.





# Projects under implementation by Objective



**GREEN PORT**

TUTATIS: Renewable **self-sufficient** Cies  
Ecosystem recovery, seabed regeneration, and  
environmental surveillance  
SEPORHA: **self-sufficient** Port



**INNOVATIVE PORT**

LNG: Samuel, Hive, LNG Atlantica Mos  
Sustainability, efficiency and energy self-  
sufficiency in maritime-port environments  
Smart Viport



**CONNECTED PORT**

Marinnleg: Level playing Field  
Port 4.0



**INCLUSIVE PORT**

Shell-fishing multifuncional boat and sector modernisation  
Marine Association in Ria de Vigo

# Modernization of the fleet



The vessel of the future is intended to be designed in order to dignify the work in the sea at the same time that the fleet (35 years old) is modernized under competitiveness and environmental criteria. This vessel will improve sea workers life by improving working conditions and fluid connection with their homes.

➤ Already marketed technology will be used in order to:

- Optimize onboard activity
- Implementing total information control on catches, transactions and sales.
- Improving ergonomomy conditions for sea workers
- Green energy (LNG)
- Connectivity
- Better living conditions on board



**Main Beneficiaries:** 20.000 galician women and men who improve their working conditions and productivity onboard.

**Indirect:** Consumers receive higher quality products and access more volume in the market.

**Budget Prototype**  
**3.000.000 € (Aclunaga+ Arvi+APVigo + CIS)**

**Total budget**  
**N vessel \*40 M€**

**Direct employment:**  
**Indirect employment: 200\* vessel (shipyards)**

**Level of influence on competitiveness**  
**High**

# Fish Market 4.0



## Innovative port

**Objective:** To promote the competitiveness of the commercialization of the fishing sector. We will adapt Fish market to the concept of INDUSTRY 4.0

- *Conciliation of 1<sup>st</sup> and 2<sup>nd</sup> sale*
- *Ensure traceability and quality control*
- **Monitoring of fish market in real time**
- *Improvement of soil cooling systems*
- *Saving and optimizing energy resources*
- **Improvement and centralization of retail activity**
- *Fish handling reduction*
- **Optimization of logistics**
- *New eviscerated room for swordfish*
- **Improved ergonomics of gutting job**
- *Avoid contamination of fish with soil water*
- **Maximum transparency and control of fish**

### Several stakeholders affected:

- Producer and market sector
- Public administration
- Sector engineering and construction.

**Main beneficiaries: 7.000 women and men** who improve their working conditions and productivity

**Indirect:** Consumers receive higher quality products and access more volume in the market.

### Estimated budget

**2.887.000€** (APVigo + State-owned Spanish Port + Spanish Secretary-General for Fisheries)

### Level of influence on competitiveness

**High Level**



**Objective:** to design a comprehensive management system for the waste from fishing ports (plastic food containers, polystyrene boxes, obsolete gear and marine waste) and to study the possibilities of recovering materials from the marine environment and transform them into material for clothing manufacture or fashion accessories.

- First phase: Port of Vigo and subsequently other Galician ports of interest.
- Second phase: extension to other ports of interest at state level.



### Activities:

1. Seabed cleaning and waste removal
2. Waste characterization
3. Selective collection point for marine litter and port waste
4. Design of pilot samples
5. Study of impact

**INDITEX**

### Stakeholders:

- Port Community
- Private sector
- Researchers
- Civil society
- Fishing sector

**Budget already invested**  
**400.000 €**

**Impact:**  
**Environment:** decreasing impact

# Multifunctional barge for the modernization of shellfish sector



**Objective:** Modernization of shellfish sector and recovery and maintenance of shellfish banks

- High contribution to improving the working conditions of shellfish farmers
- Positive impact on biological productivity
- Positive impact on environment
- Innovation: Design, prototype, high scalability



**Nº of stakeholders involved in pilot project**

- 2 private (specialized consultant)
- 2 public (APV y Consellería do Mar)
- 1 civil society (Cofradía Arcade)

**Funding Institution**  
Xunta de Galicia

**Level of influence on competitiveness**  
**High**

**Main beneficiaries:** 3.000 women and men who improve their working conditions and productivity

**Indirect:** Consumers receive higher quality products and access more volume in the market.

**Estimated Budget for prototype**  
**642.250€**

**Creation of direct employment: it is expected to multiply by 2 - 3 the current employment**  
**More number of production areas**

# MarInnleg

## Center for Innovation in Maritime and Fishery Legal Studies



**Objective:** Strengthening the competitiveness of the maritime and fishery sector through innovation in legal studies.

- *First Public Private Partnership initiative to provide innovation in legal studies in Spain*
- *Starting up in less than 6 months*
- *Activities and services: training, in-depth analysis, dissemination of legal know-how, research, cooperation in projects, others.*
- *Already main achievements: Brexit analysis, Tax Lease, training, others*

**Nº of stakeholders involved**

**7 Private organization**

**5 Public institutions**

**Budget already invested**

**51.500 € (APVigo + CdM)**

**Direct employment: 1**

**Indirect employment: 600**

**Stakeholders to be involved: researchers, private sector and public administrations, civil society. More than 50 persons will be directly involved per year**

**Annual budget committed**

**83.500 €**

**Level of influence on competitiveness**

**High**

MarInnLeg

# Port Greening



## Green Port

**Objective:** Improvement of the environmental quality of the docks of the Port of Vigo

- Test of atmospheric CO<sub>2</sub> fixing techniques
- Application of nanotechnology for the recovery of degraded areas
- Recovery of sediment removed
- Use of drones and satellites for the control and monitoring of spills
- 100% renewable energy referred to electric and thermic energy.
- Use of energy surplus to guarantee sustainable mobility and zero emissions of CO<sub>2</sub> y NO<sub>x</sub>.



### Stakeholders:

- Researchers
- Port users
- Civil society
- Fishing sector

### Estimated Budget

**15.000.000**

### Very High Environmental Impact:

Increased efficiency against spills  
Carbon footprint compensation  
Development of new management techniques

Is it real? YES. Our commitment. Malta 5 -6 October 2017

- Port of Vigo announced it will reduce by 30% its emissions (CO<sub>2</sub>, SO<sub>x</sub> and NO<sub>x</sub>) and will reach 3% energy self-sufficiency by 2022.
- To achieve this it will carry out actions that will **promote LNG use** and application of **innovative actions on algae capture of CO<sub>2</sub>**, support implementation **100% clean energy self-sufficiency for National Natural Park Illas Cies** as a pilot project and raise **awareness/training of at least 1000** users of Port of Vigo (all activities included) on the need for clean and blue energy."



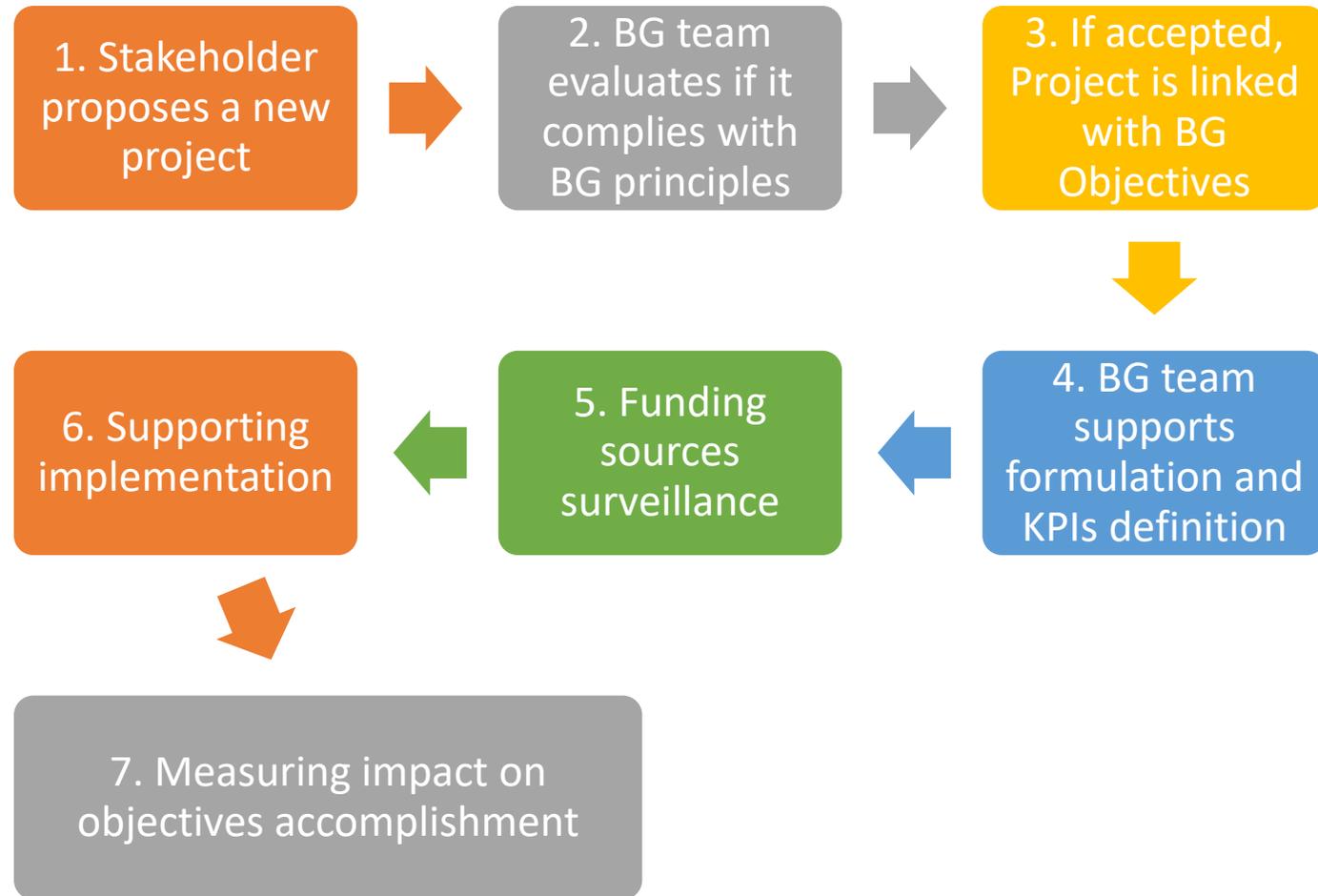
Samuel LNG



Core LNGas Hive

# Projects and Actions are ongoing, non stop process!!

- Projects and Actions are identified, designed and implemented BY STAKEHOLDERS
- We started with 35 Projects and we hold 45 PROJECTS NOW!!!!
- More than 50 public – private organizations are involved from quadruple hélix.
- At First, projects came from the Strategy design process, NOW they come from Stakeholders direct demands and proposals!!!
- We are COMMITTED with stakeholders, their proposals have become OUR proposals.



# Communication and Sensibilization as a tool for citizens to be involved

- **TRANSPARENCY AND AVAILABILITY** of information is a MUST for ensuring stakeholders involvement.
- A renewed **WEBSITE** has been launched in April 2018.
- **SOCIAL NETWORKS** are active since April 2018: Twitter and LinkedIn are on to disseminate results and to reinforce networks.
- Community perception to be evaluated by a Survey on BG.



# Communication and Sensibilization as a tool for citizens to be involved

- Media is involved in the BG strategy. They are key to disseminate and communicate to all stakeholders: written press, radio and televisión.
- Video has been edited to share BG principles.

farodevigo.es » Gran Vigo » Noticias de Vigo

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Noticias de Vigo

## Retina revolucionaria para el Blue Growth

# Puigdemont Escotet Amaia y Alfred «Fariña» La Manada ETA Eurovisión Belén Esteban Quique San Francisco MasterChef Biodiversa VIDEOS

La Voz de Galicia



VIGO CIUDAD

## Diseñan una barcaza para realizar las lab más duras del marisqueo a pie

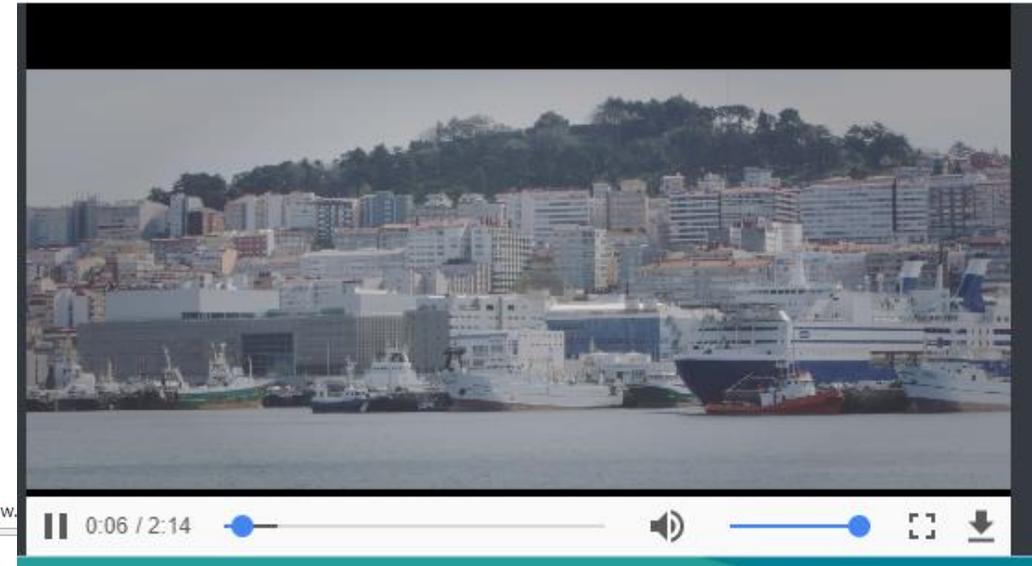
El Puerto de Vigo impulsa el proyecto dentro de la estragija de creciment

## EL PUERTO DE VIGO APUESTA POR VALORI NORTE DE PORTUGAL

*Reunión del Grupo de Trabajo Blue Growth sobre Histor el Campus do Mar, se centra en el ámbito del patrimonio Trabajo presentará su propuesta a la Convocatoria POP*

El Grupo de Trabajo sobre Historia y Cultura M Portuaria, surgido en torno a la iniciativa Blue Grov lidera el Puerto de Vigo, continúa dando pasos en Tanto es así que hoy se volvió a reunir con el obje analizar el estado del proyecto en el que se en trabajando desde el pasado año.

En esta área de trabajo se ha llamado a particip



VIGO

## Luz verde a la creación de la asociación Náutica Ría de Vigo

Más de una treintena de responsables de clubes náuticos, marinas deportivas, empresas e instituciones del sector han dado su visto bueno a la creación de la Asociación Náutica Ría de Vigo.



# The New Green is Blue. All activities fit in a Blue Port

We are working together for sustainable development; blue economy and blue society

¡THANK YOU!!!



GOBIERNO DE ESPAÑA  
MINISTERIO DE AGRICULTURA Y PESCA,  
ALIMENTACIÓN Y MEDIO AMBIENTE

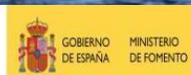


XUNTA DE GALICIA



Puerto de Vigo  
Puertos del Estado

Autoridad Portuaria de Vigo



GOBIERNO DE ESPAÑA  
MINISTERIO DE FOMENTO

