

# Location

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# The port of Antwerp



**223**

million tonnes  
of freight



**29.820**

acres  
port area



**13,5**

million TEU



**142.654**

jobs in  
the port



**7,2**

million m<sup>3</sup>  
Liquid bulk  
storage capacity



- Public investment ⇔ Private competition  
& Private investment ⇔ Provisioning of a public service



#### PoA Manages

- ✓ Infrastructure (docks, bridges, locks, quays)
- ✓ Vessel traffic in the port
- ✓ Trade facilitation
- ✓ Marketing & branding activities



#### Private companies manage

- ✓ Superstructure
- ✓ Operation of terminals (cranes, equipment, warehouses)

- Level playing field (in-port & ex-port) ⇔ Case-by-case solutions
- Multi-player agreements: shipping company, technology provider, terminal, port Authority,...
- **Transition is created together**

# Transition: Role of the port Authority

Size



*Ad hoc, re-active, competitive approach*



***New sustainable growth path***

*Integrated, pro-active, collaborative approach*

Services & tools port

Landlord port

Pro-active landlord port

Time

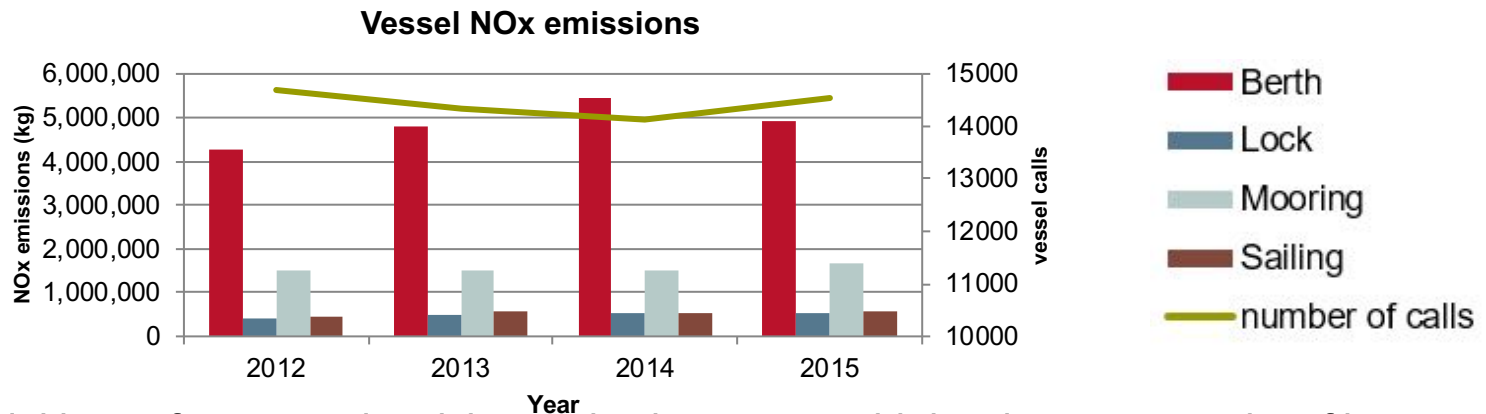


# Key parameters



# Cold ironing = Opportunity, means towards the goal

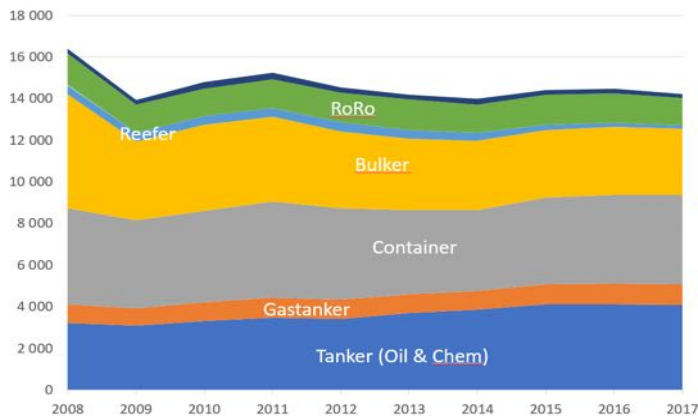
- Reduce exhaust emissions in port to secure 'license to operate'



- Potential boost for green electricity production, smart grid development, uptake of battery technology in maritime application, ...
- Port competitive advantage (?)
- Shippers/shipping company
  - Cost incentive (TCO)
  - Improve vessel 'license to operate'

## Different vessel types & terminals

### Vessel calls



- Variable types & sizes
- Variable peak power demands  
180 kWh < PoA vessels > 5000 kWh
- Different berthing locations  
Regular lines & Tramping

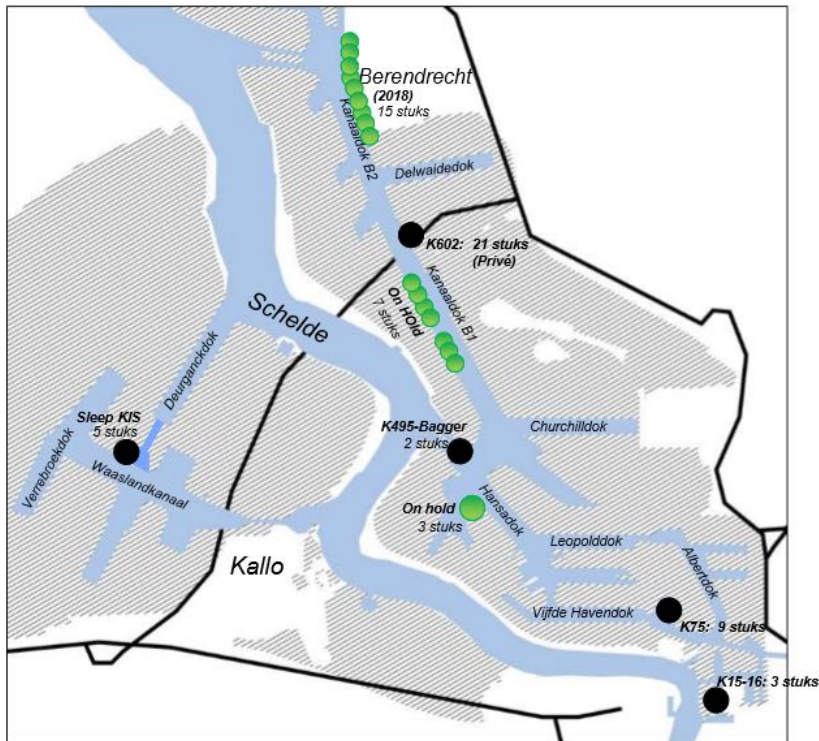
### Terminal lay-out



- 2015: 1st new terminal build “OPS-ready”
- Dedicated Container, Roro, ...
- Tankers? ATEX
- “Frequency challenge”
- Available power in port

## Inland vessels

Expanding operational network, generator prohibition



## Seagoing vessels

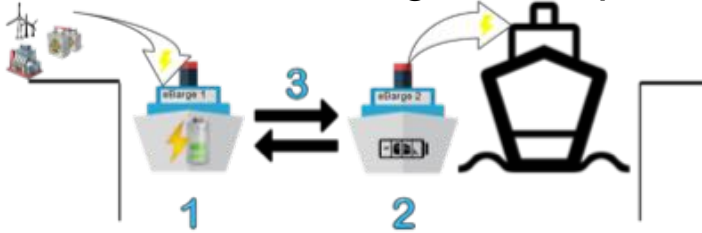
use the toolbox

- “Remove the hurdles”
  - Electricity taxation
  - Future-proof infrastructure
- “Close the gap”
  - Active partnership
  - Participation (!state aid)
- “Incentivise”



# Larger vessels? Bumpy road

2017: CieBarge concept



## 2018?

With good data, smart partnerships and the right triggers, we can flatten the bumps and a zero-emission maritime future is within reach.

**Port Authorities are crucial as a catalysator in the chain reaction.**



2015: first dock build shore power ready



2012: IMT operational



2016: river cruise operational