





From SME PORTS to Regional Entrepreneurial Ports:

**Developing Low Carbon Utilities and Abilities** 

Pireaus – Smart Ports conference – 20.04.2018











- 1. Situation of SME Ports in Europe
- 2. Challenge: how to turn SME Ports into Regional Entrepreneurial Ports
  - 3. Opportunities: sustainable specialisation
  - 4. Business Case: Dual Ports (Interreg V B North Sea)
    - 5. Business case 2 : PECS (Interreg VA 2seas)











1. Situation of SME Ports in Europe



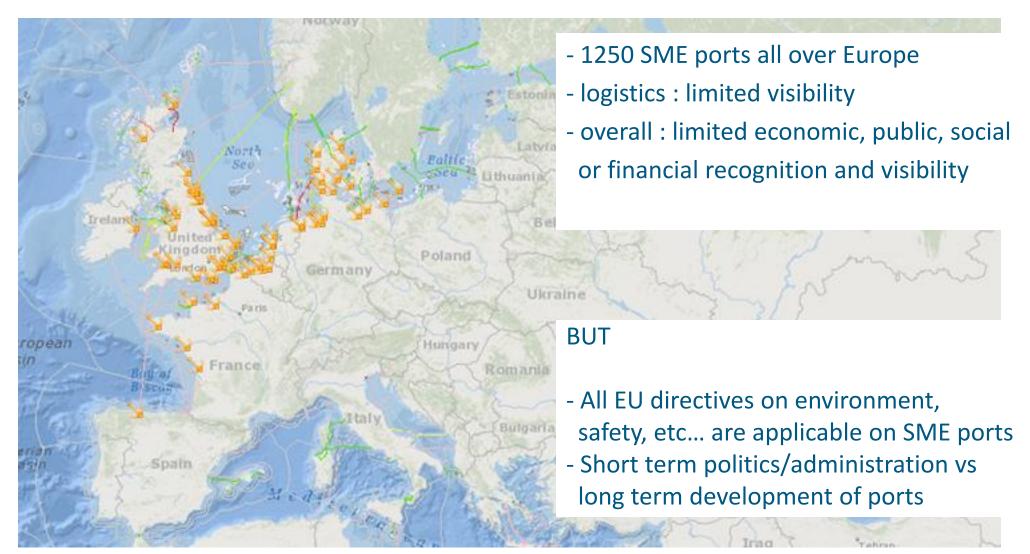






# What is the situation of SME ports in Europe







# Challenge: one dimensionality of classification of ports







## **SME** port are







## Obstacles and threats for the SME Interreg ports





- Limited Financial power access to finances / limited ressources and competences
- Isolation
- Visibility and communication
- Limited management capacities within SME ports
- -Politics/Administration: the hunger for short term wins / one dimensional classification (TON-Fixation instead of Added value)
- Pressure of real estate
- Over-Regularitis





- 1. Situation of SME Ports in Europe
- 2. Challenge: how to turn SME Ports into Regional Entrepreneurial Ports









# Challenge: How to turn SME Ports into Regional Entrepreneurial Ports









- 1. Situation of SME Ports in Europe
- 2. Challenge: how to turn SME Ports into Regional Entrepreneurial Ports
  - 3. Opportunities: sustainable specialisation



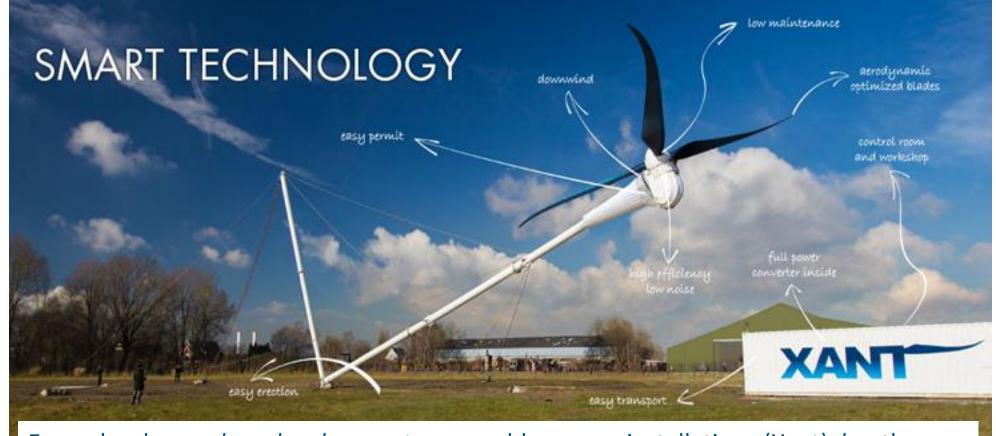






## a. Sustainable specialization: (marine) environment, low carbon and renewable energy





Examples: low carbon development, renewable energy installations (Xant), heath networking, maritime energy supply etc..



## b. Sustainable specialization: social competences and marine skills



## Examples:

center for maritime training, pooling of maritime competences, etc







## Oostende energy port C. Sustainable specialization: economic clustering, R&D North Sea Region and innovation in circular economy







## c. Sustainable specialisation: economic clustering, R&D and innovation



the Port of Oostende: hub for the blue industry and the circular economy

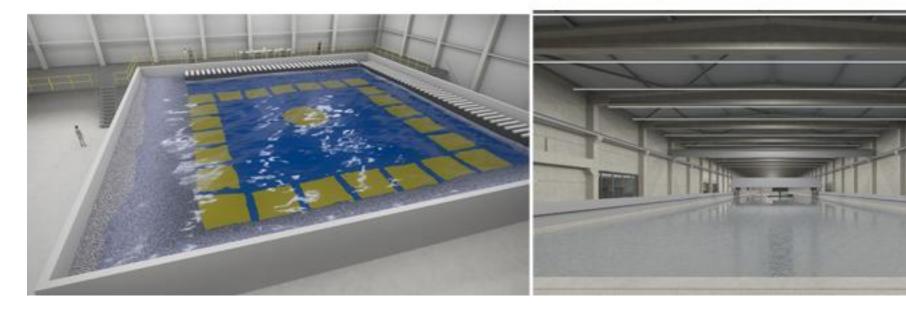




## c. Sustainable specialization: economic clustering, R&D North Sea Region and innovation in blue economy



Examples: clustering of investments, facilitating new industries, specialization in the blue industry, innovation





# Port Oostende energy port c. Sustainable specialization: economic clustering, R&D North Sea Region DUAL Ports and innovation in blue economy









- 1. Situation of SME Ports in Europe
- 2. Challenge: how to turn SME Ports into Regional Entrepreneurial Ports
  - 3. Opportunities: sustainable specialisation
  - 4. Business Case: Dual Ports (Interreg V B North Sea)









## a. What is DUAL Ports?



#### **DUAL Ports is:**

- \* a €5,2m transnational cooperation project,
- \* 50% co-funded by the European Union and the European Regional Development Fund through the Interreg North Sea Region Programme 2014 2020,
- \* Eco-innovation priority.
- \* The project runs from 10/11/2015 until 30/06/2019.



















#### **b.** Who is Dual Ports



#### Who are we?

The port of Oostende leads a consortium of 10 Flemish, Scottish, Danish, German and Dutch harbour authorities and organisations:

- The ports of Zwolle (with Kampen and Meppel), Vordingborg, Emden, and Skagen
- The private/public organisations: Fair Winds Trust; ITM Power; Orkney Islands Council; HWWI GmbH; Vordingborg Erhverv;





#### c. The objective of DUAL Ports



Stimulating eco-innovation, carbon emission reduction and sustainable use of resources is a widespread priority in Europe nowadays. Being businesses, and considering their industrial and logistic function, also ports are expected to identify pragmatic low carbon visions and implement concrete solutions to this purpose.

## The aim is to decarbonise Regional Entrepreneurial Ports (REPs) through a shared eco-innovation port programme that minimises their environmental footprint.

The objective is to specifically develop sustainable utilities and abilities of REPs.

A transnational approach has been adopted to allow the DUAL small & medium size ports to capitalise on the potential, overcoming their individual limited staff, funding and capability to identify the most effective solutions on their own.



















### d. Pilot projects in Dual Ports : abilities (software)



piloting new ways of sustainably managing the port environment :

\* soil treatment within the framework of port expansion; sustainable space use and port management through co-siting/dockland;





### d. Pilot projects in Dual Ports : abilities (software)



• sharing technology/processes/plans for resource efficient management: green officer + sustainability management system;





### d. Pilot projects in Dual Ports : abilities (software)



• sharing resources for low carbon management & processes in ports: low carbon planning & management.





### d.Pilot projets in Dual Ports: utilities (hardware)



- testing environmentally friendly equipment in ports :
- \* rolling out intelligent LED lightning network;





### d.Pilot projets in Dual Ports: utilities (hardware)



- Developing low carbon logistic products, bridging old and new technologies:
- \* set-up of Sailing cargo platform
- \* bridging to wind propulsed cargo





### d.Pilot projets in Dual Ports: utilities (hardware)



- building up business cases for alternative, non-conventional energy sources systems:
- \* liquefied natural gas,
- \* H<sup>2</sup> storage facilities, produced by overflow of renewable energy (wave, wind)





## d. Pilot projects in Dual Ports : CBACA



• CBACA tool: measuring cost benefit and carbon footprint impact

Key question: how to evaluate economic and carbon advantages and disadvantages of investments in ports,

How: comparing traditional solutions with new sustainable solutions







- 1. Situation of SME Ports in Europe
- 2. Challenge: how to turn SME Ports into Regional Entrepreneurial Ports
  - 3. Opportunities : sustainable specialisation
  - 4. Business Case: Dual Ports (Interreg V B North Sea)
    - 5. Business case: PECS (interreg VA 2 seas)









### 5. PECS: Ports energy carbon saving



#### Installing different pilots to reduce the carbon footprint

- XANT wind mill in ports (0,1/0,3/0,5 MW)
- Development and construction of an energypontoon for independent supply of energy
- Development of a smartpontoon
- Test of heath recuperation systems within port industrial areas





## CONCLUSION



DUAL PORTS: building a low carbon platform for Regional Entrepreneurial Ports in the North Sea region, creating economic, social and environmental added value and visibility



Thank you for your attention

Contact: wim.stubbe@portofoostende.be or + 32 487 548 768