



## Ports as battlegrounds for decarbonization

TOC Rotterdam 2025

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**2.89%**  
today

**17%**  
2050

**Shipping contribution to global GHG emissions**

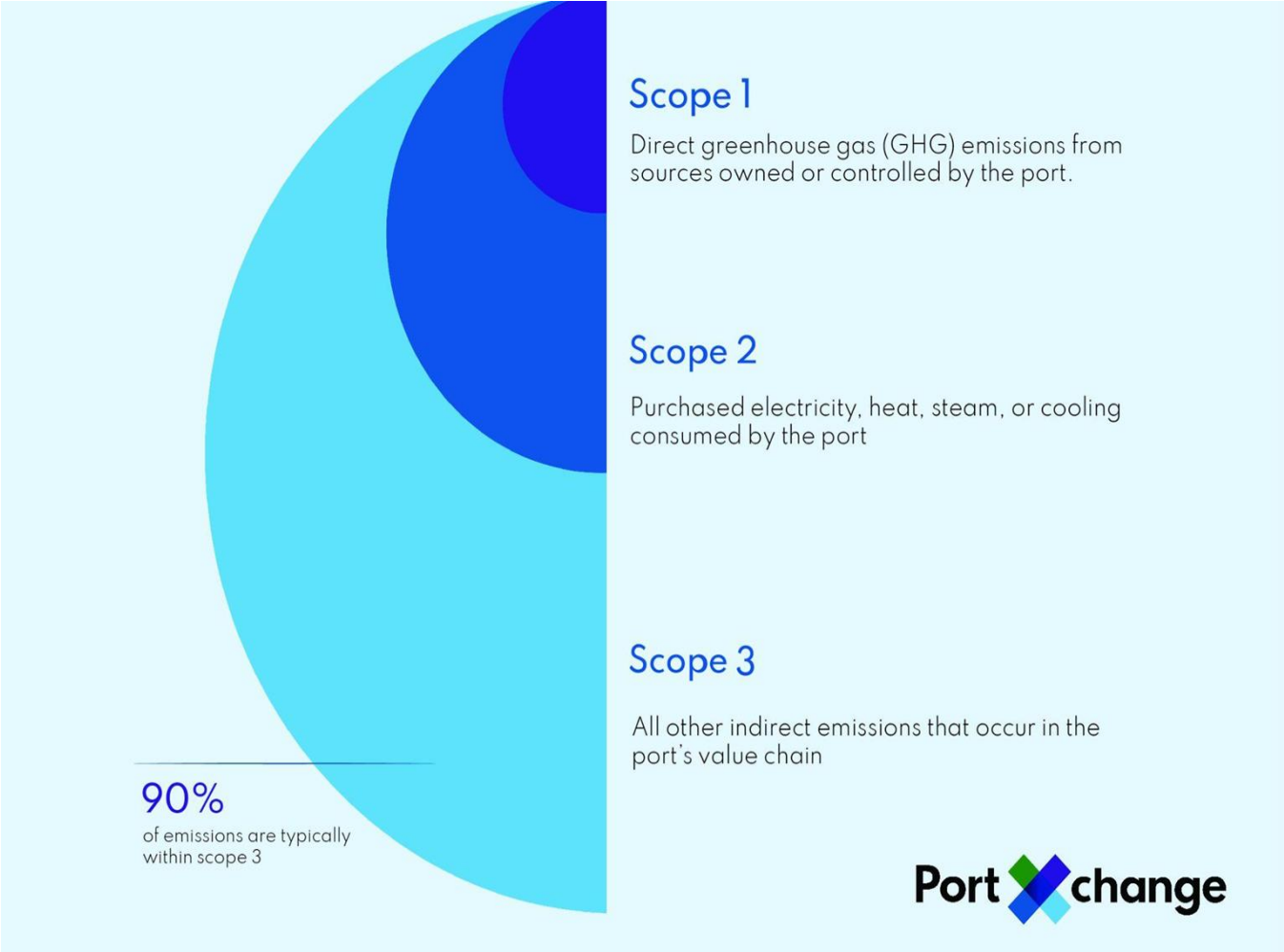
Source: Fourth IMO GHG Study 2020



# Ports play a critical role in supporting the transition to net-zero emissions



# Scope 3 Emissions represent the largest bucket of emissions in a port



96%



# Ports play a critical role in reducing vessel related emissions

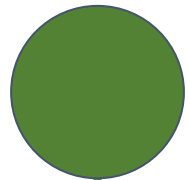
- **Just-in-time sailing** needs to be facilitated by ports:
  - Terminal berth planning
  - Nautical service planning
  - Harbour fee discount
- Environmental impact:
  - **13 tons** bunker fuel saved / portcall
  - **39 tons** of CO<sub>2</sub> / portcall
- **On shore power**
  - Port of Rotterdam can save **2500 tons NOx** by applying on-shore power across terminals
  - Provide infrastructure for future fuel bunkering



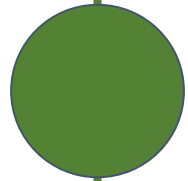
An aerial photograph of a large container ship sailing on the open sea. The ship's deck is densely packed with multi-colored shipping containers in shades of red, blue, yellow, and grey. The ship's white superstructure is visible, with a prominent funnel emitting a thick plume of white smoke that drifts to the right. The water is a deep teal color. The text "If we can't measure emissions, how can we manage them?" is overlaid in white, bold, sans-serif font across the center of the image.

**If we can't measure  
emissions, how can we  
manage them?**

# Needs and challenges with emission reporting



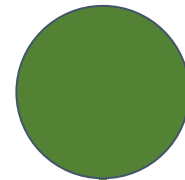
**Lack of consistent and reliable ways to track current emission footprint.**



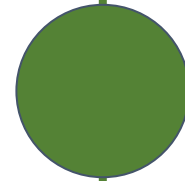
**Need to report on the effectiveness of sustainability projects.**



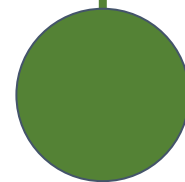
**Impact assessment timing**



**Data consistency, definition ambiguity**



**Time Consuming**



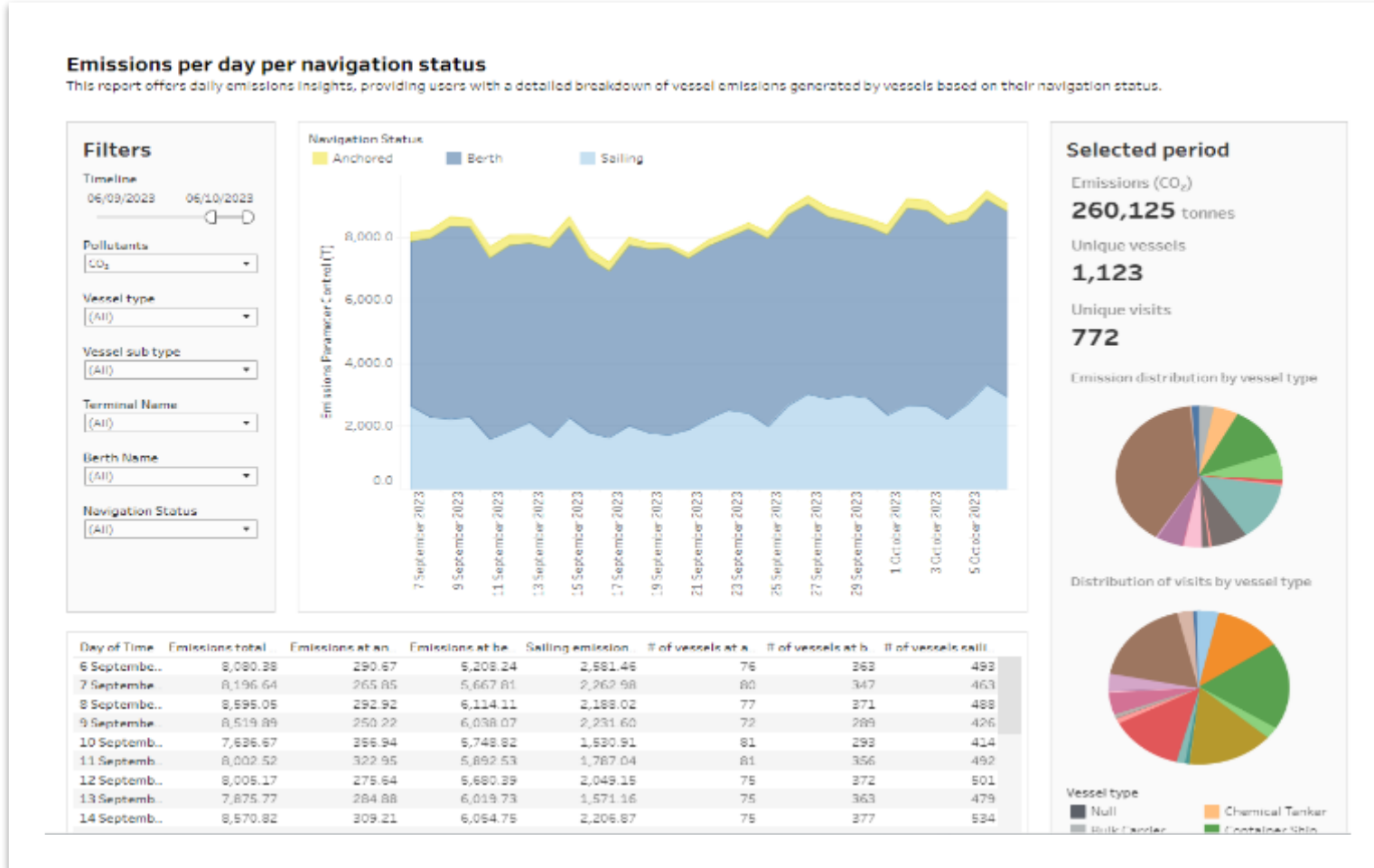
**Costly**

**Emissions transcend  
borders, emphasizing the  
need for collaboration  
and mobilizing  
communities**



# PortXchange EmissionInsider

## Track your progress toward a zero-emission port



Build the path to a zero emission port:

- Identify emission trends, aiding in transparent communication with stakeholders, regulatory bodies, and the public.
- Measure the effectiveness of decarbonization strategy
- Report on the results and apply corrective actions if needed

**But really...**

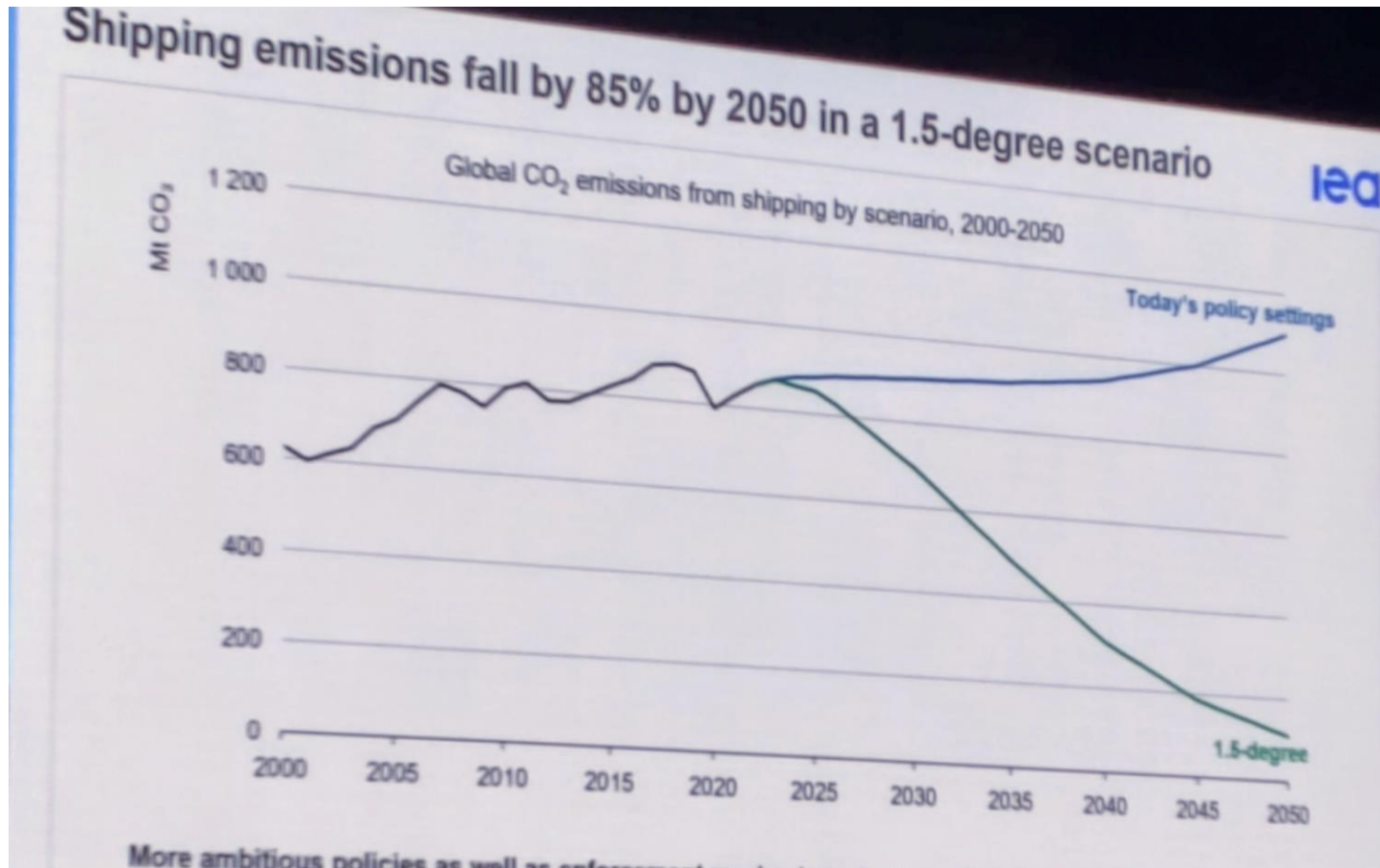
“ We know what’s wrong and what we need to do to solve it. We have all the data, all the science, the reports; we know what needs to change.

And yet we don’t.

I ask why?”

*- Prof. Matthijs Schouten*

# Shipping emissions need to drop some 85% in order to keep 1.5 degree scenario in 2050



Source: IEA, presentation Singapore Maritime Shipping Week 2024

IMO NZE  
CII  
FuelEU  
LNG dual fuel  
On-Shore Power Supply  
Wind propulsion  
Air lubrication  
Green Corridors  
Just in Time sailing  
etc...

Even when applied all together, all over the world, all at once, into perpetuity...

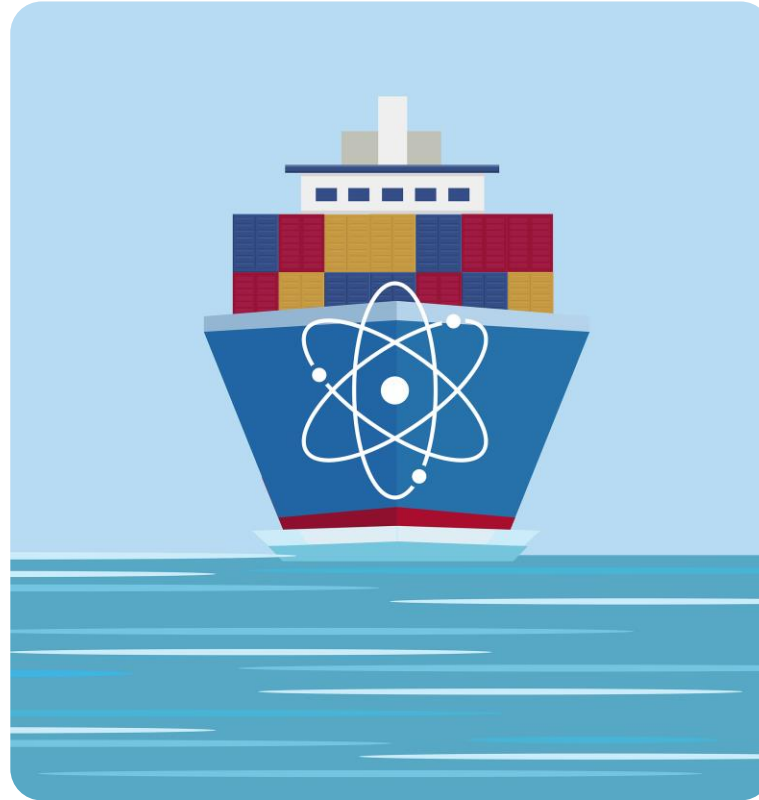
It wont be enough

# Shouldn't we be talking about...



**Stop  
Free  
Shipping**

**?**



**Nuclear powered  
deep sea vessels**

**?**



**Reduce  
Cruise**

**?**

We look forward to  
talk further!



## Contact Information



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