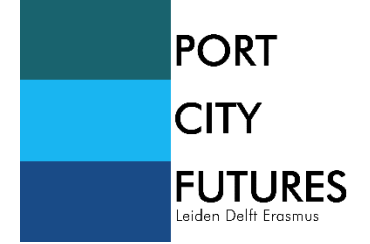


# Rotterdam Moves: the port's future

## Erasmus Alumni Lecture

17 December 2020

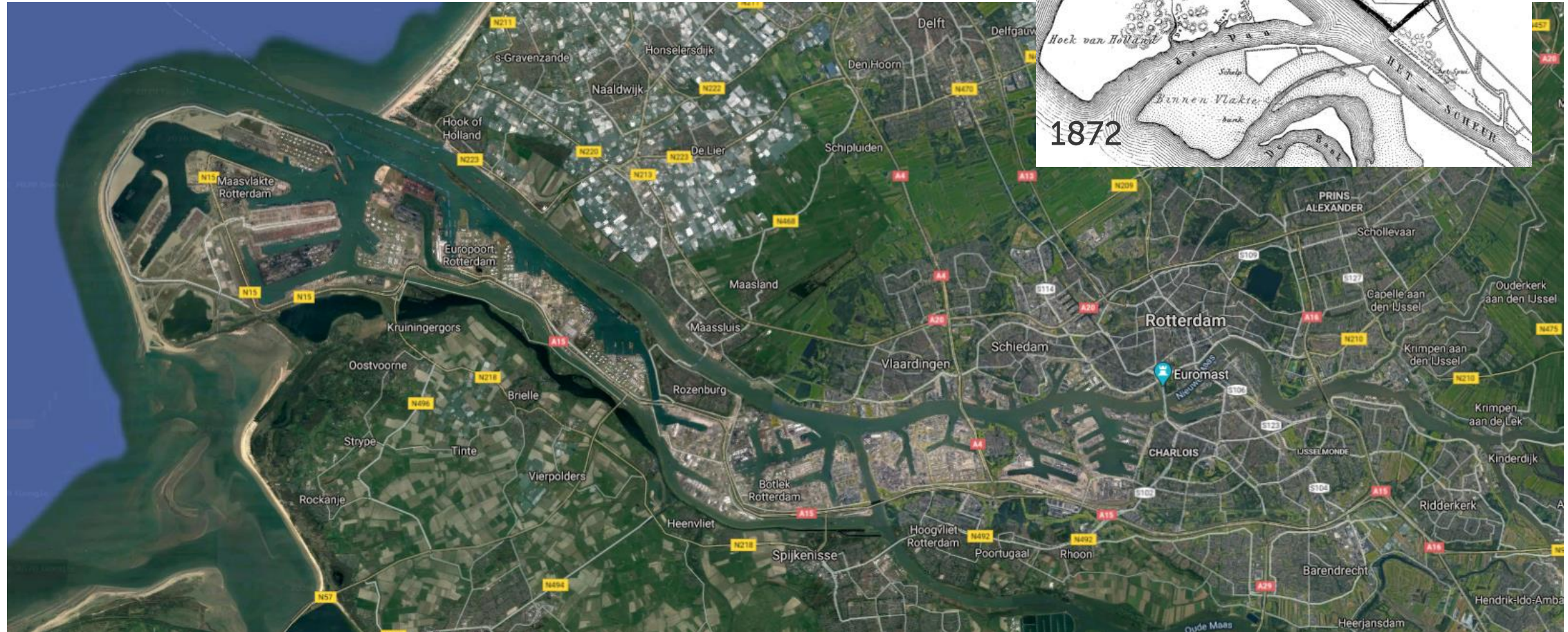
Maurice Jansen MSc



**ROTTERDAM.  
MAKE IT  
HAPPEN.**

# ROTTERDAM: A PORT WITH A CITY

PORT OF ROTTERDAM STRETCHES 40+ KM TOWARDS THE SEA



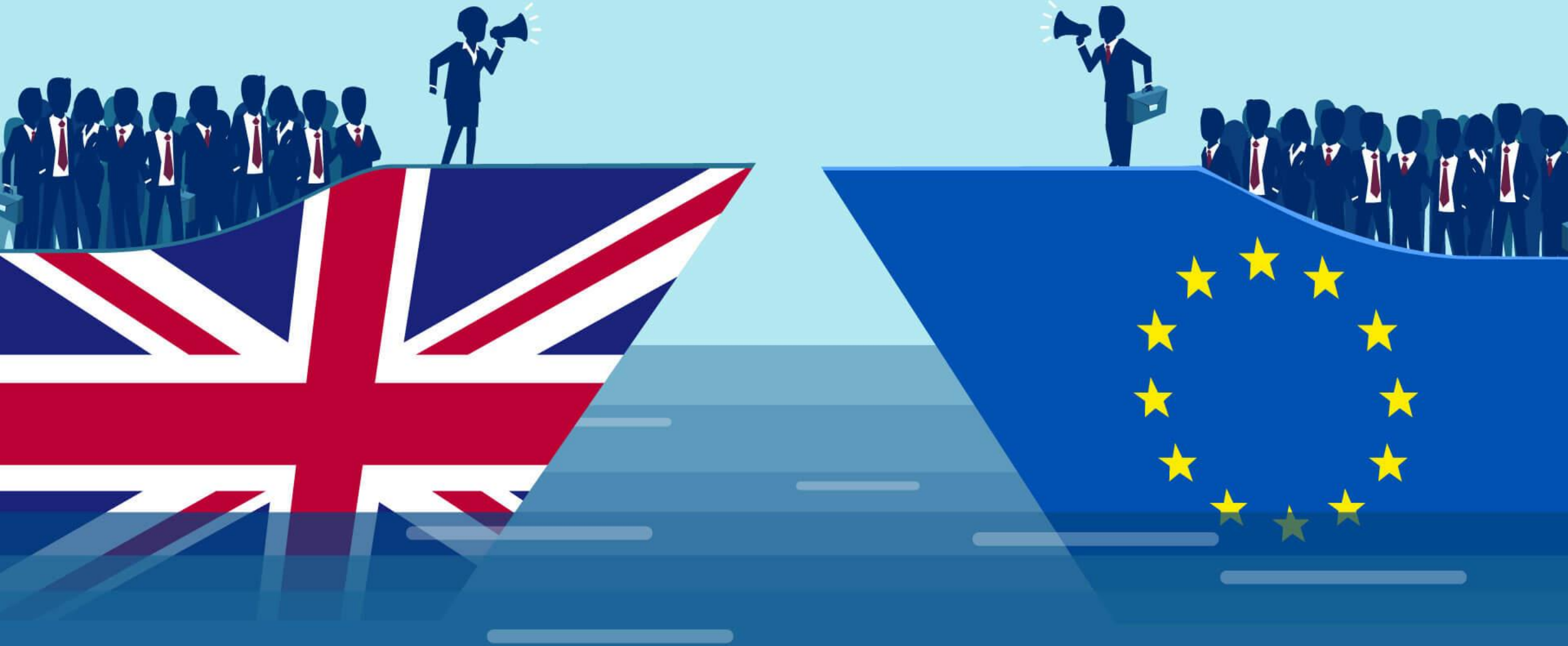


**2020 A YEAR TO REMEMBER....**

# COVID-19



# 2020 A YEAR TO REMEMBER....





**MEANWHILE...**



# THE END TO GLOBALISATION AS WE KNOW IT?

## The Great Unwinding

Covid-19 and the regionalisation of global supply chains

A report by The Economist Intelligence Unit

## The pandemic adds momentum to the deglobalisation trend

Douglas Irwin 05 May 2020

Globalisation unwound

Has covid-19 killed globalisation?

The flow of people, trade and capital will be slowed

Coronavirus won't end globalisation, but change it hugely for the better

**Coronavirus will reverse globalization and create regional supply chains, economists predict**

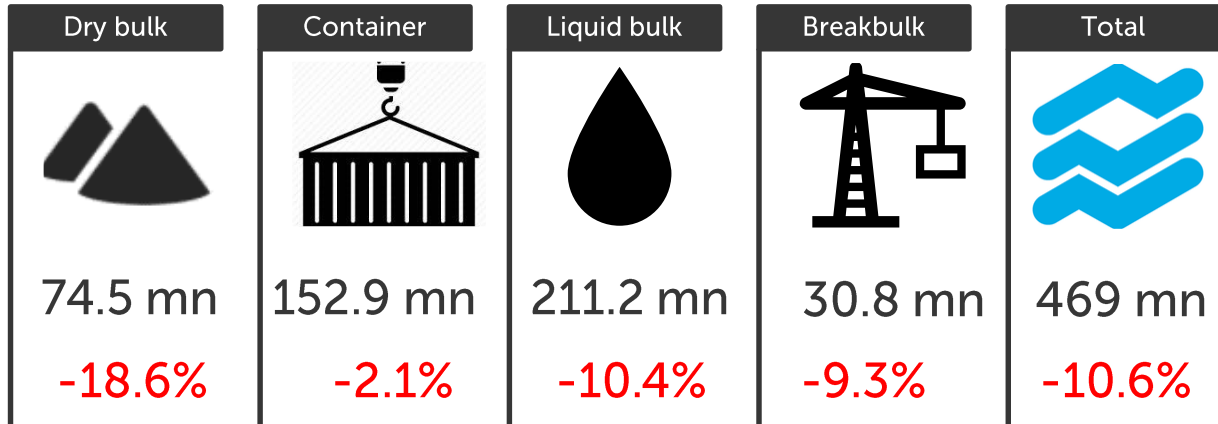
PUBLISHED WED, MAY 13 2020•8:47 AM EDT



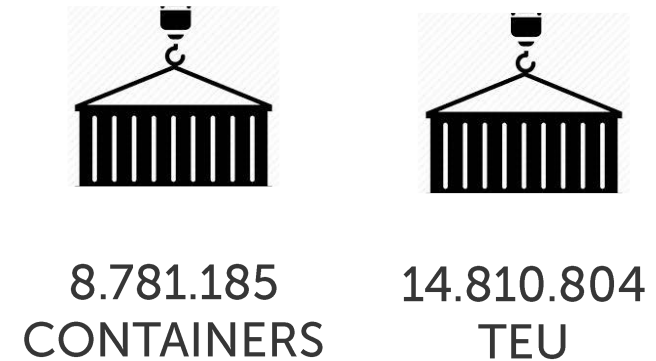
**Sinds corona meer vraag naar lokale producten in Rotterdam**

# PORT OF ROTTERDAM SOME FACTS AND FIGURES

Throughput in tonnage **COVID-19 impact, YTD Q32020**



Container volume



2019

Rank  
Europe

1

World  
GDP  
2020\*

**-4.1%**

World  
trade  
2020\*

**-4.1%**

Vessel calls



SEA-GOING:  
29,491



INLAND VESSELS  
100,000

Employment and added value



385,000 jobs



45.6 billion

Source: Port of Rotterdam, 2019 / \*) Estimate UNCTAD 2020



# THE CHALLENGE AHEAD FOR THE PORT OF ROTTERDAM

- “The biggest challenge of the 21st century is the development and implementation of methods that at the **same time strengthen the economy and improve the environment**, while making optimum use of the available space.
- **Sustainability of production and consumption** processes in coastal zone areas.
- This is crucial in achieving a **minimal global footprint**.
- Dr. Ronald Waterman



Photo credits: Danny Cornelissen, Port of Rotterdam

**New energy system  
needed, requires ports to  
lead the energy transition**

**20% CO<sub>2</sub>  
of NL**



# PARALLEL TRACKS OF TRANSITION

## INDUSTRY



Hydrogen chain  
for industry and  
transport system  
Biofuel refinery  
Carbon Capture  
Storage

## PORT CITY



Maker's District  
Local-for-local  
manufacturing  
Circular business  
models  
Entrepreneurship

## URBAN DISTRICT



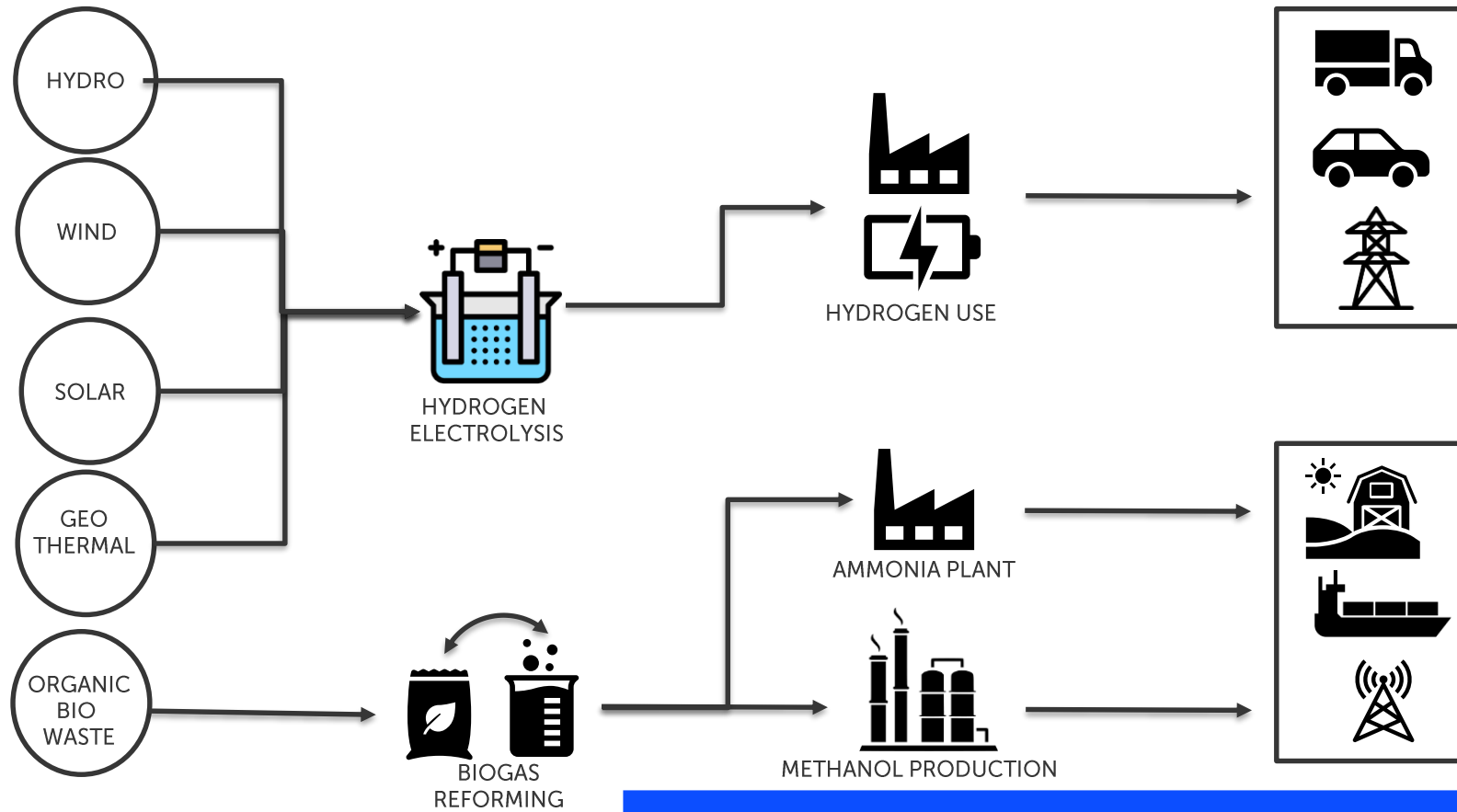
Rotterdam  
Maritime Capital of  
Europe  
High-end maritime  
services

## SUPPLY CHAIN



Supply chains are  
going digital,  
creating visibility  
and control across  
continents

# TOWARDS LARGE SCALE HYDROGEN PRODUCTION AND NETWORK



Rotterdam aims to become the hydrogen hub for Europe

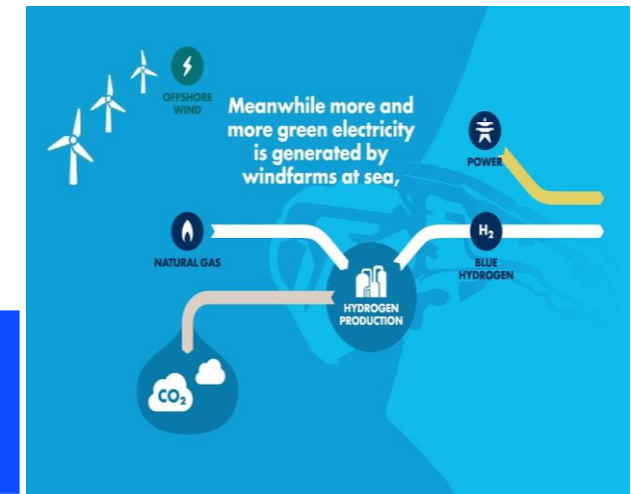


Photo credits: Port of Rotterdam



# TRANSFORMING CITY PORTS INTO INCUBATORS FOR ENTREPRENEURS

1.



2.



The floating farm for cows



- 1. Onderzeebootloods
- 2. Merwe-Vierhavens
- 3. Aqualab
- 4. Aerial view Stadshavens
- 5. RDM innovation dock

Photo credits 3,5 : Claire Droppert



# CHANGING ENVIRONMENT – CONFLICT OR CREATIVE SOLUTIONS?



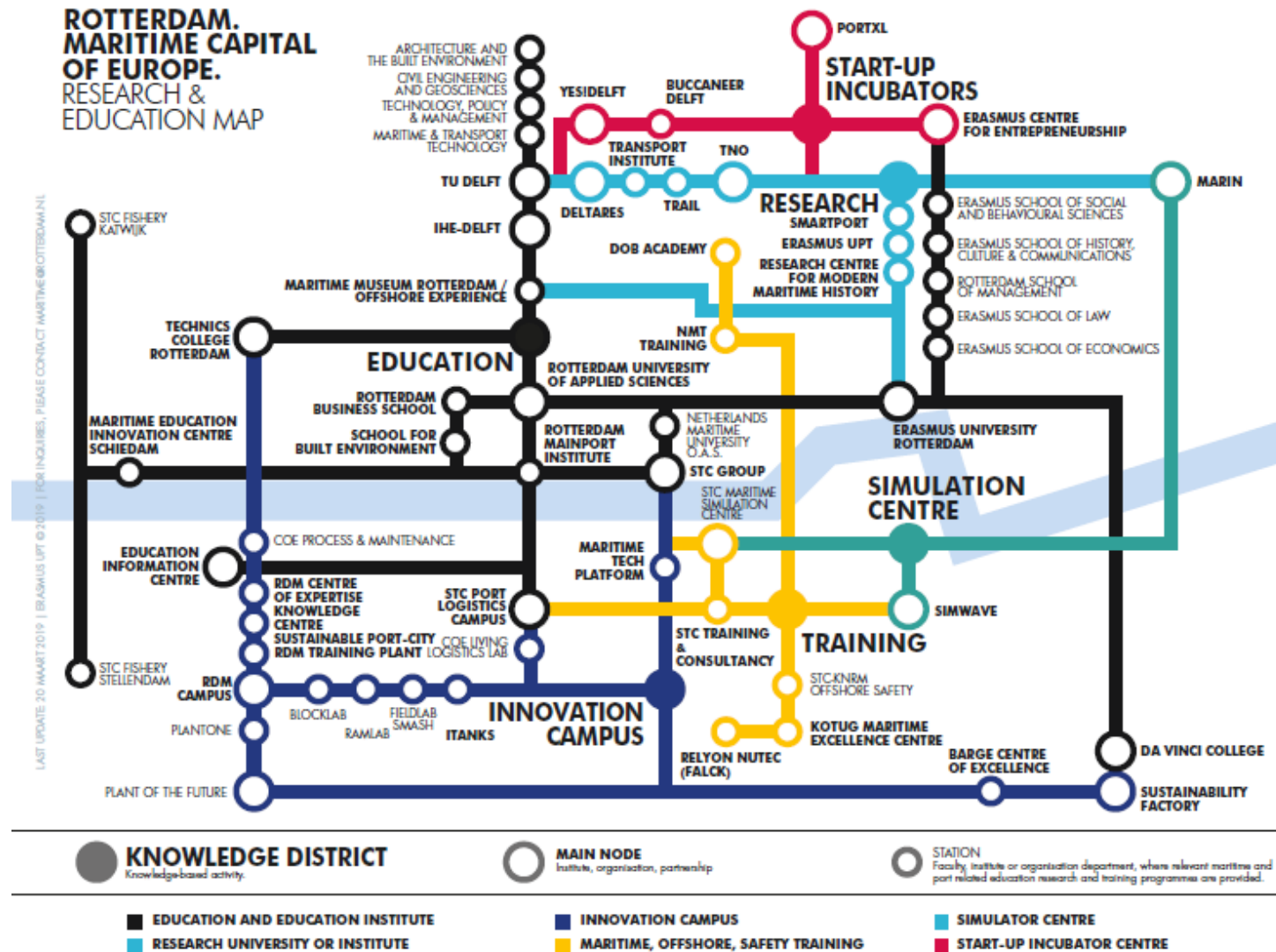
- Transition is not just about technology, but primarily about cooperation and creativity on the basis of **trust**, **tolerance** and **willingness to act** and move forward.
- That also means that people must be (re-)skilled and educated differently than we have done before

# EXTENSIVE MARITIME INNOVATION ECOSYSTEM IS PART OF TRANSITION

**Extensive maritime innovation ecosystem:** R&D, incubators, accelerators, funding.

**Broad fieldlab infrastructure;** leading in application of disruptive technologies in port and maritime sectors

**Maritime-related:**  
 14 Master degree  
 8 Bachelor's degrees  
 34 Vocational programmes  
 11,000 students



# THE INNOVATION ECOSYSTEM APPROACH

- The **cluster perspective** by Porter (1990) applies to ports as well (De Langen & Haezendonck, 2012).
- Cluster theory is a model on **competition**, but as environmental management, sustainability and **corporate social responsibility** have become more important port authorities engage in stakeholder management and embraced corporate social responsibility policies.
- The switch from **competition to collaboration** is critical for survival in turbulent environments and for firm strategies (Trist, 1977).
- The **ecosystem of shared value** (Kramer & Pfitzer, 2016) is based on the idea that societal problems are too complex to solve by single actors and can only be solved by the **coordinated efforts** of those actors.

*'It is important that we all pull together on this. Not only do we want to speed up the development of hydrogen in the Netherlands, we also want to make sure our country plays a pivotal role in the renewal of Northwestern Europe's energy system.'*

— Allard Castelein, COO Port of Rotterdam Authority



Competition



Collaboration

The ecosystem approach port cities are clusters of economic activity, which are competing in a global marketplace, however prosper on the basis of collaborative action and shared value creation within the cluster.





**THANK YOU VERY MUCH**



## Contact details



Maurice Jansen  
Erasmus University  
E: [M.Jansen@ese.eur.nl](mailto:M.Jansen@ese.eur.nl)  
T: +31 6 8101 6678  
L: [linkedin.com/in/mauricejansen](https://www.linkedin.com/in/mauricejansen)