# **NOSTRA**

**Network Of STRAits** 

# PATCH project

"Ports Adapting To Change"

Good practice for "Port of Calais" CCI Côte d'Opale

Workshop n°4 - Coast and Hinterland Economy









## Port Management and Port Financing

# The PATCH project partnership Ports working together towards a sustainable future





PATCH is part-financed by the European Regional Development Fund (ERDF) under the Interreg IVA 2 Mers Seas Zeeën Cross-border Cooperation Programme

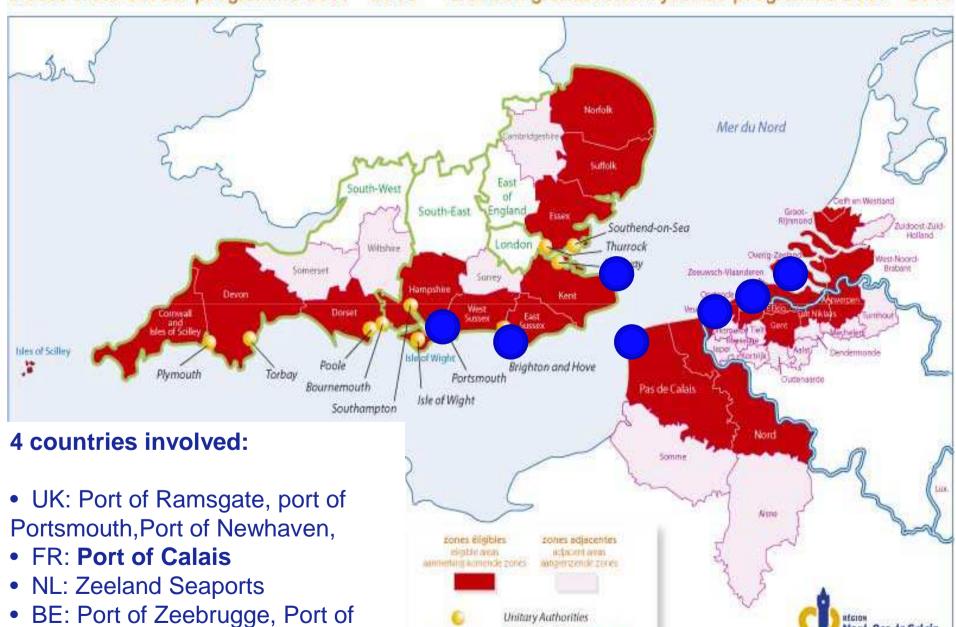






#### Programme transfrontalier des 2 Mers 2007 - 2013

#### 2 Seas cross-border programme 2007 - 2013 2 Zeeën grensoverschrijdende programma 2007 - 2013



Oostende

Government Office Region

mans 2008

# Introduction to the PATCH Project

#### What is PATCH?

PATCH stands for 'Ports Adapting o CHange', and the project aims at promoting the crossborder cooperation between port authorities of small and medium-sized ports.











#### Introduction to the PATCH Project

#### What are its objectives?

- Strengthen logistic functionality
- Promotion of economic activities in the port
- Development of new markets
- Strengthening of port management
- Strengthening of cross-border economic cooperation
- Cross-border pooling of competences







#### Introduction to the PATCH Project

#### **Cross-Border added value?**

The actual economic recession makes it clear that social and economic prosperity depend on the quality of the **logistic and economic infrastructure**.

Several actions have to be developed on cross-border level in order to strenghen the role of the ports in the cross-border logistic gateways, and to become **hubs for new economic activities** 

#### **Timing and budget?**

- •9 472 550 euros
- •From 2009 to 2012







## Realisation of the PATCH project

The PATCH project has been active in the following fields:

- a. Port management
- b. Diversification of economic activities
- c. Energy efficiency
- d. Port financing
- e. Marine and maritime industry

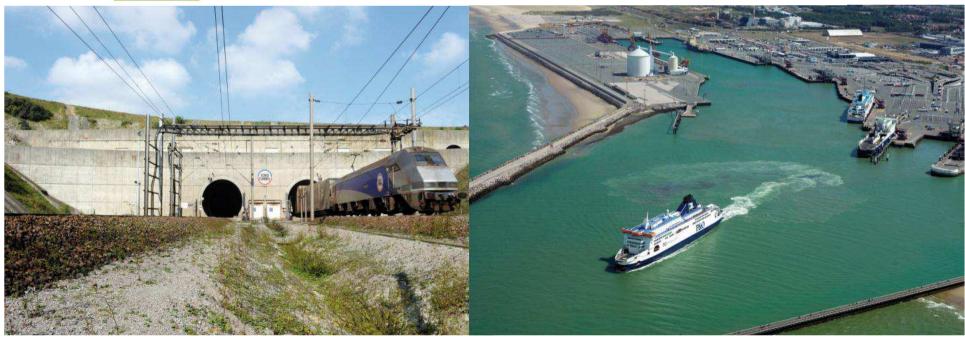


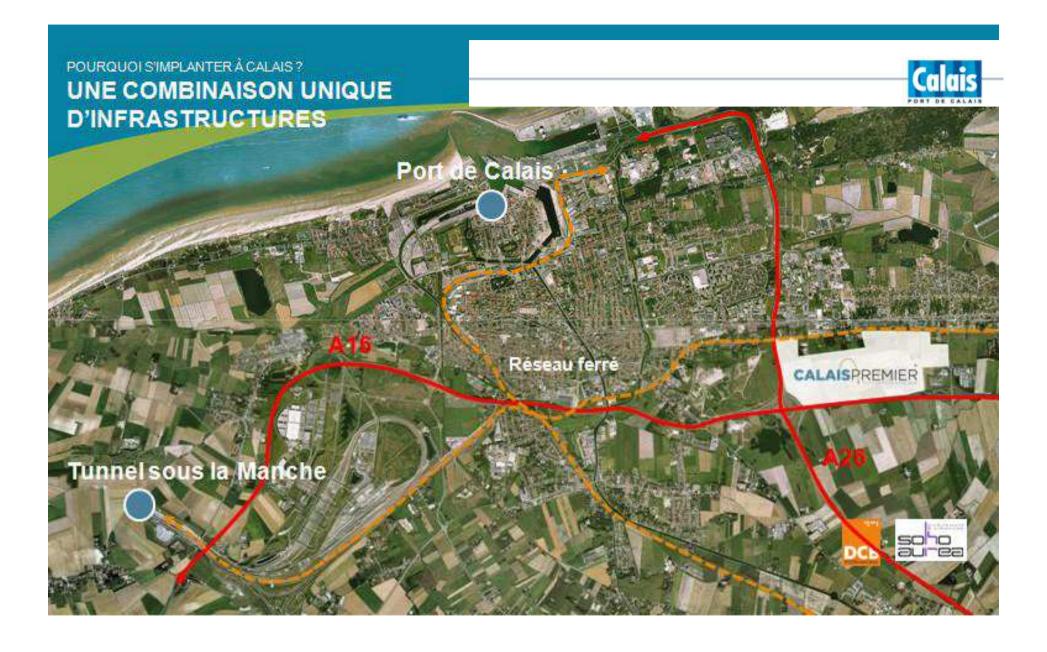












# Port of Calais: how to increase green electricity production and reduce green house gases emission?

After a multicriteria screening, 6 technologies were shortlisted:

- Tidal energy & wave energy
- Solar energy by using a Stirling engine
- Production, storage and conversion to electricity of hydrogen
- Exhaust gas recuperation by using AMECS (Advanced Maritime Emissions Control System)
- Liquified Natural Gas
- Piezo electricity







#### **Port of Calais**

#### 1 - Tidal energy and Wave energy - potential energy :

- Necessity of a tidal basin by using weirs or sluices
- Existing infrastructure can be used / optimisation is necessary
- High and constant water velocities are important
- -Interaction with shipping needs to be investigated
- -Several technologies are in a pilot project phase









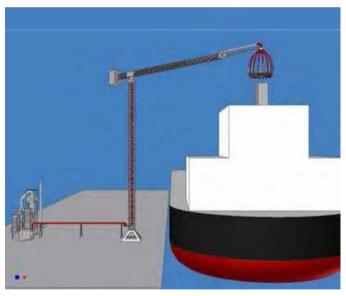


#### **Port of Calais**

# 2- Exhaust gas recuperation:

- Reduction of NOx, SOx and particulate matter emissions
- High investment costs
- Waste after treatment issues











#### **Port of Calais**

# 3 - Liquified Natural Gas:

- LNG reduces emissions
- Safety, regulations and logistics regarding LNG need to be investigated





#### For further information:

Lead Partner: Port of Ostende (Wim Stubbe)

- website: www.portofoostende.be/patch
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#### Partner from Pas-de-Calais:

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