



COREALIS Antwerp Demo/Training Webinar  
Port of the Future Serious Game (PoFSG)

Wiebe de Boer - DELTARES

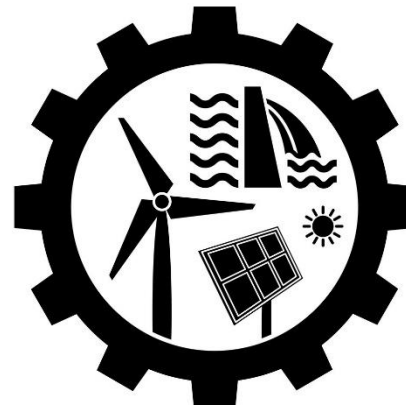
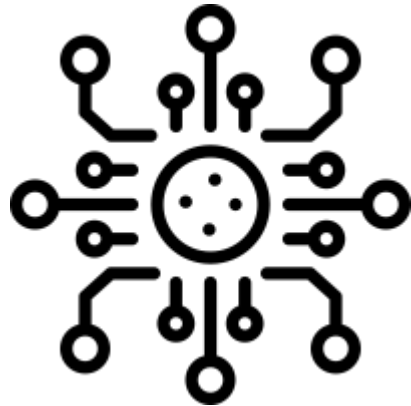
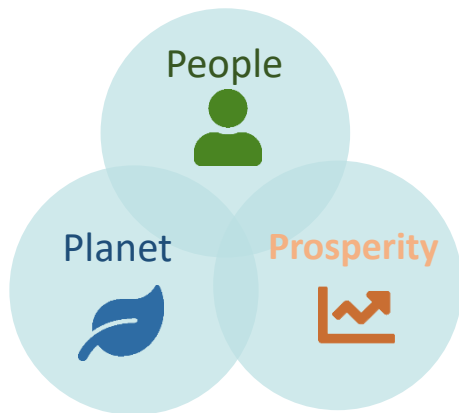
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# Why Port of the Future Serious Game?

## Motivation:

- Ongoing port developments to accommodate economic and population growth
- “Inclusive green growth” – more attention for environmental and social aspects
- New challenges: emerging technologies (e.g. 5G), energy transition, climate change





# Why Port of the Future Serious Game?

## Objectives:

- Raise awareness – simulating real-world events
- Stakeholder involvement – together explore and discuss port development aspects
- Education – multi-disciplinary thinking and different stakeholder perspectives

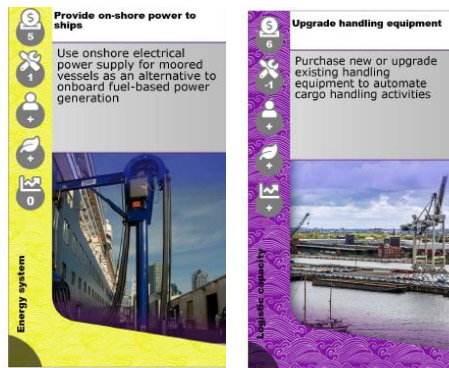






# What is the Port of the Future Serious Game?

- Setting: fictitious port
- Multiple stakeholder groups
- Negotiate about measures
- Each round select 2 measures
- Measures have scores:
  - People-Planet-Profit (PPP)
  - Costs and benefits
- Together balance PPP – inclusive green growth



Government

Financial investor

Port authority



NGO

Terminal operator

People



Employment

Recreation/culture

Safety

Planet



Ecosystems

Emissions

Climate vulnerability

Profit



Port profit

City-port benefits

Port operational efficiency



# Scenarios and events

- Different scenarios for different learning goals (tailored to port needs/context)
- (News) Events trigger additional debate and conflict amongst stakeholders

Scenario	Learning goal
Climate change adaptation	Awareness of potential consequences of climate change and adaptation measures
Energy transition	Awareness of measures for energy transition and its potential consequences
Economic stagnation	Anticipate to economic decline and its consequences for port-city relations
Innovation (emerging technologies)	Awareness for emerging technologies and their potential consequences
Sustainable port-city development	Stressing importance of stakeholder inclusion and livable port-city environment
Neutral	Fit-for-purpose scenario based on selected events

**SPECIAL NEWS**

**Big strike: workers fear to lose their jobs**



The rapid changes in the economy and technology make the workers in traditional industries feel insecure. Workers are afraid to lose their jobs and demand action!

**SPECIAL NEWS**

**Chaos due to 5G network breakdown**



Due to a long network interruption activities in the port have shut down entirely. What is the port's fallback option?



# Fly through the game



- PORT OF THE FUTURE -

PLAY SCENARIO

LANGUAGE

SETTINGS

ABOUT

EXIT



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 768994





## Concluding remarks

- Focus is on raising awareness/exploration, not decision-making tool
- Qualitative rather than quantitative character
- Feedback from past experiences:
  - Nice, interactive way of learning about port developments and challenges
  - Game helped to:
    - Better understand port sustainability
    - Better understand different stakeholder viewpoints
    - Think differently
- More information:
  - <https://www.corealis.eu/>
  - <https://www.deltares.nl/en/software/port-of-the-future-serious-game/>



[www.corealis.eu](http://www.corealis.eu)



[corealis\\_eu](https://twitter.com/corealis_eu)



[COREALIS EU Project](https://www.youtube.com/COREALIS%20EU%20Project)



[Corealis\\_eu](https://www.linkedin.com/company/corealis_eu)



[info@lists.corealis.eu](mailto:info@lists.corealis.eu)

# THANK YOU FOR YOUR ATTENTION



Wiebe de Boer



[wiebe.deboer@deltares.nl](mailto:wiebe.deboer@deltares.nl)



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