LOOP·Ports

Circular Economy Network of Ports

FINAL CONFERENCE

Online

16th December 2020

FUNDACIÓN VALENCIAPORT

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SIDE EVENT

WCEF

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

UNIVERSIDAD POLITÉCNICA MADRID

INSTITUTO
DE ECONOMÍA
INTERNACIONAL
VNIVERSITAT DE VALÈNCIA

NTU INTERNATIONAL

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

DTU Technical University
of Denmark

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Álvaro Campos – Universidad Polit. Madrid

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AGENDA

LOOP·Ports
Circular Economy Network of Ports

FINAL CONFERENCE
Online
16th December 2020

08:45 - 09:00	**WELCOME AND CONNECTION TO THE PLENARY MEETING ROOM**
09:00 - 09:45	**OPENING SESSION**
09:00 - 09:15	Welcome and presentation of New CE Action Plan - Emmanuelle Maire, Head of unit of Sustainable Production, Products and Consumption, DG Environment European Commission
09:15 - 09:25	World Ports Sustainability Program - Antonis Michail, International Association of Port and Harbors IAPH
09:25 - 09:35	LOOP-Ports Project Presentation - Rocío García, Fundación Valenciaport
09:35 - 09:45	A Systems innovation approach for a circular, inclusive, resilient, zero-carbon maritime sector - Maria Loloni, EIT Climate-KIC
09:45 - 10:45	**PROJECT RESULTS (1st PANEL)**
09:45 - 10:05	Mapping of Ports and Circular Economy Indicators - Álvaro Campos, Universidad Politécnica de Madrid
10:05 - 10:25	Circular Economy initiatives from across Europe - Monika Elend, NTU International
10:25 - 10:45	Innovation Recommendations for the EU Port Sector - Tim McAloone, Technical University of Denmark
10:45 - 11:00	**BREAK TIME**
11:00 - 11:45	**PROJECT RESULTS (2ND PANEL)**
11:00 - 11:15	Circular Economy training for professionals in the port sector - Paola Valandro, EIT Climate-KIC
11:15 - 11:30	Workshops for a Network - Tiziana Campisi, University of Bologna & Fondazione Flaminia
11:30 - 11:45	Business Models in EU Ports - Jorge Lara, Fundación Valenciaport
11:45 - 12:00	**CONCLUSIONS**
11:45 - 12:00	Conclusions of the Project - Jorge Lara, coordination LOOP-Ports project, Fundación Valenciaport
12:00	**END OF THE CONFERENCE**

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LOOP·Ports
Circular Economy Network of Ports

Circular Economy Network of Ports (LOOP-Ports)

Mapping of Ports and Circular Economy Indicators

Álvaro Campos

R&D researcher

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POLITÉCNICA

LOOP·Ports
Circular Economy Network of Ports

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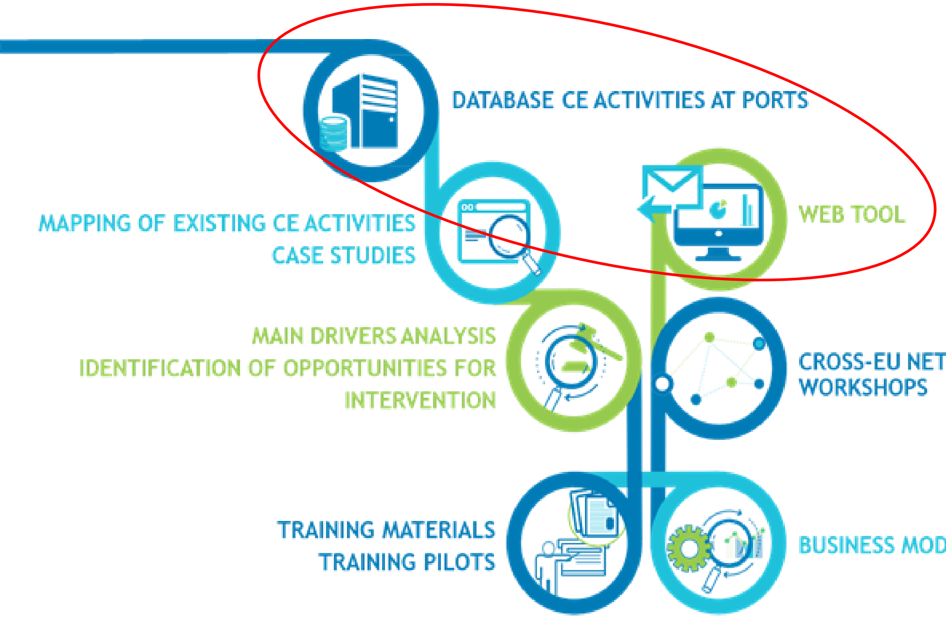
CONFERENCE
Online
16th December 2020

LOOP·Ports
Circular Economy Network of Ports

1. INTRODUCTION AND OBJECTIVES



DATABASE CE ACTIVITIES AT PORTS

MAPPING OF EXISTING CE ACTIVITIES
CASE STUDIES

WEB TOOL

MAIN DRIVERS ANALYSIS
IDENTIFICATION OF OPPORTUNITIES FOR INTERVENTION

CROSS-EU NETWORK OF PORTS
WORKSHOPS

TRAINING MATERIALS
TRAINING PILOTS

BUSINESS MODELS

MAIN OBJECTIVE:

Development/analysis of a database with the information collected from EU Ports

Matrix based on:

- Selection of Ports
- Selection of Variables

Inclusion of the information in a web tool

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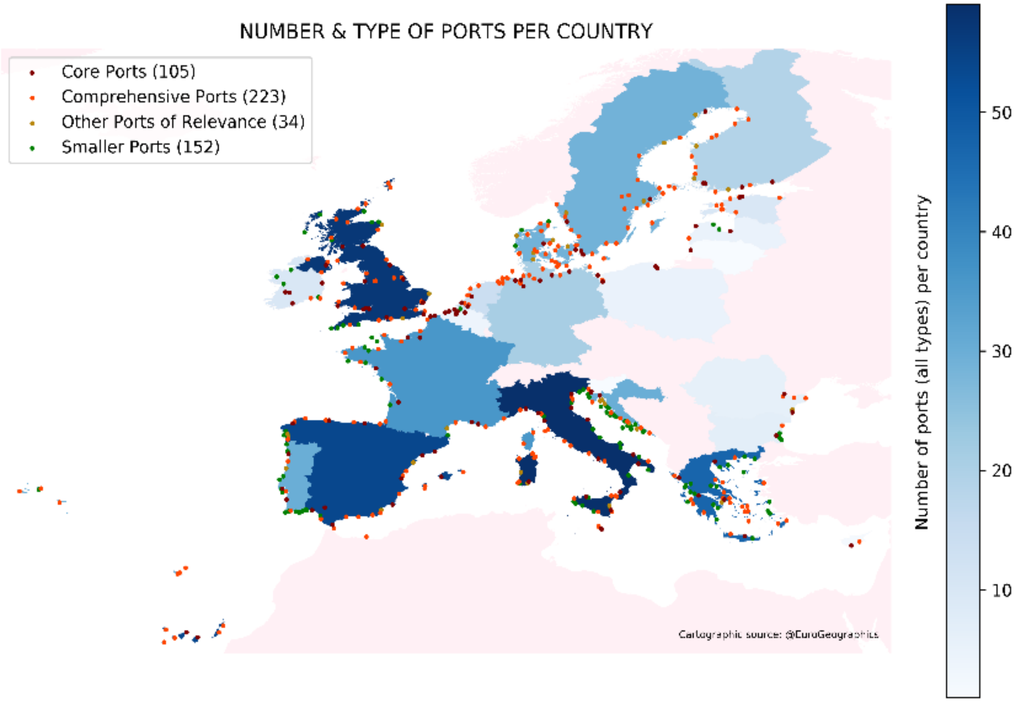
Circular Economy Network of Ports

2. METHODOLOGY

STEP1: SELECTION OF PORTS

- Total of 480 main European Ports:
- All ports considered by the European Commission as **Core** (105 ports) and **Comprehensive** (223 ports)

(As part of the TEN-T network, are the hubs for main goods and passengers traffics inside and outside Europe)


NUMBER & TYPE OF PORTS PER COUNTRY
Core Ports (105)
Comprehensive Ports (223)
Other Ports of Relevance (34)
Smaller Ports (152)
Number of ports (all types) per country
50
40
30
20
10
Cartographic source: @EuroGeographics

- **Other Ports of Relevance** (34 ports), handling more than 1,000,000 tons per year or with a traffic higher than 1,000,000 passengers per year

- **Main Fishing Ports** (390 ports, from which 152 have been classified as **Smaller Ports** for not being core, comprehensive or other of relevance), with more than 100 fishing vessels registered, according to the Fleet Register of the European Union

2. METHODOLOGY

STEP2: SELECTION OF VARIABLES OF INTEREST

OVERALL CHARACTERISTICS

- Country
- Port
- UN/LOCODE
- Latitude
- Longitude
- Sea/ocean
- Geographical área
- Core Port
- Comprehensive Port
- Other of Relevance

CARGO AND INDUSTRIAL SECTORS

- Containarized traffic
- Dry bulk traffic
- General Cargo traffic
- Other liquid traffic
- Petroleum traffic
- Ro-Ro/Ro-Pax traffic
- Dry dock/Shipyards
- Cruise Traffic
- Fishing Traffic
- Enlargement expectations

STATISTICS

- Eurostat name
- Nº inward calls
- GW handled
- Nº ferry pass.
- Nº cruise pass.
- Nº fishing ships
- Nº terminals

ENVIRONMENT

- ESPO members
- ECOPORTS members
- WPCI members
- ISO14001 certification
- PERS certification
- EMAS certification
- Env./sustainability report

PORT MANAGEMENT

- Ownership
- Government model
- Management organism
- Level of digitalization

CIRCULAR ECONOMY

- National
- Regional
- Local
- Weblink

ADDITIONAL INFORMATION

- Website
- Comments

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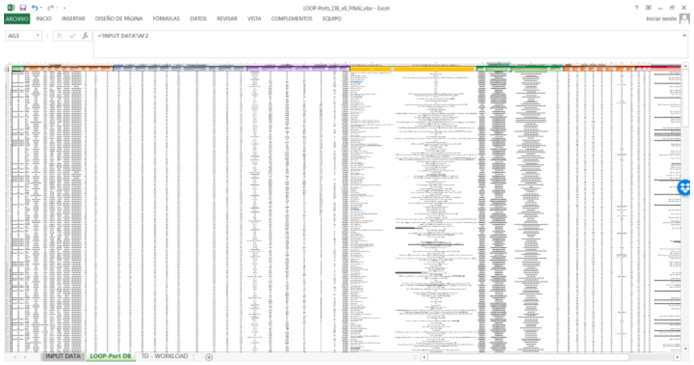
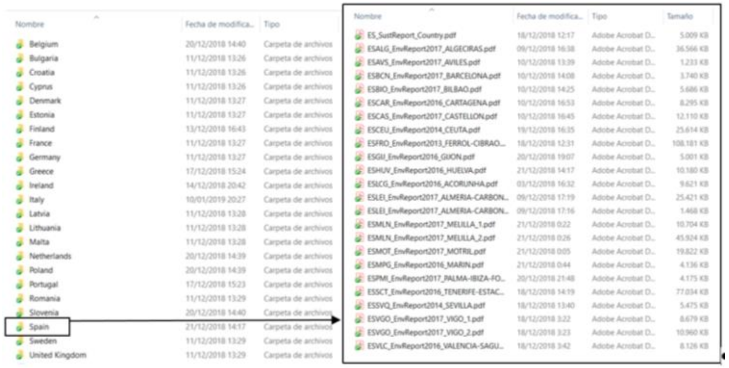
2. METHODOLOGY

STEP3: DATABASE GENERATION AND QUALITY CHECK

1. Fill in Excel file



2. Store environmental/sustainable reports



Nombre	Fecha de modifica...	Tipo
Belgium	20/12/2018 14:40	Carpeta de archivos
Bulgaria	11/12/2018 13:26	Carpeta de archivos
Croatia	11/12/2018 13:26	Carpeta de archivos
Cyprus	11/12/2018 13:26	Carpeta de archivos
Denmark	11/12/2018 13:27	Carpeta de archivos
Estonia	11/12/2018 13:27	Carpeta de archivos
Finland	13/12/2018 16:43	Carpeta de archivos
France	11/12/2018 13:27	Carpeta de archivos
Germany	11/12/2018 13:27	Carpeta de archivos
Greece	17/12/2018 15:24	Carpeta de archivos
Ireland	14/12/2018 20:42	Carpeta de archivos
Italy	10/01/2019 20:27	Carpeta de archivos
Latvia	11/12/2018 13:28	Carpeta de archivos
Lithuania	11/12/2018 13:28	Carpeta de archivos
Malta	11/12/2018 13:28	Carpeta de archivos
Netherlands	20/12/2018 14:39	Carpeta de archivos
Poland	20/12/2018 14:39	Carpeta de archivos
Portugal	17/12/2018 15:23	Carpeta de archivos
Romania	11/12/2018 13:29	Carpeta de archivos
Slovenia	20/12/2018 14:40	Carpeta de archivos
Spain	21/12/2018 14:17	Carpeta de archivos
Sweden	11/12/2018 13:29	Carpeta de archivos
United Kingdom	11/12/2018 13:29	Carpeta de archivos

Nombre	Fecha de modifica...	Tipo	Tamaño
ES_SustReport_Country.pdf	18/12/2018 12:17	Adobe Acrobat D...	5.009 KB
ESALG_EnvReport2017_ALGECIRAS.pdf	09/12/2018 16:38	Adobe Acrobat D...	36.566 KB
ESAVS_EnvReport2017_AVILES.pdf	10/12/2018 13:39	Adobe Acrobat D...	1.233 KB
ESBCN_EnvReport2017_BARCELONA.pdf	10/12/2018 14:08	Adobe Acrobat D...	3.740 KB
ESBIO_EnvReport2017_BILBAO.pdf	10/12/2018 14:25	Adobe Acrobat D...	5.686 KB
ESCAR_EnvReport2016_CARTAGENA.pdf	10/12/2018 16:53	Adobe Acrobat D...	8.295 KB
ESCAS_EnvReport2017_CASTELLON.pdf	10/12/2018 16:45	Adobe Acrobat D...	12.110 KB
ESCEU_EnvReport2014_CEUTA.pdf	19/12/2018 16:35	Adobe Acrobat D...	25.614 KB
ESFRO_EnvReport2013_FERROL-CIBRAO...	18/12/2018 12:31	Adobe Acrobat D...	108.181 KB
ESGIJ_EnvReport2016_GIJON.pdf	20/12/2018 19:07	Adobe Acrobat D...	5.001 KB
ESHUV_EnvReport2016_HUELVA.pdf	21/12/2018 14:17	Adobe Acrobat D...	10.180 KB
ESLCG_EnvReport2016_ACORUNHA.pdf	03/12/2018 16:32	Adobe Acrobat D...	9.621 KB
ESLEI_EnvReport2017_ALMERIA-CARBON...	09/12/2018 17:19	Adobe Acrobat D...	25.421 KB
ESLEI_EnvReport2017_ALMERIA-CARBON...	09/12/2018 17:16	Adobe Acrobat D...	1.468 KB
ESMLN_EnvReport2017_MELILLA_1.pdf	21/12/2018 0:22	Adobe Acrobat D...	10.704 KB
ESMLN_EnvReport2017_MELILLA_2.pdf	21/12/2018 0:26	Adobe Acrobat D...	45.924 KB
ESMOT_EnvReport2017_MOTRIL.pdf	21/12/2018 0:05	Adobe Acrobat D...	19.822 KB
ESMPG_EnvReport2016_MARIN.pdf	21/12/2018 0:44	Adobe Acrobat D...	4.136 KB
ESPMI_EnvReport2017_PALMA-IBIZA-FO...	20/12/2018 21:48	Adobe Acrobat D...	4.175 KB
ESSCT_EnvReport2016_TENERIFE-ESTAC...	18/12/2018 14:19	Adobe Acrobat D...	77.034 KB
ESSVQ_EnvReport2014_SEVILLA.pdf	18/12/2018 13:40	Adobe Acrobat D...	5.475 KB
ESVGO_EnvReport2017_VIGO_1.pdf	18/12/2018 3:22	Adobe Acrobat D...	8.679 KB
ESVGO_EnvReport2017_VIGO_2.pdf	18/12/2018 3:23	Adobe Acrobat D...	10.960 KB
ESVLC_EnvReport2016_VALENCIA-SAGU...	18/12/2018 3:42	Adobe Acrobat D...	8.126 KB

3. Quality check

- ✓ Checking that there are not blanks and that the “not available” fields are normalized with the symbol “N/A”.
- ✓ Checking and reviewing that the classifications and numerical values are in line with the references and expectations.
- ✓ Checking the uniqueness of a “core port”, “comprehensive port” or “other of relevance”.
- ✓ Checking that ports classified as “other of relevance” have indeed more than 1 million passengers per year or more than 1 million GT of handled goods.
- ✓ Checking that, when a certain traffic with associated statistics is marked with “YES” (i.e. Cruise Traffic, Fishing Traffic or any kind of goods traffic), there are indeed statistics associated and vice versa. Also checking the contrary, that is, when a certain traffic with associated statistics is marked with “NO”, the statistics are indeed 0 and vice versa. Due to the lacking of available information, in a few cases there are ports with certain traffics identified but with statistical information classified as “N/A”. Notice that, in the study and generation of results, all the statistics marked as “N/A” are considered as 0.
- ✓ Checking that ports with EMAS certification have indeed an available annual environmental/sustainable report, as it is part of the requisites for this certification.
- ✓ Checking that all the ports with an environmental/sustainable report have indeed an available document in the shared folder and vice versa.

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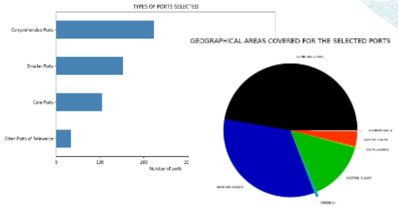
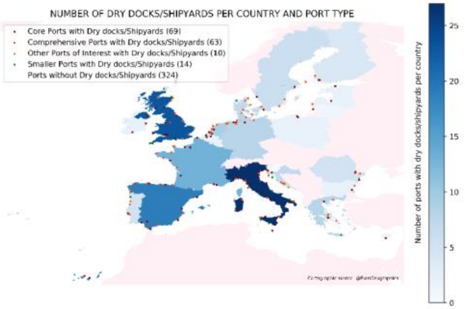
2. METHODOLOGY

STEP4: DATABASE ANALYSIS

- Sectors/bar diagrams

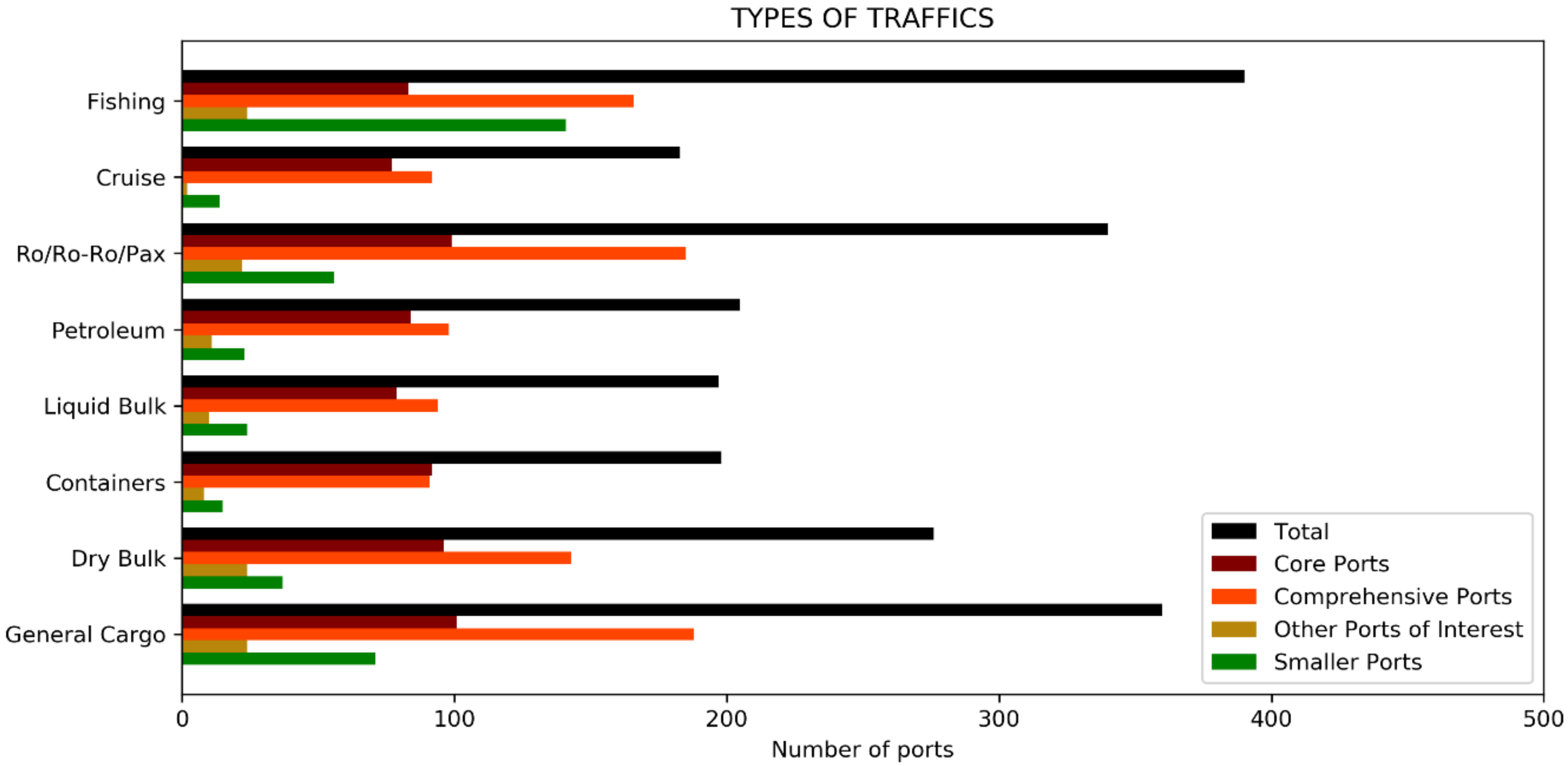


- Geo-referenced maps


NUMBER OF DRY DOCKS/SHIPYARDS PER COUNTRY AND PORT TYPE
Core Ports with Dry docks/Shipyards (69)
Comprehensive Ports with Dry docks/Shipyards (63)
Other Ports of Interest with Dry docks/Shipyards (10)
Smaller Ports with Dry docks/Shipyards (14)
Ports without Dry docks/Shipyards (324)
Number of ports with dry docks/shipyards per country
25
20
15
10
5
0

- Suitability of ports to implement CE innitiatives

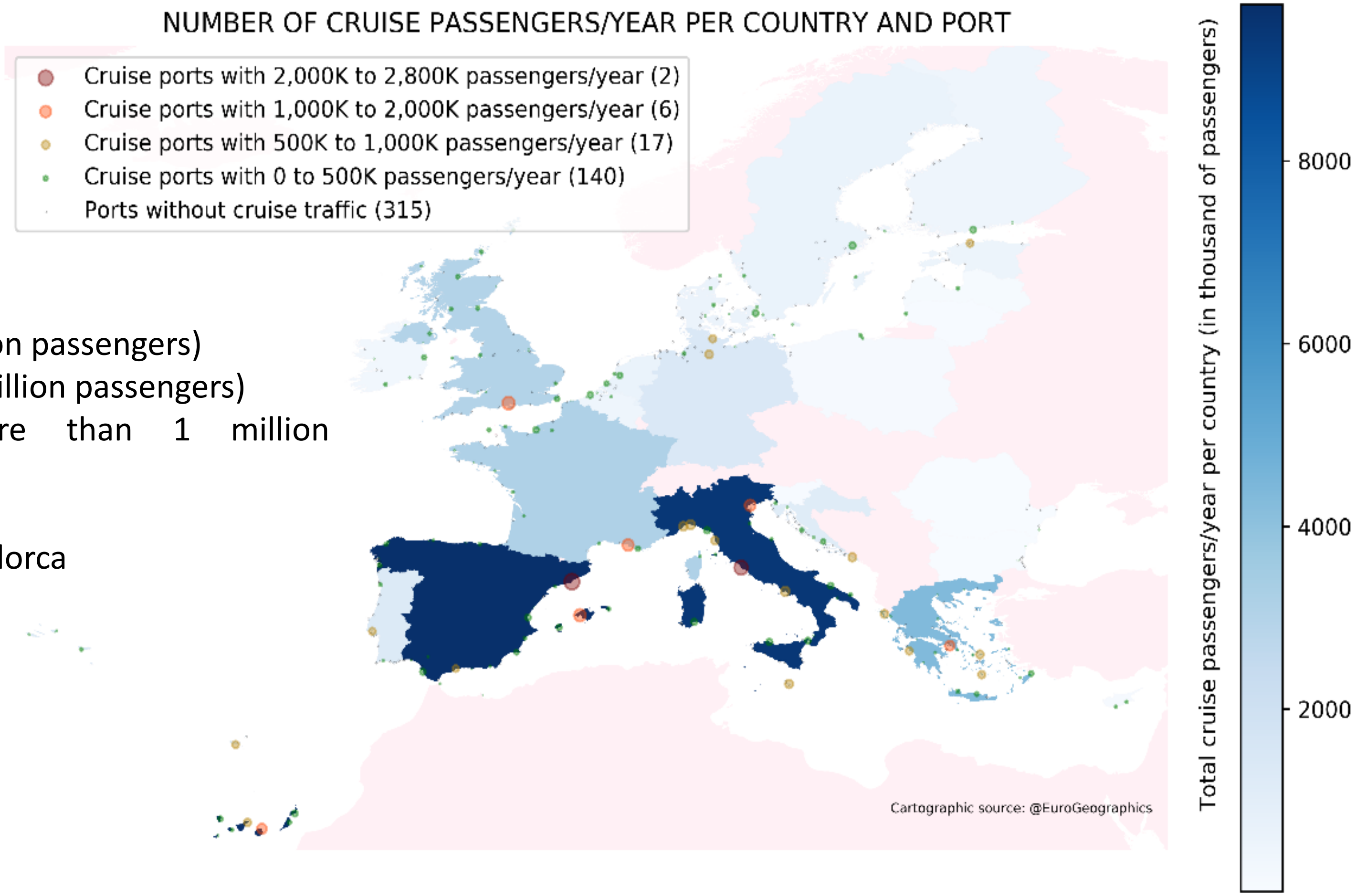
3. RESULTS



TYPES OF TRAFFICS
Fishing
Cruise
Ro/Ro-Ro/Pax
Petroleum
Liquid Bulk
Containers
Dry Bulk
General Cargo
0
100
200
300
400
500
Number of ports
Total
Core Ports
Comprehensive Ports
Other Ports of Interest
Smaller Ports

3. RESULTS

CRUISE PASSENGERS



NUMBER OF CRUISE PASSENGERS/YEAR PER COUNTRY AND PORT

Cruise ports with 2,000K to 2,800K passengers/year (2)
Cruise ports with 1,000K to 2,000K passengers/year (6)
Cruise ports with 500K to 1,000K passengers/year (17)
Cruise ports with 0 to 500K passengers/year (140)
Ports without cruise traffic (315)
Total cruise passengers/year per country (in thousand of passengers)
8000
6000
4000
2000

Cartographic source: @EuroGeographics

Busiest cruise ports:

- Barcelona (2.7 million passengers)
- Civitavecchia (2.2 million passengers)
- Others with more than 1 million passengers:
  - Southampton
  - Palma de Mallorca
  - Marseille
  - Venetia
  - Las Palmas
  - Piraeus

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3. RESULTS

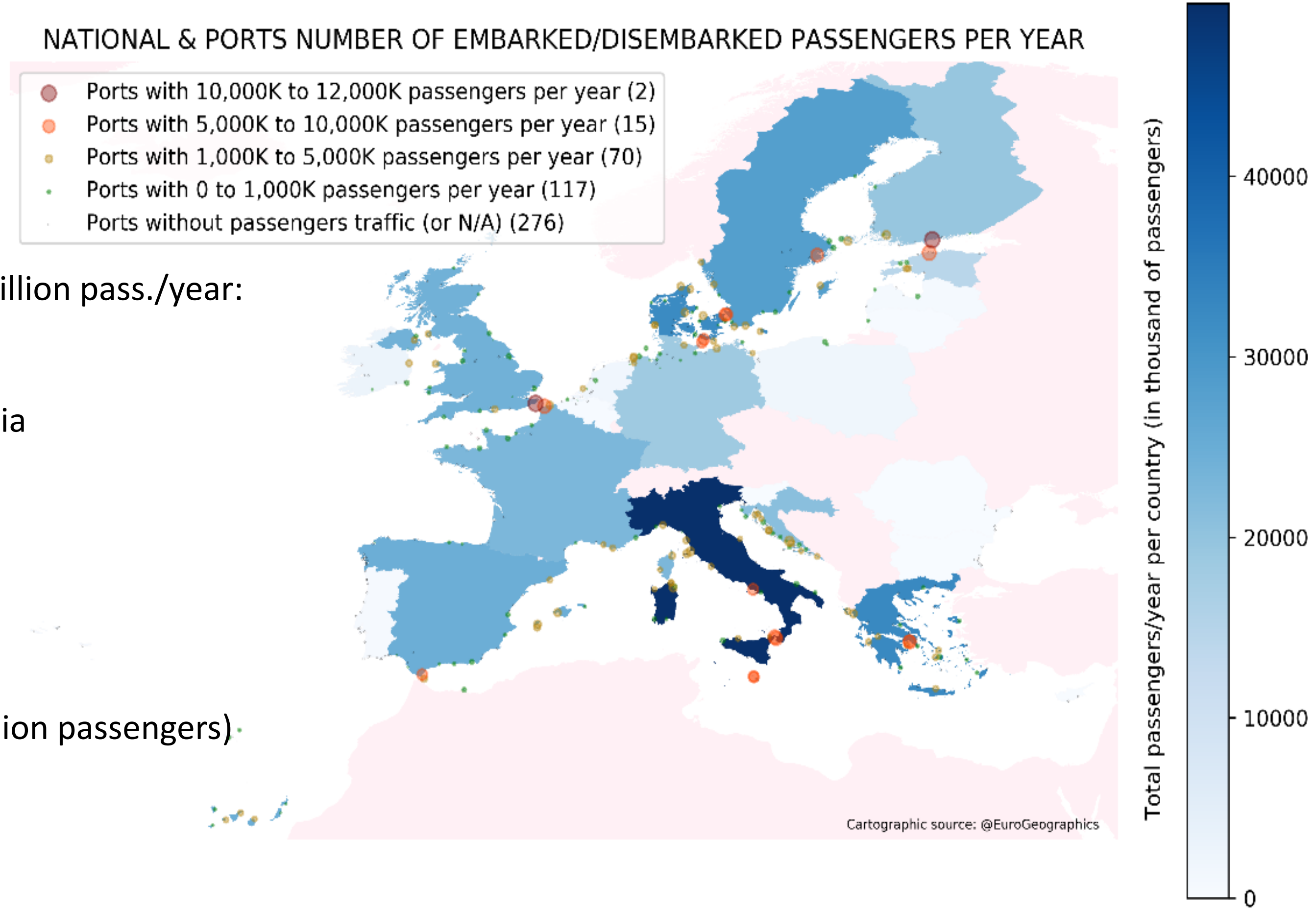
FERRY PASSENGERS

8 ferry routes moving 5-10 million pass./year:

- Dover-Calais
- Helsinki-Tallinn
- Messina-Reggio di Calabria
- Helsinborg-Helsingor
- Perama-Salamina
- Puttgarden-Rodby
- Cirkewwa-Mgarr
- Algeciras-North Africa

Busiest port:

- Piraeus + Perama (14 million passengers)


NATIONAL & PORTS NUMBER OF EMBARKED/DISEMBARKED PASSENGERS PER YEAR

● Ports with 10,000K to 12,000K passengers per year (2)
● Ports with 5,000K to 10,000K passengers per year (15)
● Ports with 1,000K to 5,000K passengers per year (70)
● Ports with 0 to 1,000K passengers per year (117)
Ports without passengers traffic (or N/A) (276)
Total passengers/year per country (in thousand of passengers)
40000
30000
20000
10000
0

Cartographic source: @EuroGeographics

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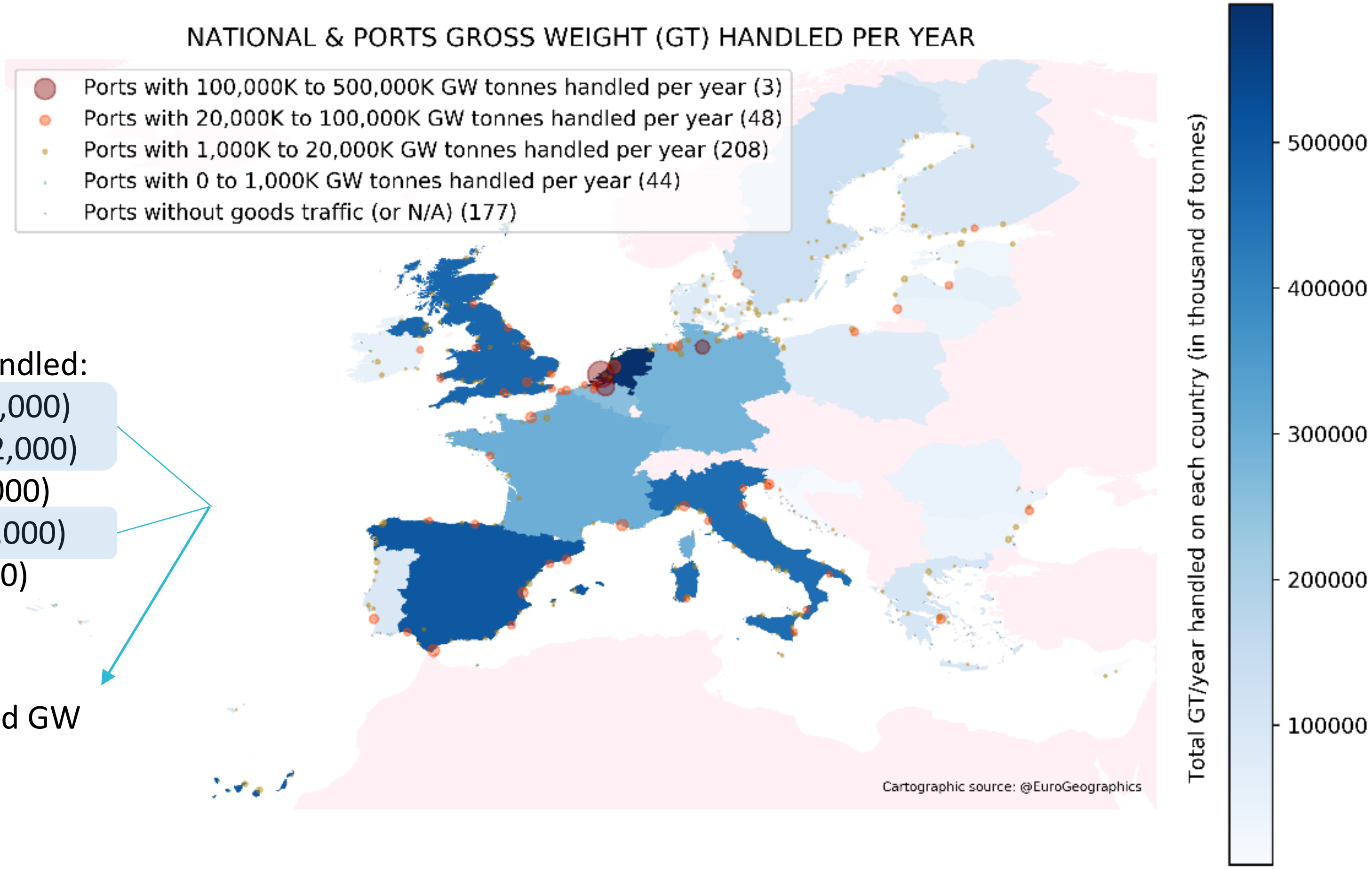
Circular Economy Network of Ports

3. RESULTS

TONS HANDLED PER YEAR


NATIONAL & PORTS GROSS WEIGHT (GT) HANDLED PER YEAR

Ports with 100,000K to 500,000K GW tonnes handled per year (3)
Ports with 20,000K to 100,000K GW tonnes handled per year (48)
Ports with 1,000K to 20,000K GW tonnes handled per year (208)
Ports with 0 to 1,000K GW tonnes handled per year (44)
Ports without goods traffic (or N/A) (177)
Total GT/year handled on each country (in thousand of tonnes)
500000
400000
300000
200000
100000

Cartographic source: @EuroGeographics

Ports with more tons handled:

- Rotterdam (433,290,000)
- Antwerpen (201,202,000)
- Hamburg (118,761,000)
- Amsterdam (98,517,000)
- Algeciras (83,493,000)

20% of all the considered GW

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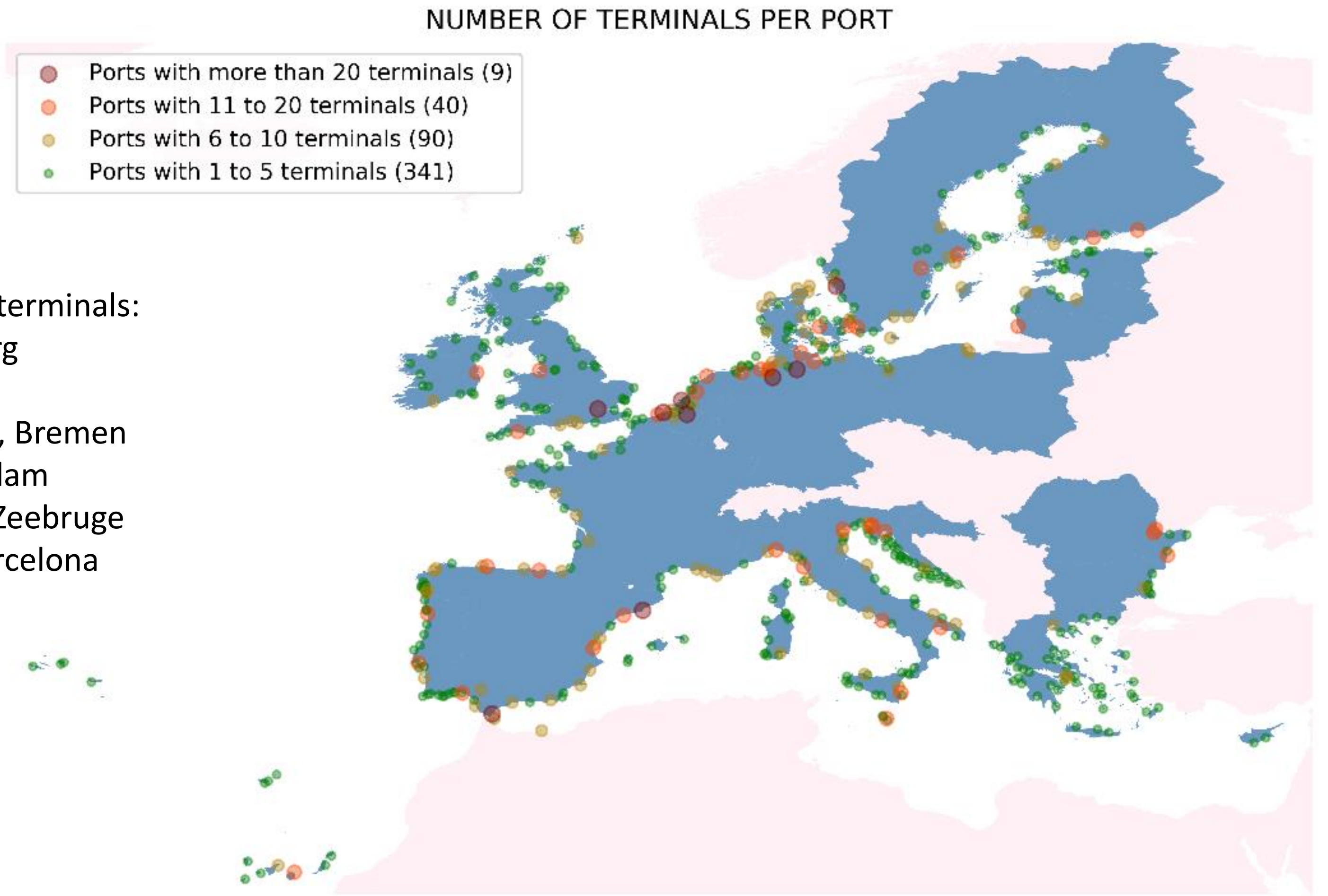
3. RESULTS

NUMBER OF TERMINALS

Ports with more tan 20 terminals:

- Sweden: Gothenburg
- UK: London
- Germany: Hamburg, Bremen
- Netherland: Rotterdam
- Belgium: Antwerp, Zeebruge
- Spain: Algeciras, Barcelona


NUMBER OF TERMINALS PER PORT
● Ports with more than 20 terminals (9)
● Ports with 11 to 20 terminals (40)
● Ports with 6 to 10 terminals (90)
● Ports with 1 to 5 terminals (341)

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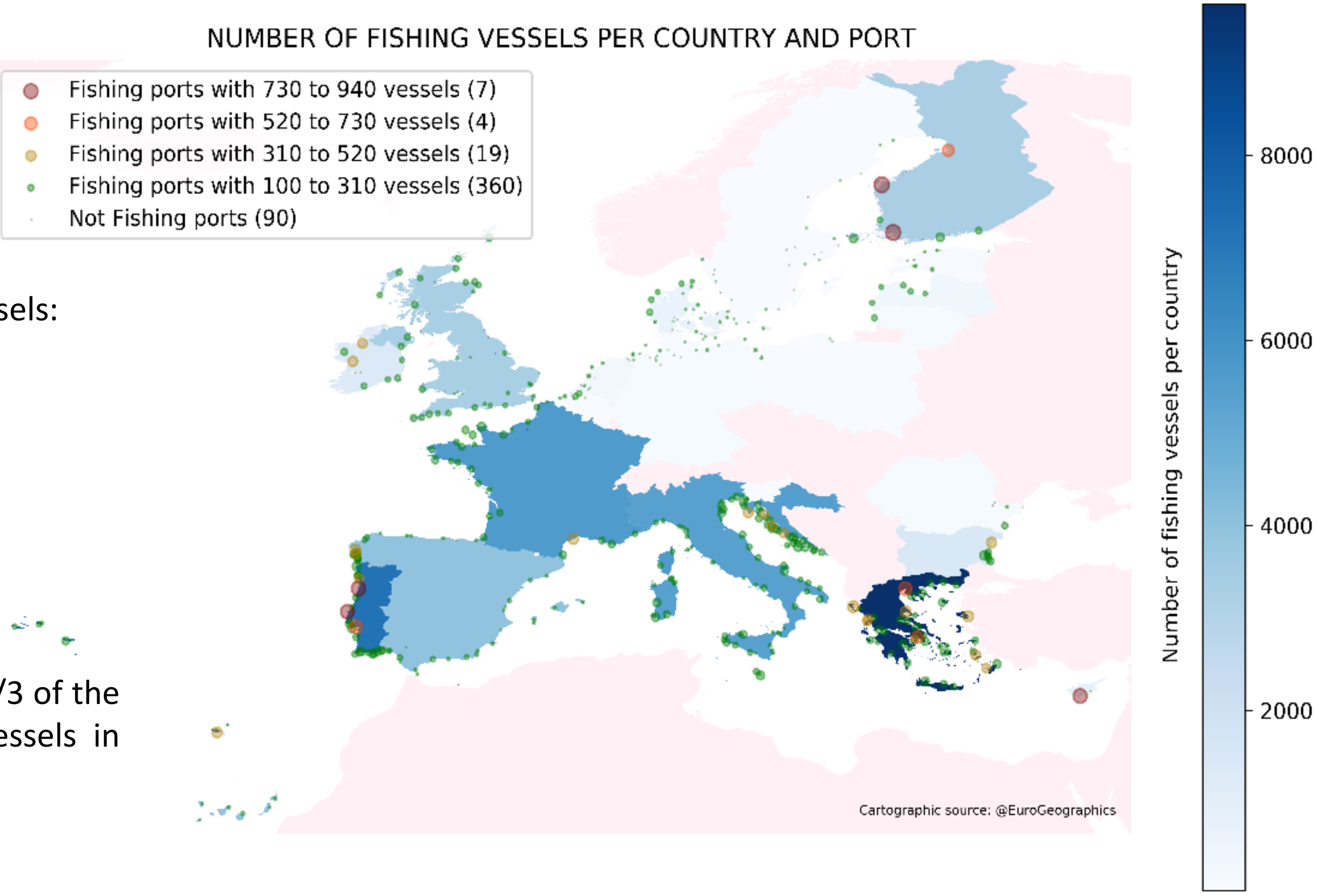
Circular Economy Network of Ports

3. RESULTS

NUMBER OF FISHING VESSELS


NUMBER OF FISHING VESSELS PER COUNTRY AND PORT

● Fishing ports with 730 to 940 vessels (7)
● Fishing ports with 520 to 730 vessels (4)
● Fishing ports with 310 to 520 vessels (19)
● Fishing ports with 100 to 310 vessels (360)
· Not Fishing ports (90)
Number of fishing vessels per country
8000
6000
4000
2000

Cartographic source: @EuroGeographics

Ports with more fishing vessels:

- Vaasa (943)
- Turku (933)
- Fort de France (904)
- Aveiro (839)
- Limassol (805)
- Peniche (765)
- Point á Pitre (741)

Greece + Portugal gather 1/3 of the total number of fishing vessels in the database

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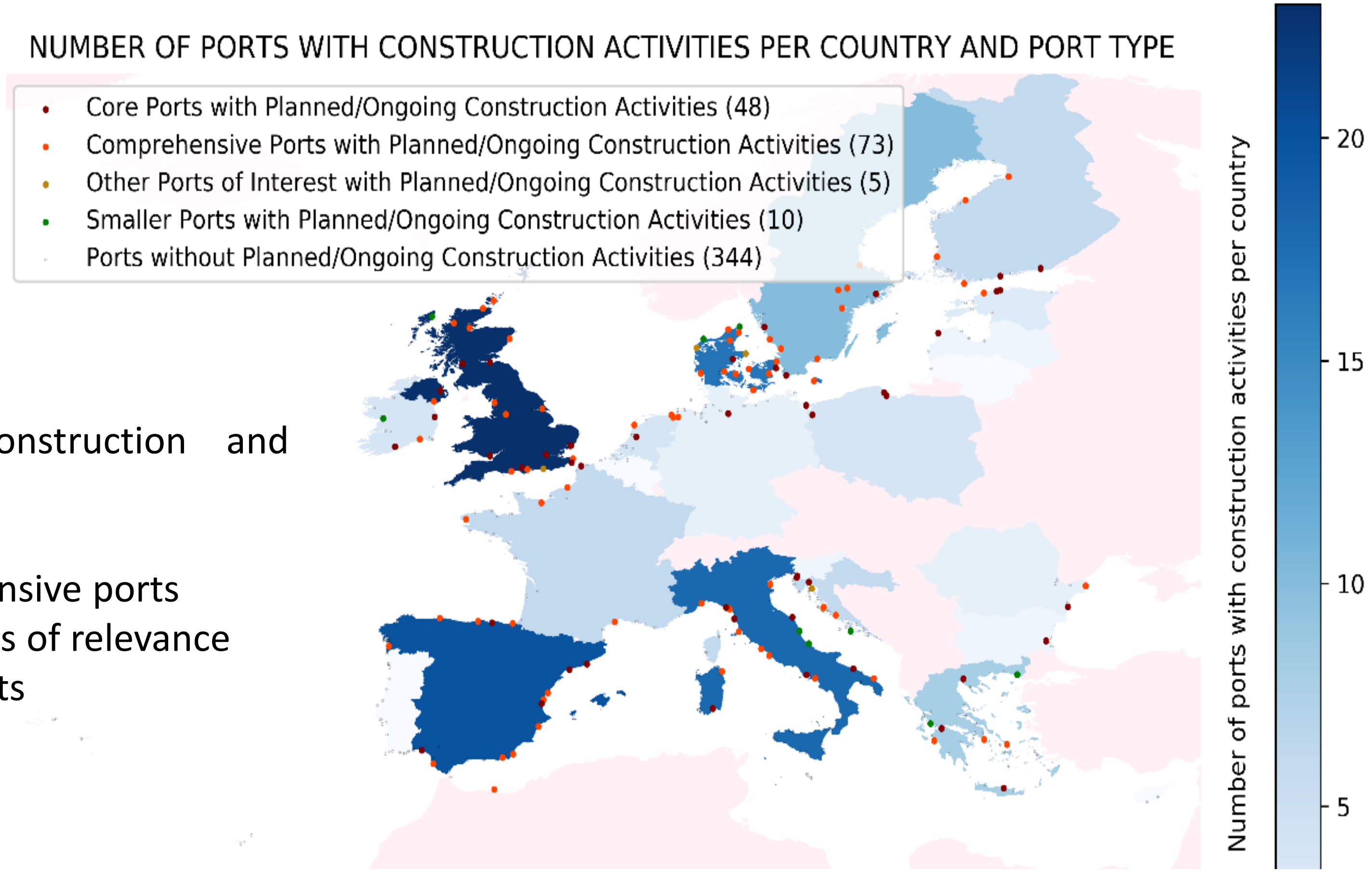
3. RESULTS

CONSTRUCTION & DREDGING ACTIVITIES


NUMBER OF PORTS WITH CONSTRUCTION ACTIVITIES PER COUNTRY AND PORT TYPE

● Core Ports with Planned/Ongoing Construction Activities (48)
● Comprehensive Ports with Planned/Ongoing Construction Activities (73)
● Other Ports of Interest with Planned/Ongoing Construction Activities (5)
● Smaller Ports with Planned/Ongoing Construction Activities (10)
· Ports without Planned/Ongoing Construction Activities (344)
Number of ports with construction activities per country
20
15
10
5

Ongoing/planned construction and dredging activities:

- 46% of core ports
- 33% of comprehensive ports
- 15% of other ports of relevance
- 6% of smaller ports

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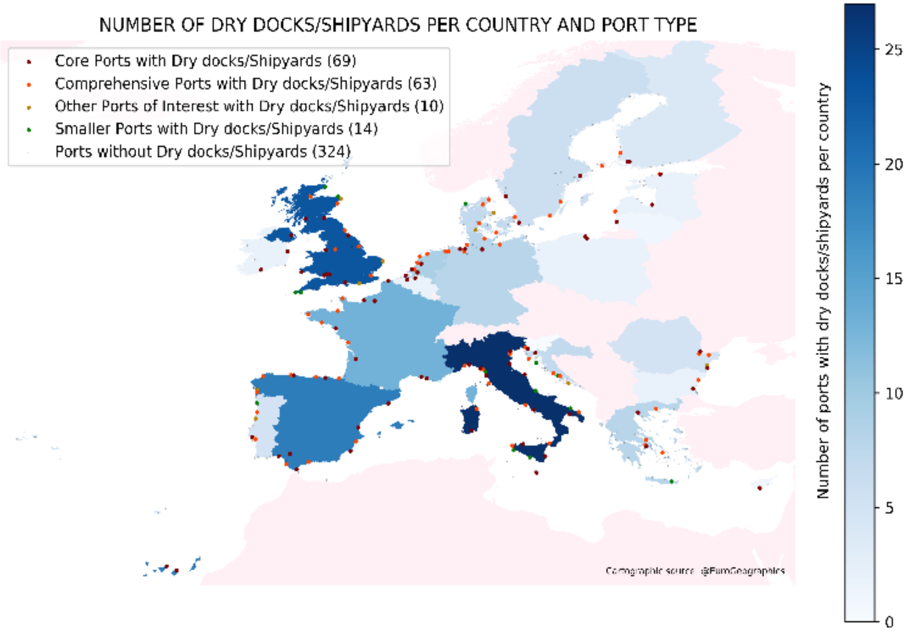
3. RESULTS

DRY DOCKS/ SHIPYARDS

Dry docks/shipyards:
- 66% of core ports
- 29% of comprehensive ports
- 28% of other ports of relevance
- 9% of smaller ports

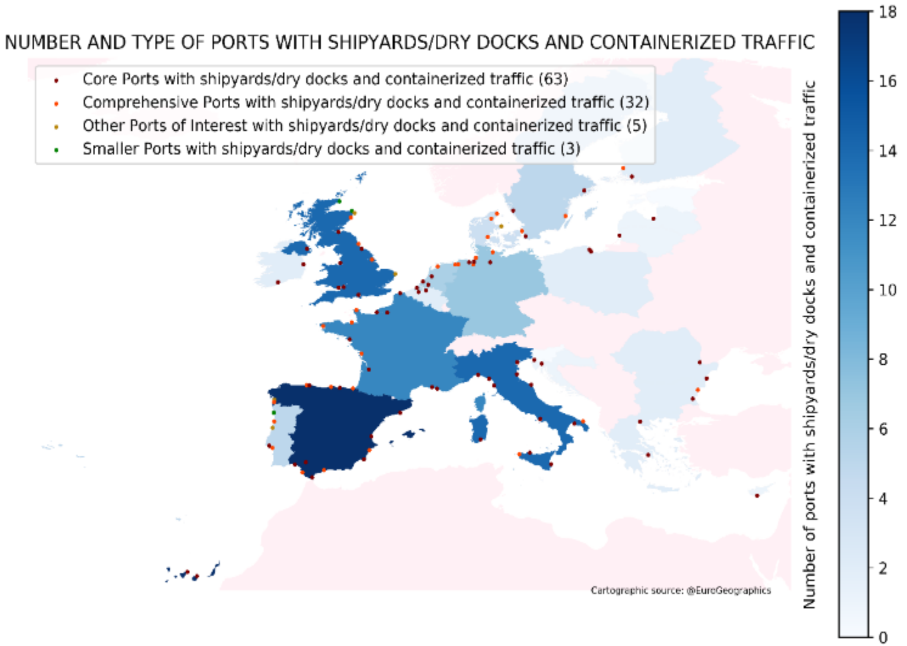
Dry docks/shipyards + Contenerized traffic:
- **60% of core ports**
- 14% of comprehensive ports
- 0% of other ports of relevance
- 0% of smaller ports

Possible hubs for CE activities regarding metal flows


NUMBER OF DRY DOCKS/SHIPYARDS PER COUNTRY AND PORT TYPE

• Core Ports with Dry docks/Shipyards (69)
• Comprehensive Ports with Dry docks/Shipyards (63)
• Other Ports of Interest with Dry docks/Shipyards (10)
• Smaller Ports with Dry docks/Shipyards (14)
Ports without Dry docks/Shipyards (324)
Number of ports with dry docks/shipyards per country
25
20
15
10
5
0

Cartographic source: @EuroGeographics


NUMBER AND TYPE OF PORTS WITH SHIPYARDS/DRY DOCKS AND CONTAINERIZED TRAFFIC

• Core Ports with shipyards/dry docks and containerized traffic (63)
• Comprehensive Ports with shipyards/dry docks and containerized traffic (32)
• Other Ports of Interest with shipyards/dry docks and containerized traffic (5)
• Smaller Ports with shipyards/dry docks and containerized traffic (3)
Number of ports with shipyards/dry docks and containerized traffic
18
16
14
12
10
8
6
4
2
0

Cartographic source: @EuroGeographics

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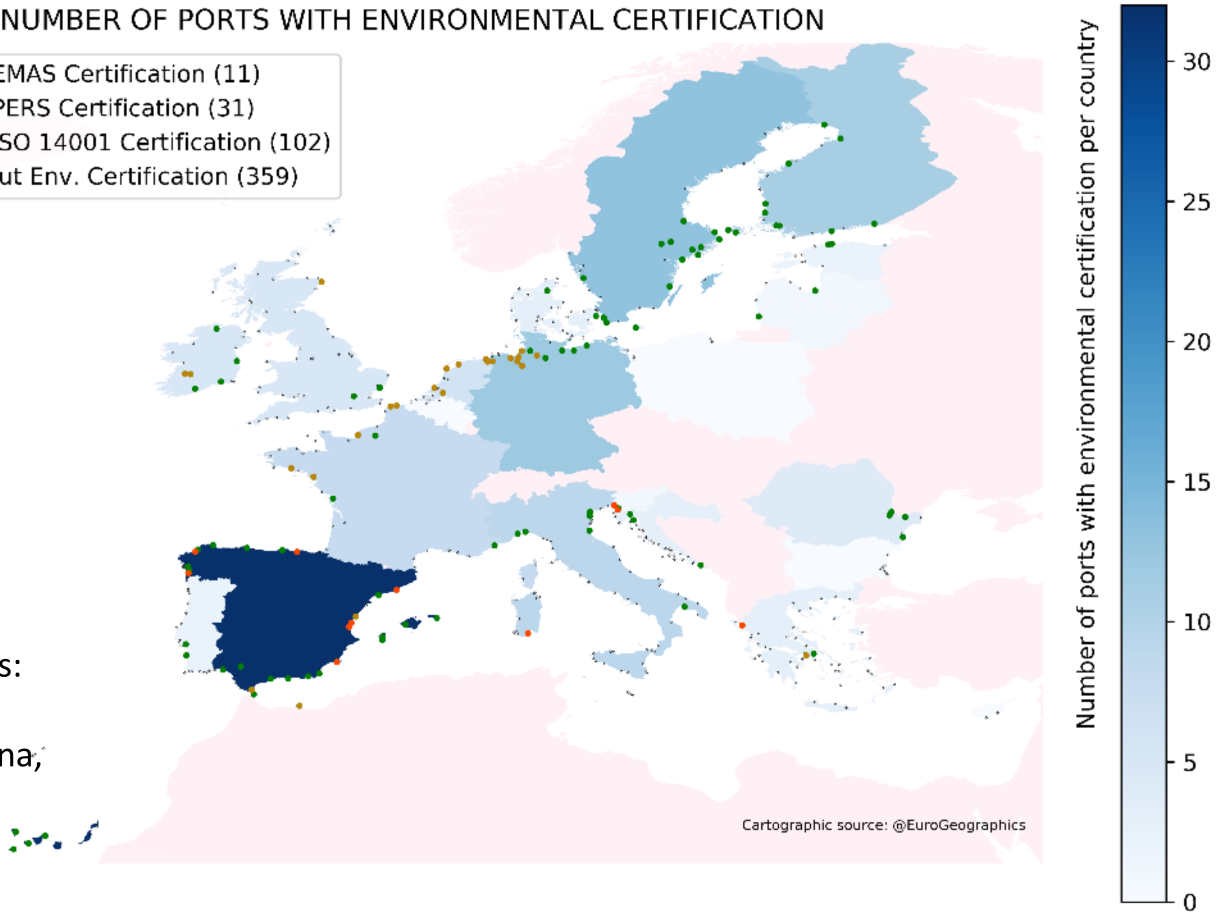
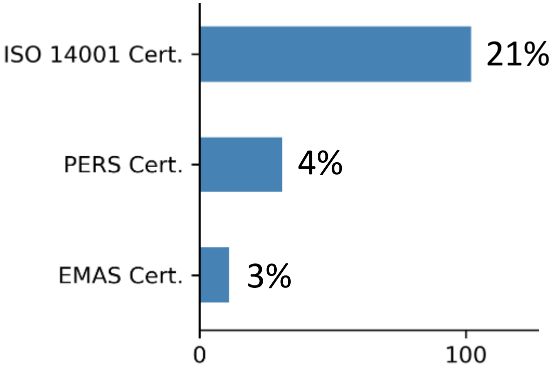
3. RESULTS

ENVIRONMENTAL CERTIFICATIONS


NUMBER OF PORTS WITH ENVIRONMENTAL CERTIFICATION
● Ports with EMAS Certification (11)
● Ports with PERS Certification (31)
● Ports with ISO 14001 Certification (102)
· Ports without Env. Certification (359)
Number of ports with environmental certification per country
0
5
10
15
20
25
30
Cartographic source: @EuroGeographics



There are 6 ports with all 3 certifications:

- 1 Greek port: Igoumenitsa
- 5 Spanish ports: Barcelona, Cartagena, Sagunto, Valencia and Vigo

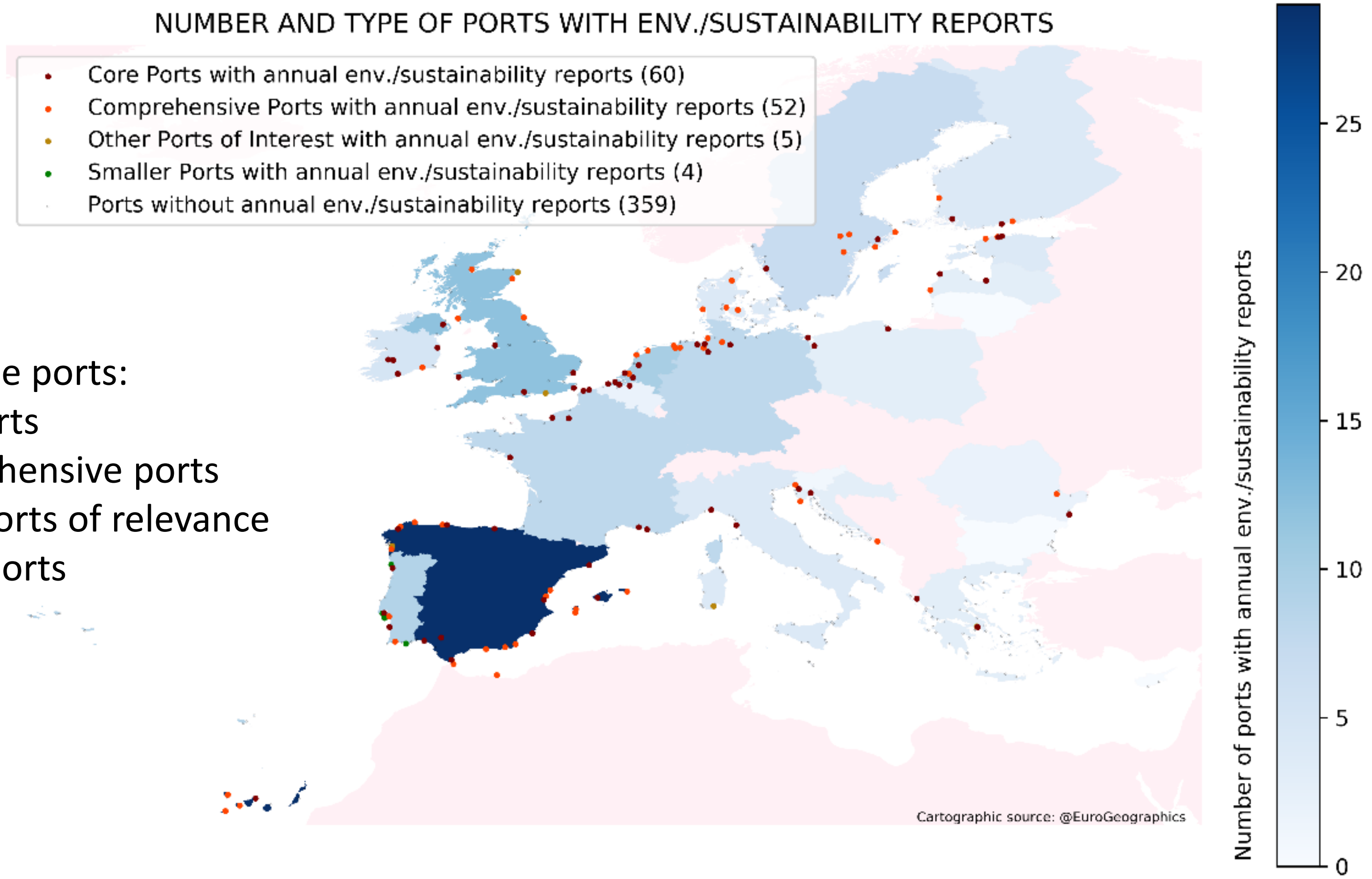
3. RESULTS

PUBLIC ENVIRONMENTAL/ SUSTAINABILITY REPORTS

Found in 25% of the ports:

- 57% of core ports
- 23% of comprehensive ports
- 15% of other ports of relevance
- 3% of smaller ports

NUMBER AND TYPE OF PORTS WITH ENV./SUSTAINABILITY REPORTS

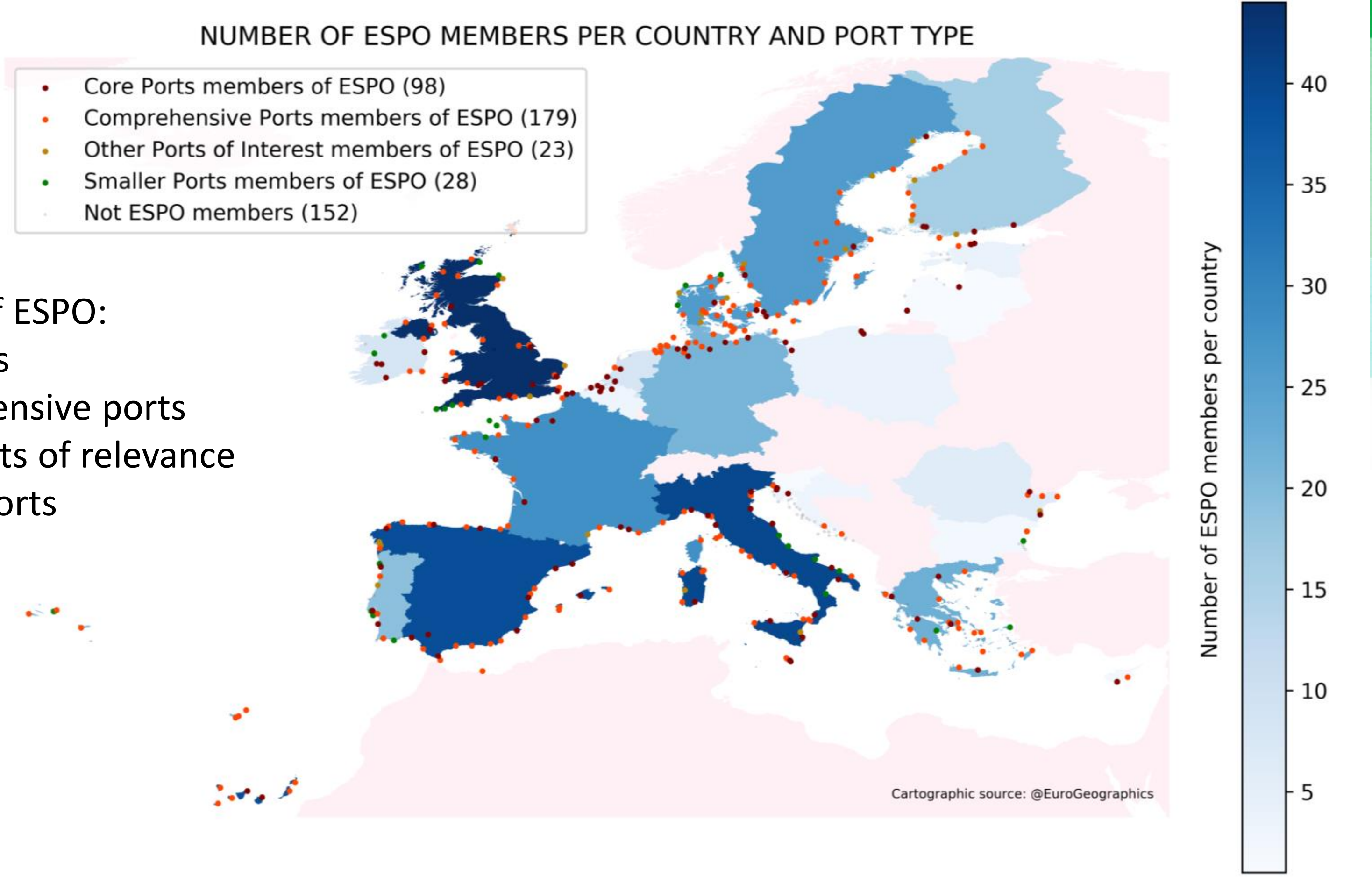

● Core Ports with annual env./sustainability reports (60)
● Comprehensive Ports with annual env./sustainability reports (52)
● Other Ports of Interest with annual env./sustainability reports (5)
● Smaller Ports with annual env./sustainability reports (4)
· Ports without annual env./sustainability reports (359)
Number of ports with annual env./sustainability reports
25
20
15
10
5
0

Cartographic source: @EuroGeographics

LOOP·Ports
Circular Economy Network of Ports

3. RESULTS

NETWORKS: ESPO


NUMBER OF ESPO MEMBERS PER COUNTRY AND PORT TYPE
Core Ports members of ESPO (98)
Comprehensive Ports members of ESPO (179)
Other Ports of Interest members of ESPO (23)
Smaller Ports members of ESPO (28)
Not ESPO members (152)
Number of ESPO members per country
40
35
30
25
20
15
10
5

Cartographic source: @EuroGeographics

68% are members of ESPO:

- 93% of core ports
- 80% of comprehensive ports
- 68% of other ports of relevance
- 18% of smaller ports

LOOP·Ports
Circular Economy Network of Ports

3. RESULTS

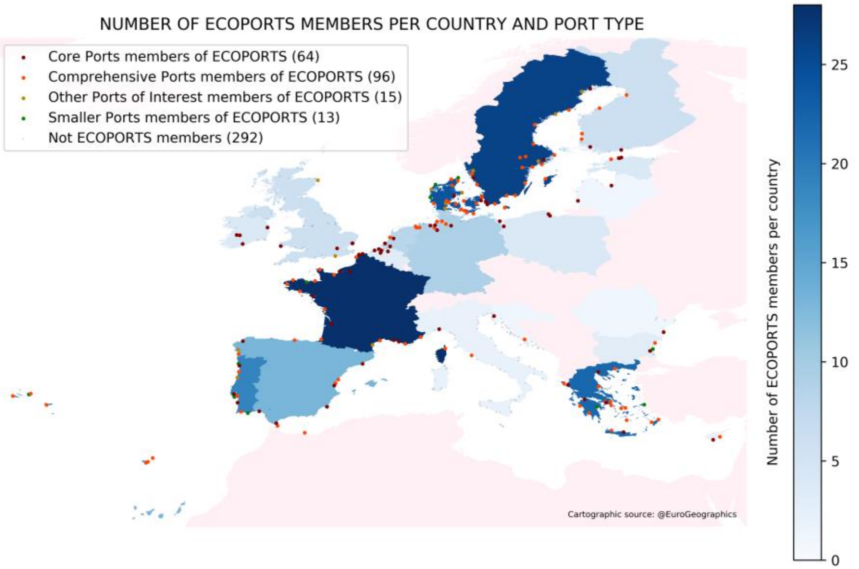
NETWORKS: ECOPORTS - WPCI

39% are members of ECOPORTS:

- 64% of core ports
- 43% of comprehensive ports
- 44% of other ports of relevance
- 9% of smaller ports

8% are members of WPCI:

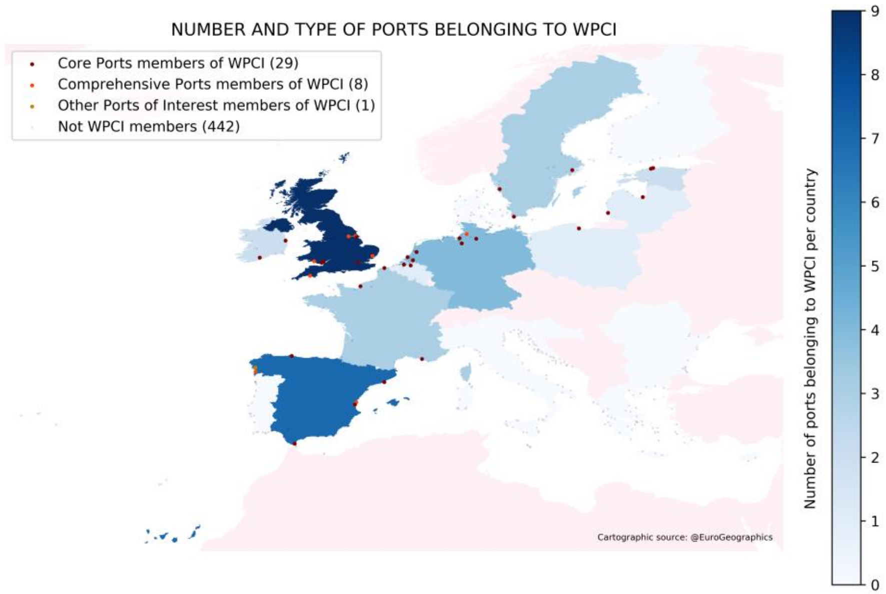
- 27% of core ports
- 4% of comprehensive ports
- 3% of other ports of relevance
- 0% of smaller ports



NUMBER OF ECOPORTS MEMBERS PER COUNTRY AND PORT TYPE

Core Ports members of ECOPORTS (64)
Comprehensive Ports members of ECOPORTS (96)
Other Ports of Interest members of ECOPORTS (15)
Smaller Ports members of ECOPORTS (13)
Not ECOPORTS members (292)
Number of ECOPORTS members per country
0
5
10
15
20
25

Cartographic source: @EuroGeographics



NUMBER AND TYPE OF PORTS BELONGING TO WPCI

Core Ports members of WPCI (29)
Comprehensive Ports members of WPCI (8)
Other Ports of Interest members of WPCI (1)
Not WPCI members (442)
Number of ports belonging to WPCI per country
0
1
2
3
4
5
6
7
8
9

Cartographic source: @EuroGeographics

LOOP·Ports
Circular Economy Network of Ports

3. RESULTS

PORT SUSTAINABILITY INDICATORS

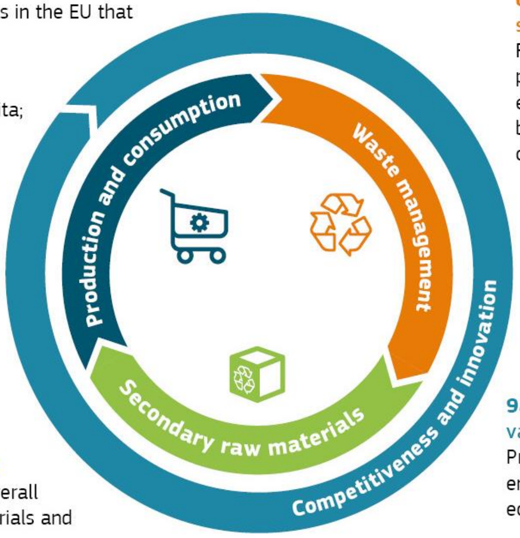
Circular economy monitoring framework

1 EU self-sufficiency for raw materials
The share of a selection of key materials (including critical raw materials) used in the EU that are produced within the EU

2 Green public procurement
The share of major public procurements in the EU that include environmental requirements

3a-c Waste generation
Generation of municipal waste per capita; total waste generation (excluding major mineral waste) per GDP unit and in relation to domestic material consumption

4 Food waste
Amount of food waste generated



7a-b Contribution of recycled materials to raw materials demand
Secondary raw materials' share of overall materials demand - for specific materials and for the whole economy

8 Trade in recyclable raw materials
Imports and exports of selected recyclable raw materials

5a-b Overall recycling rates
Recycling rate of municipal waste and of all waste except major mineral waste

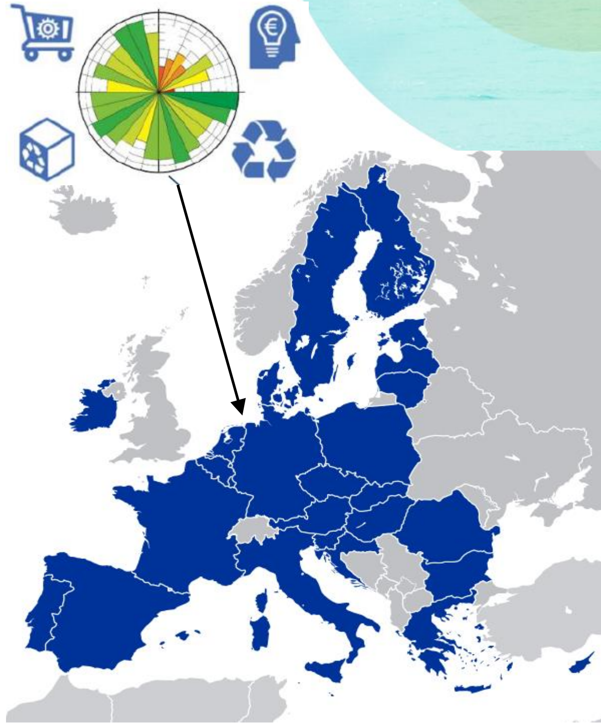
6a-f Recycling rates for specific waste streams
Recycling rate of overall packaging waste, plastic packaging, wood packaging, waste electrical and electronic equipment, recycled biowaste per capita and recovery rate of construction and demolition waste

eurostat
Your key to European statistics

9a-c Private investments, jobs and gross value added
Private investments, number of persons employed and gross value added in the circular economy sectors

10 Patents
Number of patents related to waste management and recycling

CIRCLES OF SUSTAINABILITY



Climate-KIC

Climate-KIC is supported by the EIT, a body of the European Union

3. RESULTS

CLASSIFICATION OF SUITABILITY TO IMPLEMENT CE ACTIVITIES

Taking into account the information of the database

** Deeper open access information is needed: consumption of resources, waste generation, recycling rates…

Top10 in any of de indexes

Estonia	Tallin
Finland	Helsinki, Turku
France	Nantes St. Nazaire, Calais, Fort de France
Germany	Hamburg, Bremenshaven
Greece	Piraeus, Igoumenitsa
Italy	Messina
Netherlands	Rotterdam, Amsterdam
Portugal	Setubal, Aveiro
Slovenia	Khoper
Spain	Valencia, Vigo, Algeciras, Cartagena, Sagunto, Bilbao
Sweden	Stockholm, Gothenburg
United Kingdom	Dover/Folkestone

General index: $1 \cdot General\ \ Params. + 1 \cdot Shipyards + 1 \cdot Enlargements + 4 \cdot Statistics + 3 \cdot Environmental\ \ Params.$

Plastic index: $1 \cdot General\ \ Params. + 0.5 \cdot T\_Containers + 1 \cdot N^{o}\,Calls + 3 \cdot N^{o}\,Fishing + 1.5 \cdot N^{o}\,Passengers + 3 \cdot Environmental\ \ Params.$

Metal index: $1 \cdot General\ \ Params. + 1 \cdot Size\ \ Params + 0.5 \cdot T\_GeneralCargo + 1.5 \cdot T\_Container + 3 \cdot Shipyard + 3 \cdot Environmental\ \ Params.$

Cement index: $1 \cdot General\ \ Params. + 2 \cdot Traffics\ \ Params + 4 \cdot Enlargements + 3 \cdot Environmental\ \ Params.$

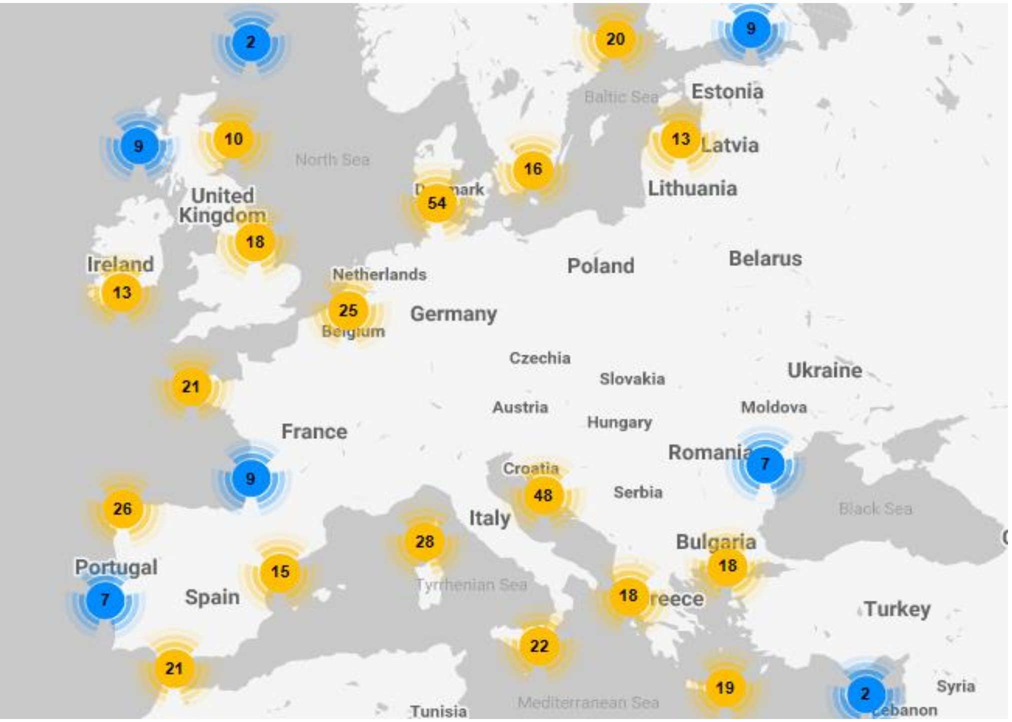
Biomaterial index: $1 \cdot General\ \ Params. + 1 \cdot N^{o}\,Calls + 1 \cdot Fishing + 4 \cdot N^{o}\,Passengers + 3 \cdot Environmental\ \ Params.$

LOOP·Ports
Circular Economy Network of Ports

4. WEB TOOL

https://www.loop-ports.eu

Map of Ports and CE activities


2
20
9
Baltic Sea
Estonia
9
10
North Sea
13
Latvia
16
Denmark
54
Lithuania
United Kingdom
18
Ireland
13
Netherlands
Poland
Belarus
25
Belgium
Germany
Czechia
Slovakia
Ukraine
21
Austria
Moldova
Hungary
France
Romania
7
Croatia
48
Serbia
9
26
Italy
Black Sea
28
Bulgaria
18
Portugal
15
Tyrrhenian Sea
Spain
18
Greece
Turkey
7
22
21
19
2
Syria
Lebanon
Tunisia
Mediterranean Sea

1. DECOMISSIONING
2. DISTMANTLING/COMPONENT HARVESTING
3. INDUSTRIAL SYMBIOSIS
4. MAINTENANCE AND OVERHAUL
5. RE-USE / SECOND HAND
6. RECYCLING OF WASTE STREAMS
7. REFURBISHMENT
8. RENTAL SERVICES
9. REPAIR
10. OTHER

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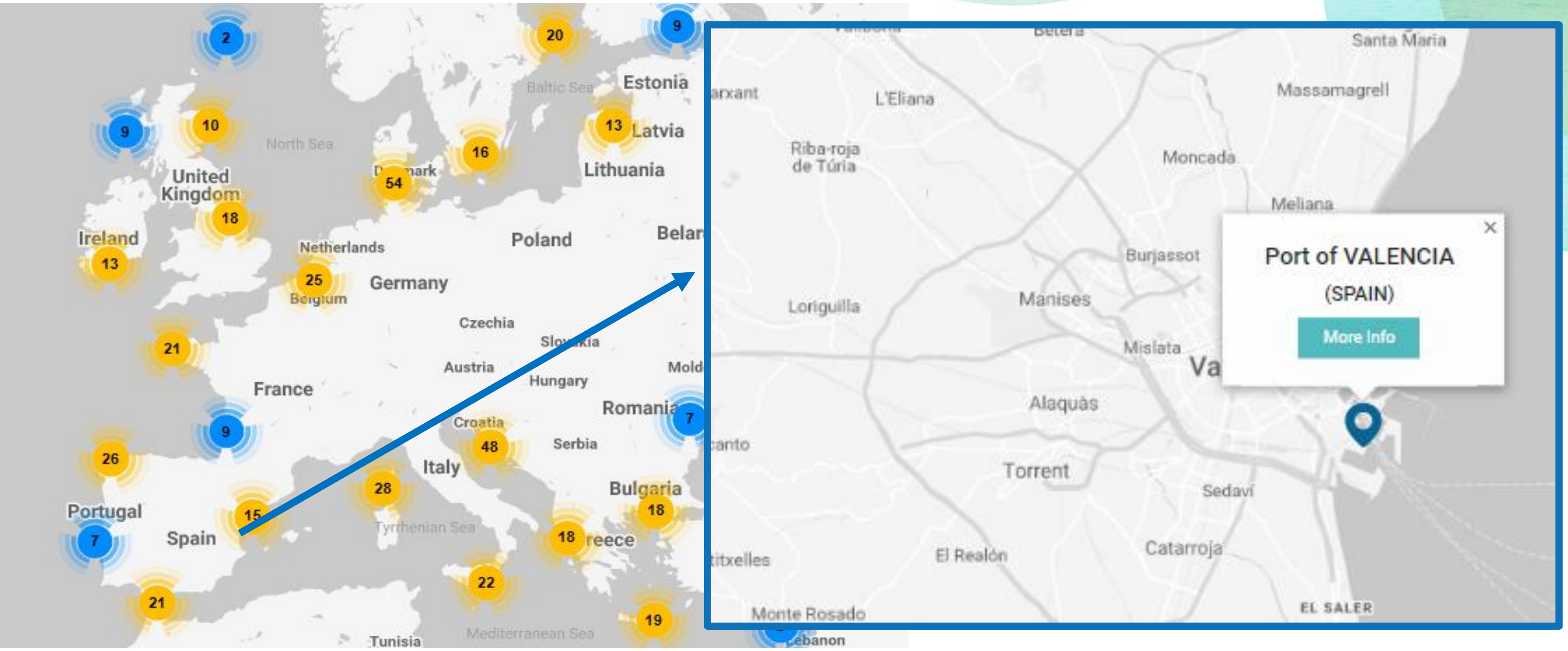
2
20
9
Baltic Sea
Estonia
9
10
North Sea
13
Latvia
16
United Kingdom
54
Denmark
Lithuania
18
Ireland
13
Netherlands
Poland
Belar
25
Belgium
Germany
Czechia
21
Slovakia
Austria
Hungary
Mold
France
Romania
7
9
Croatia
48
Serbia
26
Italy
Bulgaria
Portugal
15
28
18
7
Spain
Tyrrhenian Sea
18
Greece
21
22
19
Tunisia
Mediterranean Sea
Lebanon
Betera
Santa Maria
Massamagrell
arxant
L'Eliana
Riba-roja de Túria
Moncada
Meliana
Burjassot
Loriguilla
Manises
Mislata
Va
Alaquàs
Torrent
Sedaví
Catarroja
El Realón
Monte Rosado
EL SALER
×
More Info

Port of VALENCIA
(SPAIN)

https://www.loop-ports.eu/circular-economy-tools/

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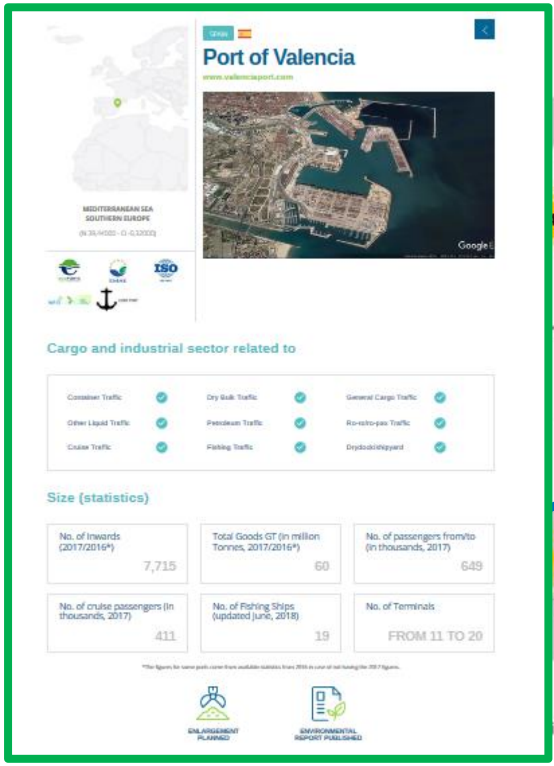


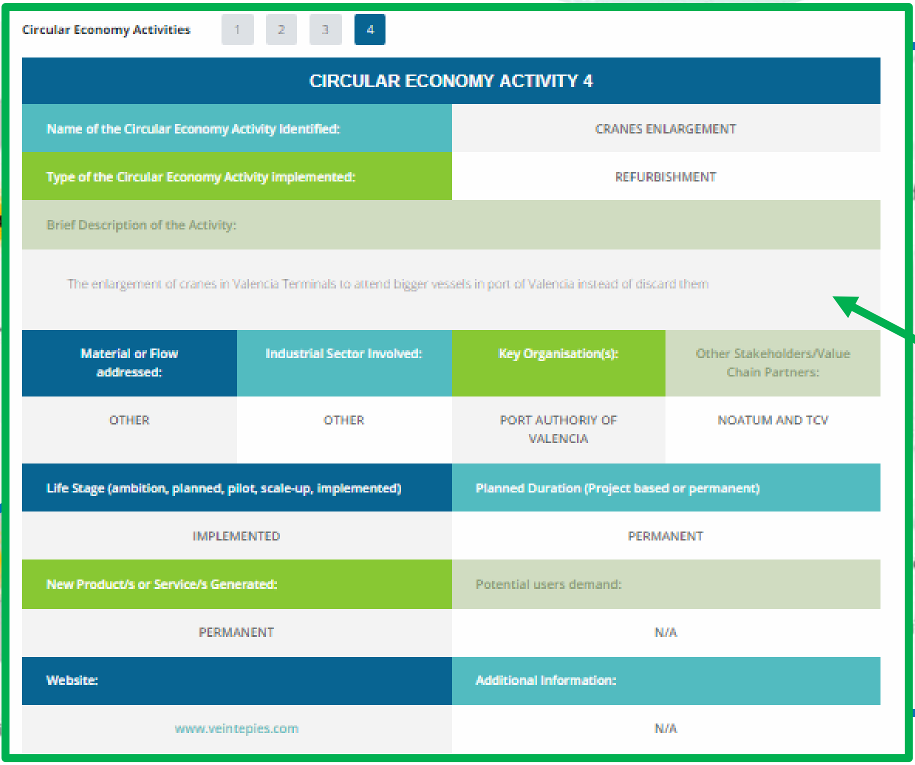
Port of Valencia
www.valenciaport.com

Cargo and industrial sector related to

Container Traffic	✓	Dry Bulk Traffic	✓	General Cargo Traffic	✓
Other Liquid Traffic	✓	Petroleum Traffic	✓	Ro-ro/ro-pax Traffic	✓
Cruise Traffic	✓	Fishing Traffic	✓	Drydock/shipyard	✓

Size (statistics)

No. of Inwards (2017/2016*) 7,715	Total Goods GT (in million Tonnes, 2017/2016*) 60	No. of passengers from/to (in thousands, 2017) 649
No. of cruise passengers (in thousands, 2017) 411	No. of Fishing Ships (updated June, 2018) 19	No. of Terminals FROM 11 TO 20



Circular Economy Activities 1 2 3 4

CIRCULAR ECONOMY ACTIVITY 4

Name of the Circular Economy Activity Identified:	CRANES ENLARGEMENT
Type of the Circular Economy Activity implemented:	REFURBISHMENT

Brief Description of the Activity:

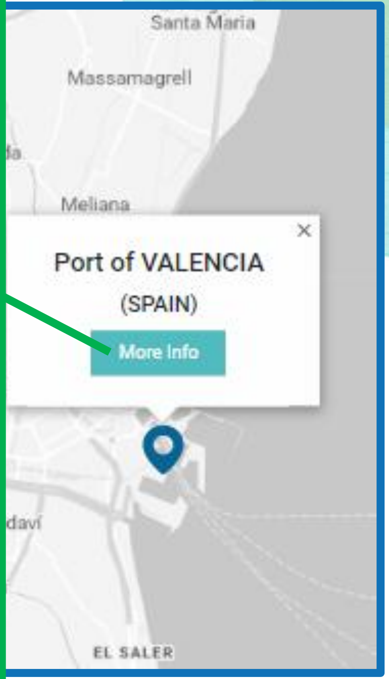
The enlargement of cranes in Valencia Terminals to attend bigger vessels in port of Valencia instead of discard them

Material or Flow addressed:	Industrial Sector Involved:	Key Organisation(s):	Other Stakeholders/Value Chain Partners:
OTHER	OTHER	PORT AUTHORIY OF VALENCIA	NOATUM AND TCV

Life Stage (ambition, planned, pilot, scale-up, implemented)	Planned Duration (Project based or permanent)
IMPLEMENTED	PERMANENT

New Product/s or Service/s Generated:	Potential users demand:
PERMANENT	N/A

Website:	Additional Information:
www.veintepies.com	N/A



Port of VALENCIA
(SPAIN)
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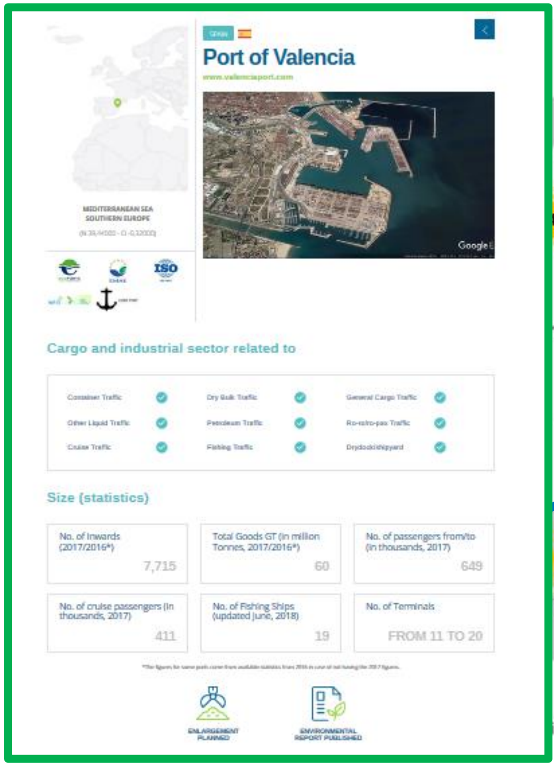
Map of Ports and CE activities



Spain

Port of Valencia

www.valenciaport.com

MEDITERRANEAN SEA
SOUTHERN EUROPE

Cargo and industrial sector related to

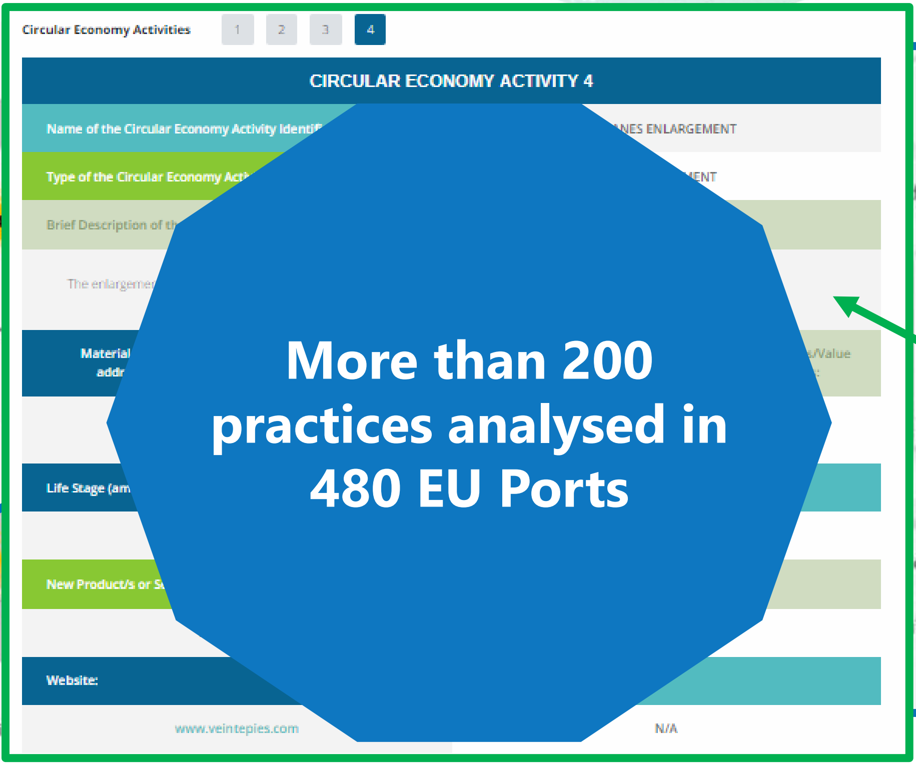
Container Traffic	✓	Dry Bulk Traffic	✓	General Cargo Traffic	✓
Other Liquid Traffic	✓	Petroleum Traffic	✓	Ro-ro/ro-pax Traffic	✓
Cruise Traffic	✓	Fishing Traffic	✓	Drydock/shipyard	✓

Size (statistics)

No. of Inwards (2017/2016*) 7,715	Total Goods GT (in million Tonnes, 2017/2016*) 60	No. of passengers from/to (in thousands, 2017) 649
No. of cruise passengers (in thousands, 2017) 411	No. of Fishing Ships (updated June, 2018) 19	No. of Terminals FROM 11 TO 20

ENLARGEMENT PLANNED

ENVIRONMENTAL REPORT PUBLISHED



Circular Economy Activities 1 2 3 4

CIRCULAR ECONOMY ACTIVITY 4

Name of the Circular Economy Activity Identif… …NES ENLARGEMENT

Type of the Circular Economy Acti… …MENT

Brief Description of th…

The enlargemen…

Material… addr… …/Value

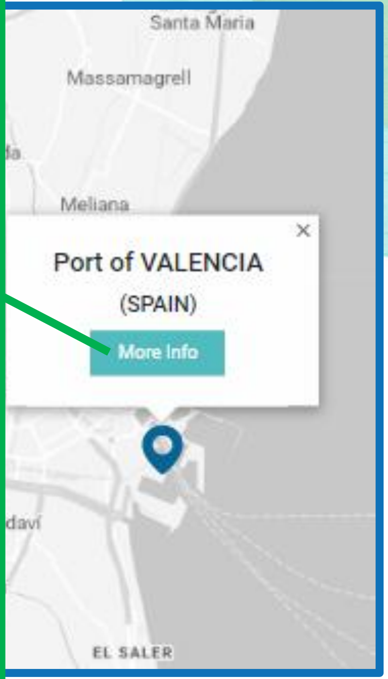
Life Stage (am…

New Product/s or S…

Website:

www.veintepies.com N/A

More than 200 practices analysed in 480 EU Ports



Port of VALENCIA
(SPAIN)
More Info

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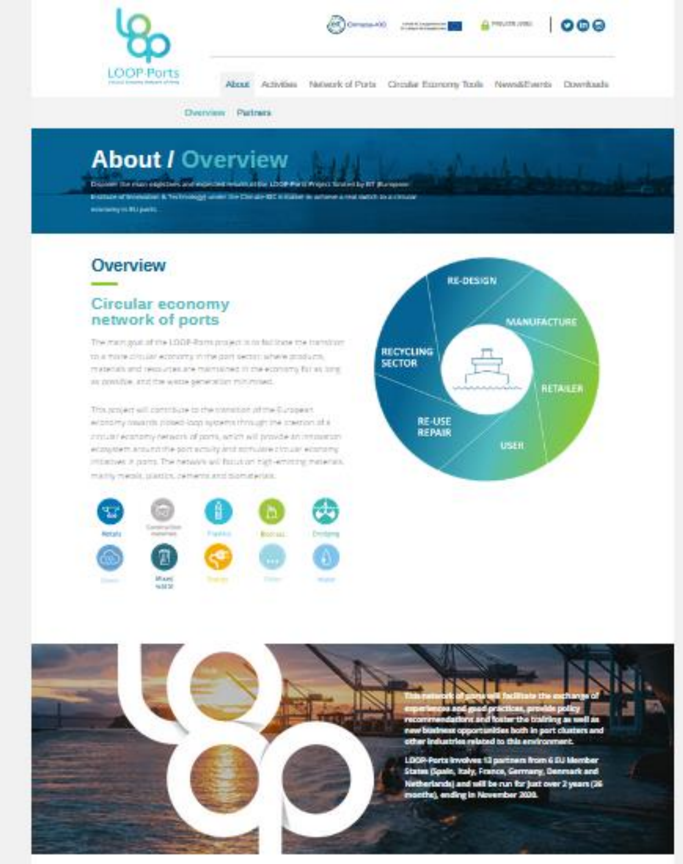


About Activities Network of Ports Circular Economy Tools News&Events Downloads

Overview Partners

About / Overview

Discover the main objectives and expected results of the LOOP-Ports Project funded by EIT (European Institute of Innovation & Technology) under the Climate-KIC initiative to achieve a real switch to a circular economy in EU ports.

Overview

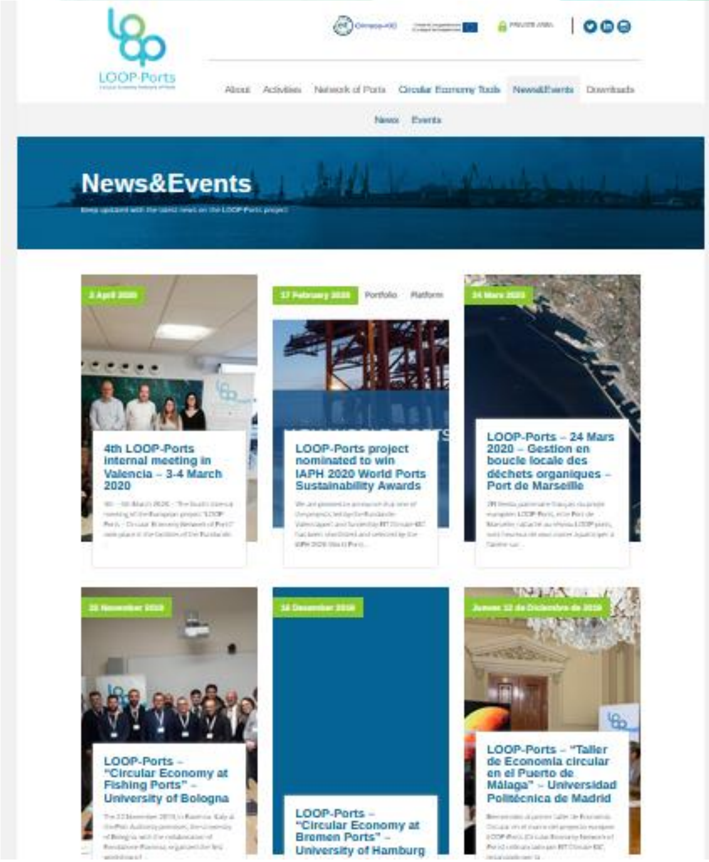
Circular economy network of ports

The main goal of the LOOP-Ports project is to facilitate the transition to a more circular economy in the port sector, where products, materials and resources are maintained in the economy for as long as possible, and the waste generation minimised.

This project will contribute to the transition of the European economy towards closed-loop systems through the creation of a circular economy network of ports, which will provide an innovation ecosystem around the port activity and stimulate circular economy initiatives in ports. The network will focus on high-emitting materials, mainly metals, plastics, cements and biomaterials.

This network of ports will facilitate the exchange of experiences and good practices, provide policy recommendations and foster the training as well as new business opportunities both in port clusters and other industries related to this environment.

LOOP-Ports involves 13 partners from 6 EU Member States (Spain, Italy, France, Germany, Denmark and Netherlands) and will be run for just over 2 years (26 months), ending in November 2020.



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News Events

News&Events

Keep updated with the latest news on the LOOP-Ports project

3 April 2020
4th LOOP-Ports internal meeting in Valencia – 3-4 March 2020

17 February 2020
LOOP-Ports project nominated to win IAPH 2020 World Ports Sustainability Awards

24 Mars 2020
LOOP-Ports – 24 Mars 2020 – Gestion en boucle locale des déchets organiques – Port de Marseille

LOOP-Ports – "Circular Economy at Fishing Ports" – University of Bologna

LOOP-Ports – "Circular Economy at Bremen Ports" – University of Hamburg

Jueves 12 de Diciembre de 2019
LOOP-Ports – "Taller de Economía circular en el Puerto de Málaga" – Universidad Politécnica de Madrid

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

INSTITUTO
DE ECONOMÍA
INTERNACIONAL
VNIVERSITAT DE VALÈNCIA

NTU INTERNATIONAL

Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

DTU Technical University of Denmark

2EI VEOLIA

TNO innovation for life

LOOP·Ports

Circular Economy Network of Ports

Álvaro Campos Duque
Researcher at HRL-UPM
Universidad Politécnica de Madrid
alvaro.campos@upm.es

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SIDE EVENT WCEF

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UNIVERSIDAD POLITÉCNICA MADRID

INSTITUTO
DE ECONOMÍA
INTERNACIONAL
VNIVERSITAT DE VALÈNCIA

NTU
INTERNATIONAL

UHH
Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

DTU
Technical University
of Denmark

ZEI VEOLIA

TNO innovation
for life

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FINAL CONFERENCE

Online

16th December 2020

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THANK YOU!!

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FINAL CONFERENCE

Online

16th December 2020

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SIDE EVENT

CWEF