

3 Core Network corridors4 EU Countries5 TEN-T Core Ports



12 partners



Start date: 01/04/2019 End date: 31/03/2023

The **GREEN C PORTS global project** aims to provide a suitable array of digitalisation tools and technologies to **reduce the impact of port operations** on their cities, **monitor emissions** from ports and vessels and **optimize performance** of port operations in the **TEN-T Core Network**.

### Specific Objectives of the Action

- Upgrade existing **sensor networks** with new sensors at the pilot ports
- Implement a **Port Environmental Performance** (PEP) **IT platform** that will receive real time data from the sensor networks and from existing port systems (i.e. PCS, PMIS and TOS)
- Reduce the impact of port operations on their cities
- Monitor emissions from ports and vessels
- Increase the efficiency of port operations and optimize handling of cargo in core ports
- Facilitate access and egress of cargo in and out of core ports.
- Communicate effectively the case studies results and the main benefits of the technologies piloted in this Action

### www.greencportsproject.eu







Valencia (Spain) www.fundacion.valenciaport.com

#### Partners:





NORTH ADRIATIC SEA PORT AUTHORITY PORTS OF VENICE AND CHIOGGIA



Gasemover atodomás





# Valenciaport Autoridad Portuaria de Valencia













Digitalisation tools and technologies to support port environmental sustainability and performance of port operations in the TEN-T Core Network.





### **Case Study 1**

Decrease port traffic congestion and CO<sub>2</sub> emissions by 10% for trucks entering and leaving the Port of Valencia

### **Case Study 2**

Optimize vessel calls at the Port of Venice before and after port closure due to bad meteorological conditions (tide, wind and fog)

# NQ.SD

### **Case Study 3**

PEP

Predict air quality in the Ports of Valencia and Piraeus and at their surrounding neighbourhoods. Generate notifications to the city council and / or other government institutions when certain tolerance emission levels are exceeded

### Case Study 4

Predict noise level in the Ports of Valencia and Piraeus and at their surrounding neighbourhoods. Notifications will be sent to the city council and / or other government institutions when certain tolerance noise emission levels will be exceeded.

## Case Study 5

Predict how STS crane productivity at the Ports of Wilhemshaven and Bremerhaven will be affected by wave agitation, currents and wind. Warnings on expected productivity reductions will be sent to affected parties up to 48h prior to the event occurrence.



# Case Study 6

Measure and inform shippers about the real emissions generated by their shipments in door-to-door transport chains between the Iberian peninsula and the Balearic Islands.

