



# Circular Economy Network of Ports (LOOP-Ports)

## National Workshop i Danmark

26. november 2020

## AGENDA

- Introduction to LOOP Ports
- Circular Economy and the port sector
- Learnings and obstacles from workshops with ports
- Roundtable: "your work with circular economy"
- How to move forward
- Wrap up





- Screenshots og GDPR
- Vi taler gerne “Danglish”
- Opfølgende mail med referat og ekstra materiale



## Today's team



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Professor, DTU



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Project Consultant, NTU int







# Introduction to LOOP Ports

Lasse Vinblad Thaisen



# PORTS

ideal places to develop Circular  
Economy Activities

- Crossing-points for all kinds of waste and industrial flows.
- Logistical hubs for the import and export of waste materials.
- Setting-up location of industries that are active in the treatment, collection and shipment of waste
- Stimulate the emergence of innovation circles

LOOP-Ports aims to **facilitate the transition to a more circular economy in ports** through the creation of a Circular Economy Network in Ports that will provide an innovation ecosystem around the port activity and stimulate circular economy initiatives in ports.



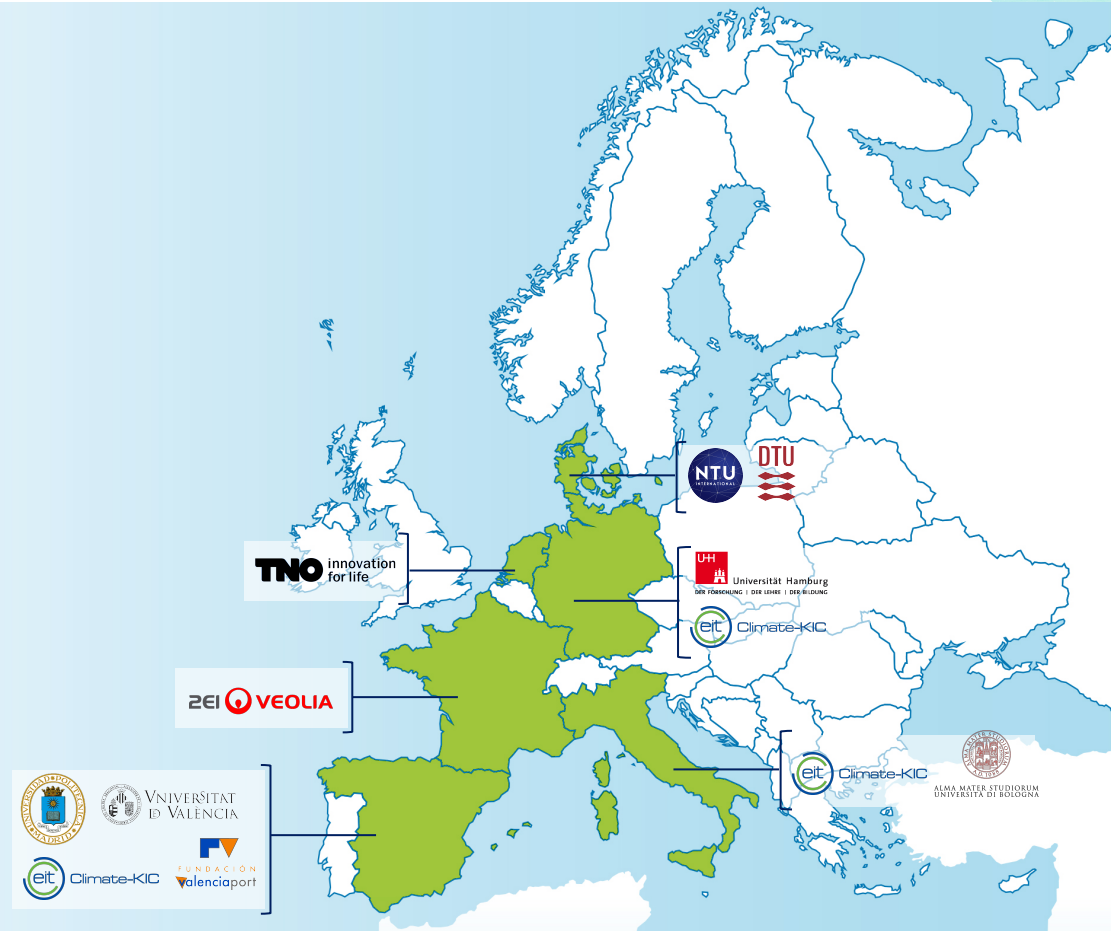


October 2018 - December 2020

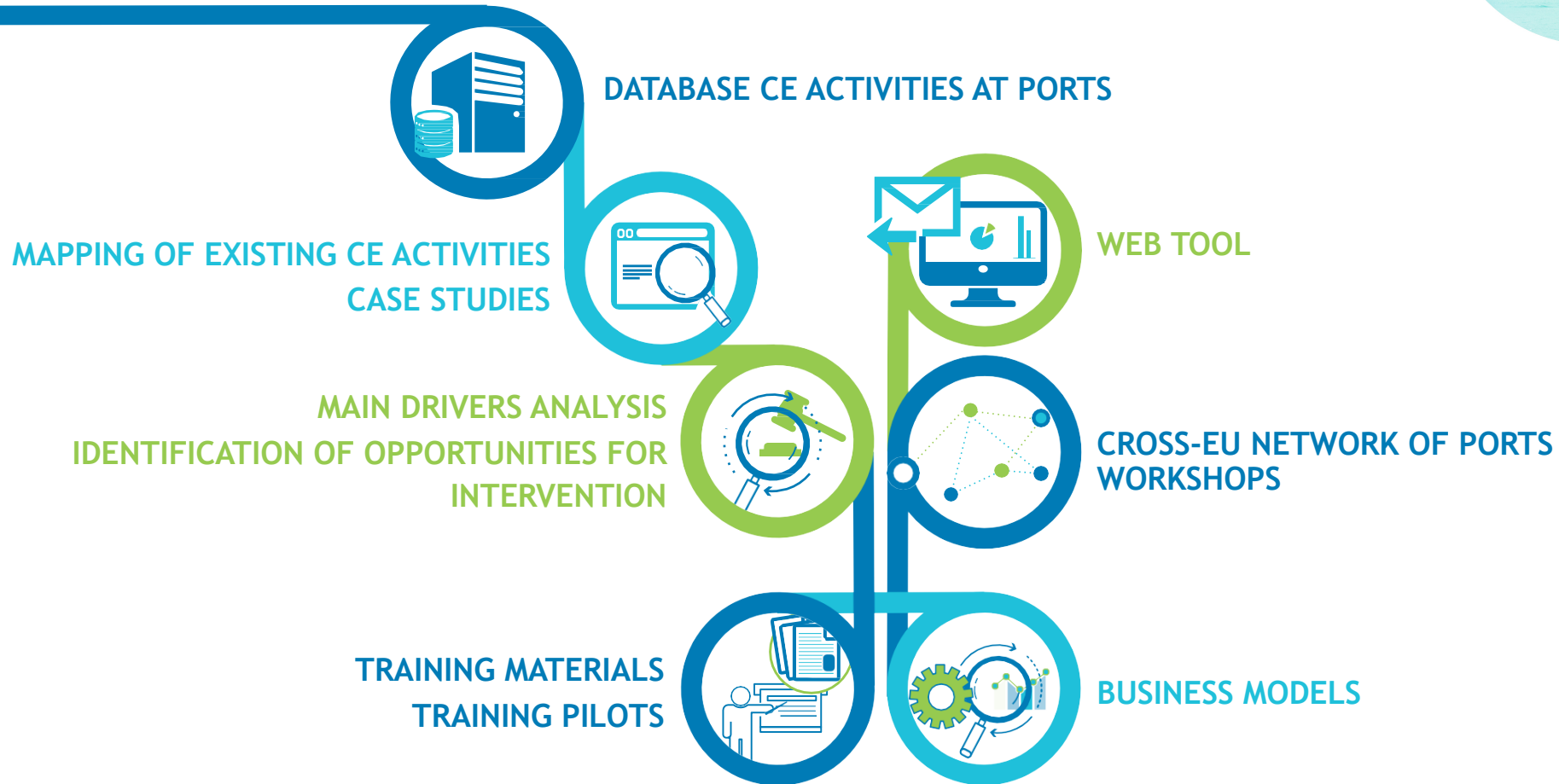
13 partners

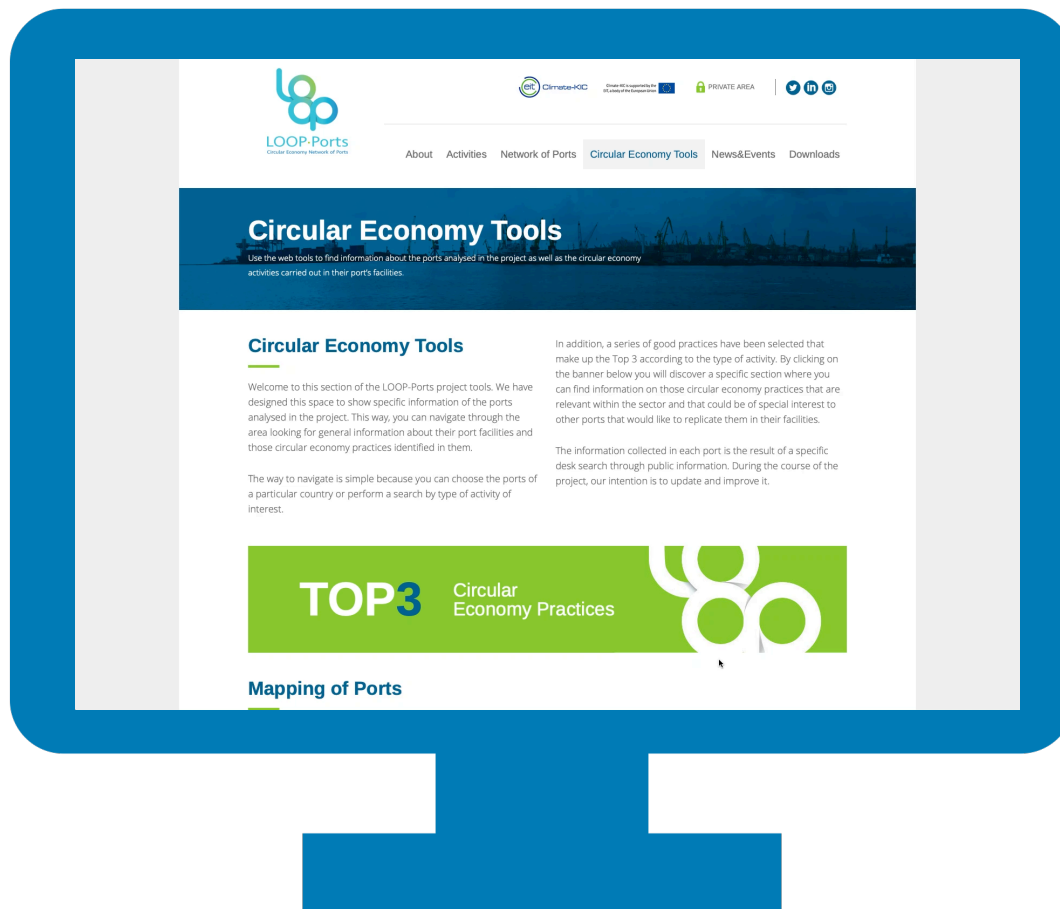
6 European Countries

France  
Italy  
Germany  
Netherlands  
Denmark  
Spain



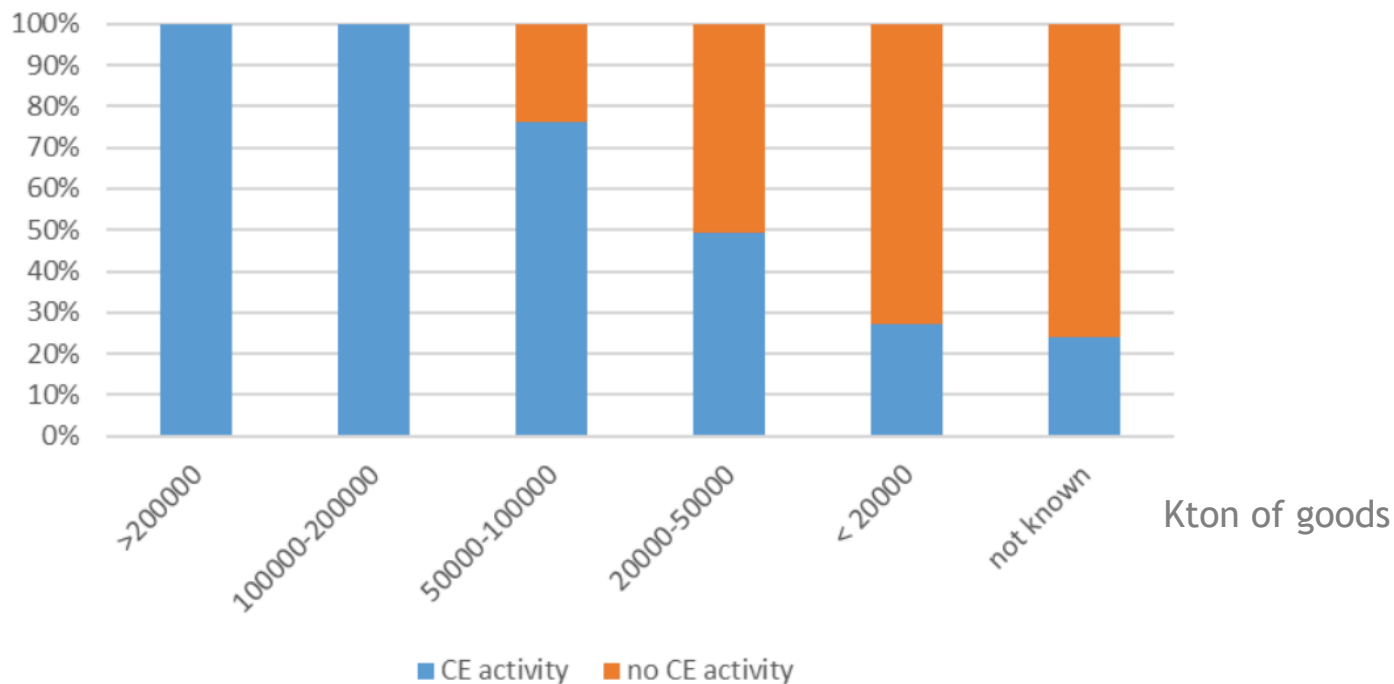
## RESULTS







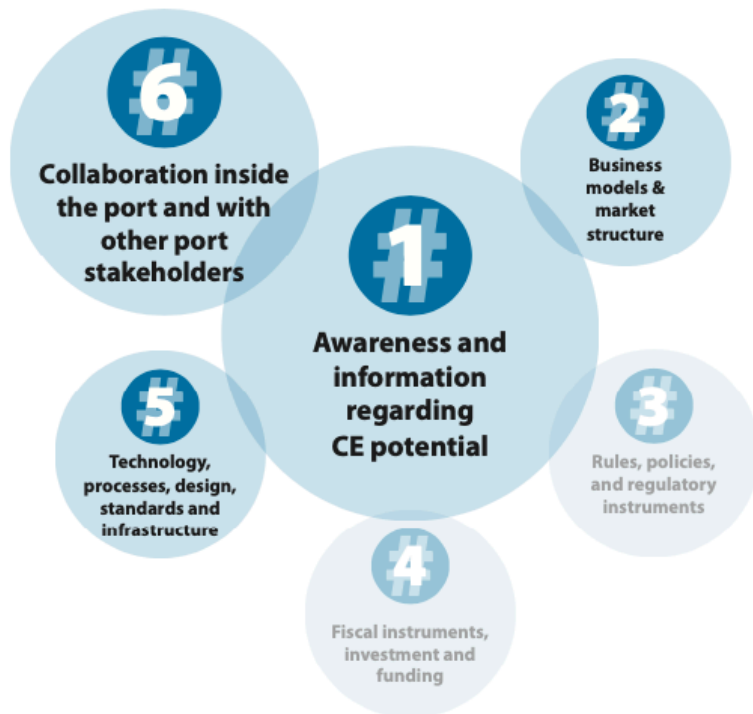
### The more material flow (port size) the more CE activities



### Focus for knowledge, skills and capabilities for developmental stages

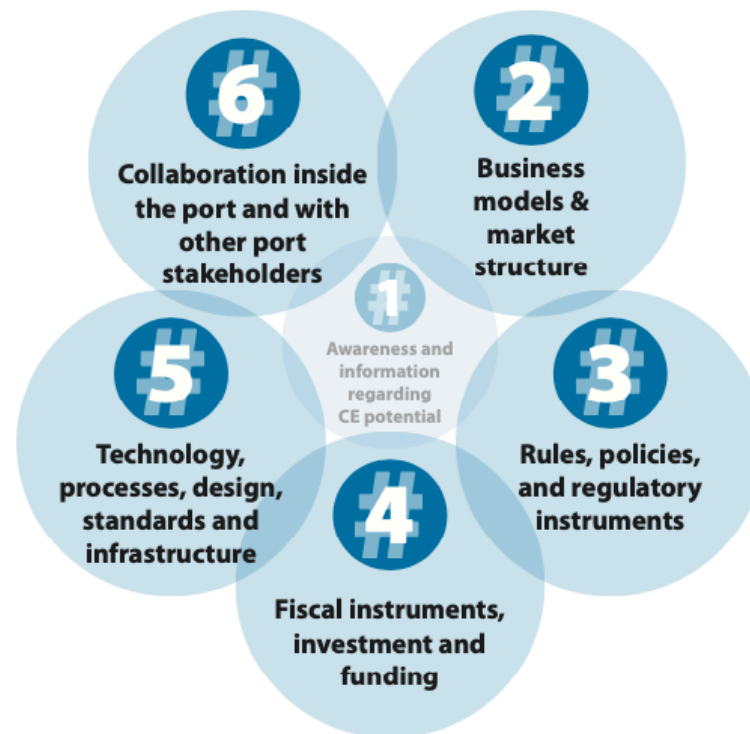
#### **Newcomer ports**

*Ports that are exploring CE potential*



#### **Forerunner ports**

*Ports that are advanced in their application of CE*





## Case Studies examples



### MOERDIJK, NL

Valorisation of waste tires through pyrolysis

Piloting return logistics to valorize waste tires through pyrolysis - replacing incineration to obtain gas, oil and biochar for producing new goods and generation of energy.



### AALBORG, DK

Circular sourcing for cement production

Dredging has become a value adding activity - the sands are used as a raw material in the production of grey cement in the co-located cement plant.



### BOULOGNE-SUR-MER, FR

Valorisation of fish by-products

Former waste streams from the fishing industry are being used to manufacture a range of high-value products in the nutrition and beauty industry



- Surplus green energy to hydrogen in the Port of Emden
- On-shore power to cruiseships in Kristiansand
- Excess heat from cooled warehouses is used for heating buildings and swimming pools in Valencia
- Developing industrial symbiosis in the Port of Aalborg
- Maintenance and repurposing of shipping containers in Italy
- Potential new uses of recycled fiberglass from ships
- Energy recovery of rubber tires into oil and gas via pyrolysis in Moerdijk