DUAL Ports

Pilot project descriptions

Port of Oostende

Interreg
North Sea Region
DUAL Ports
European Regional Development Fund

EUROPEAN UNION

Port Oostende
energy port

DUAL Ports is co-funded by the North Sea Region Programme 2014-2020;
Eco-innovation priority. www.northsearegion.eu/dual-ports J-No: 38-2-7-15

What is DUAL Ports?

DUAL Ports aims to decarbonise Regional Entrepreneurial Ports (REPs)' resources through a shared eco-innovation port programme that minimises their environmental footprint.

The objective of DUAL Ports is

- reducing the environmental footprint of regional entrepreneurial ports.
- improving the sustainability of port operational and administration resources.
- promoting responsible growth and supporting eco-innovation oriented development.

The project will ultimately enhance ports' energy efficiency and performance, facilitating low carbonization at reduced cost, with added value in terms of knowledge and investment.

Facts about DUAL Ports:

- Duration: 3 years
- Budget: 5.2 mio. euro
- The participating ports and local authorities are expected to implement initiatives that will reduce carbon emission
- The Port of Oostende is Project Leader of DUAL Ports
- Business Vordingborg is responsible for the communication of the results of the project


Port of Oostende

Project partners

- Port of Oostende
- Business Vordingborg
- Port of Vordingborg
- Municipality of Guldborgsund
- Orkney Islands Council Marine Services
- ITM Power
- Fair Winds Trust
- Port of Zwolle
- Hamburgisches WeltWirtschaftsInstitut (HWWI)
- Niedersachsen Ports GmbH & Co. KG Branch Emden

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LNG as a multifunctional part of REP's

Task of the pilot

Multifunctional LNG installation for companies / logistics and local community.

Questions

Technical and legal components.
Assessment of the current situation and demand/supply analysis.

Task and results

Feasibility study and cost benefit analysis.
Low carbon calculation.
Plan of development and investment - advises.

Key pilot working Group
Ports of Guldborgsund
Port of Oostende
Port of Zwolle
GFS
Nordic Sugar

Ports of Guldborgsund, Nordic Sugar

SOIL - cleaning and renewed use of soil in port and area development

Task of the pilot

Cleaning of soil renewed use in the construction sector for ports and new areas to avoid transport and logistics.

Questions

Environmental assessment, investment, technology and management.

Task and results

Feasibility study and cost benefit analysis.
Low carbon calculation.


Port of Vordingborg

Key pilot working Group
Port of Vordingborg
NHM
Port of Oostende
Port of Zwolle
Business Vordingborg

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SAIL - creating a wind cargo platform

Task of the pilot

To create sailcargo Hubs in small ports and harbours giving local businesses direct access to ethically transported goods. The primary objective of the Sailcargo 2 small ports project is to create a logistics platform integrating eco-sailcargo ships into an established network of private and public *WCS & NSR players assuring impact on both local & regional levels.

Questions

Analyze the socio economic impact of the centralization of shipping and the importance of small ports to local economies.
Research and document sailcargo accessible ports, port authorities, interested communities and businesses.
Pilot and track sailcargo ships in chosen test ports.
Cost Analyses/Feasibility study & Economic/Social impact assessment.

Task and results

Establish sailcargo port hub network across the NSR.
Create a document with transport estimated costs for cargo owners including costs per ton, per mile, concerned ports and distances between ports.
Enhance and expand this network to include a broad base of relevant EU Sea and inland ports.

Key pilot working group
Fair Winds Trust (FWT)
Port of Oban
Port of Leer, Scotland
International Wind Ships Association
Port of Oostende

LED - Lighting in port areas

Task of the pilot

Installation of LED lighting in the port areas.
The Port of Emden and the Port of Vordingborg will install, manage and monitor a new intelligent and innovative lighting-system on the new developed harbor area. The new installation is a chance to implement a sustainable lighting system with durable and energy-saving lights with adaptable light intensity according to requirements.

Questions

Technology and best practice.

Results

Port light plan.
Real investment plan.
Cost benefit analysis.
Low Carbon benefit.


Port of Vordingborg

Key Pilot working Group
Port of Emden
Port of Vordingborg
Port of Meppel

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HYDRO used in ports and connected areas

Task of the pilot

To design a hydrogen refuelling system suitable for refuelling a hydrogen ferry.

Questions

Identification of Business plan.
Low carbon benefit calculation.

Task and results

The results will be a design for a ferry refueller.
This will need to be capable of being CE marked and take account of the technical requirements of the hydrogen ferry, local facilities and regulations.

Key pilot working group

ITM Power
Orkney College
Orkney Islands Council
Fair Winds Trading

LOW CARBON Harbour Plan

Task of the pilot

Making the three ports of Zwolle, Meppel and Kampen more carbon neutral. The municipality of Meppel was partner in the Interreg project Lo-Pinod for the last 4 years. In this context they have worked on a Low Carbon harbour Plan. This concerns an inventory document of what actions in the port may be carried out to promote sustainability. Actions in the areas of water, air and energy are investigated.

Questions

Determining effective measures to apply in port areas.
Pilot a number of actions of the low carbon harbour plan.

Task and results

The pilots will be monitored during implementation on effectiveness, cost efficiency and intended result. Cost-benefit analysis on the pilot projects. Case study and presentations of the results to other partners and ports.

Key pilot working group

Port of Zwolle, Meppel and Kampen
Port of Emden
HWWI

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PORT organisation

Task of the pilot

Making the three ports of Zwolle, Meppel and Kampen more efficient in the future. The formation of a joint port authority is a logical step to strengthen the competitiveness of the inland ports.

Task and results

Cost-benefit analysis on the three areas.
Business case development with relevance for other ports interested in port cooperation.
Case study and presentations of the results to other partners and ports.

Key pilot working group

Port of Zwolle, Meppel and Kampen
Port of Emden
HWWI

Port of Oostende

DOCKLAND - lead by Port of Oostende

Task of the pilot

Development of a new green port strategy by the introduction of industrial co-siting. Focus on co-siting within the sector of the fine chemicals, in correlation with the sector of the renewable energy and the sector of the circular economy. Practical base is situated within the back-port of the port of Oostende, on the site of Plassendale 1.

Questions

Identification of the conditions in order to establish a site for co-siting in close exchange with the Flemish government.
Identification of the necessary conditions for setting up a system of co-siting.
Identification of the obstacles.
Development of a Business case, related to the site in Oostende.
Development of a Management case for co-siting, related to the site in Oostende (key issue on responsabilities and follow-up of environmental and safety permissions).

Key pilot working Group

Port of Oostende
Port of Vordingborg
Port of Zwolle

Task and results

Business case on co-siting.
Best practice on co-siting as a tool for port management in function of decarbinasation and active participation of SME's in port.

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DUAL Ports is an Interreg North Sea Region project started in December 2015, with a duration of 3 years.

DUAL Ports is based on the operational pilots in Regional Entrepreneurial Ports (REP's).

DUAL Ports will be measured in the concrete success of the pilots and the pilots' tranferability to other REP's.

DUAL Ports addresses the Programme objective of promoting resource efficiency and stimulate the adoption of new products, services and processes to reduce the environmental footprint of regions around the North Sea.

Follow the progress at www.northsearegion.eu/dual-ports

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