ZERO EMISSION SERVICES

## ING Sustainable Investments

## Zero Emission Services

ALPHENAAR

Anouk Meevis & Olivia van Roijen April 2021









### **Unique Proposition**



Zero Emission



Exchangeable



Standardized



Affordable

Multi purpose



Future proof and scalable



## An affordable solution for the ship owner

	Traditional financing	Pay-per-use
Use	Ship owner buys batteries and uses them to propel the ship	The ship owner has a contract with ZES, he/she collects the batteries when needed and only pays per kWh used
Upfront investment	The ship owner invests in the battery containers	ZES invests in the battery containers
<b>Costs during use</b> (e.g. energy consumption, maintenance & repair and depreciation)	Partly predictable, partly unpredictable	Ship owner pays a fixed amount per kWh (pay per use)



## ZES Ambition - Scaling up to emission free inland shipping

#### 2023: Short term ambition

- 10 vessels to sail zero emission
- 10 docking stations
- 15 ZESpacks

#### 2030

• Green Deal: 150 vessels to sail zero emission

#### 2050: Long term ambition

- 400 vessels to sail zero emission
- 20 docking stations
- 650 ZESpacks
- $\rightarrow$  40 zero emission sailing routes
- → 400 480.000 tons of CO2 avoided
- → 3.700 tons of NOx avoided







#### Main challenges From ambition to realization



A system change requires supply chain collaboration, simultaneous action is crucial to break through **catch-22** 



Subsidies need to help cover **unprofitable scale-up phase** 



**Legislation** turning zero emission into a must-have e.g. pollution pricing



ING is looking forward to collaborate on making this happen



## Thank you for your time

## Please let us know if you have any questions

For ZES specific questions, please have a look at the website or follow ZES on LinkedIn



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www.zeroemissionservices.nl

www.linkedin.com/company/zero-emission-services/



Olivia.van.Roijen@ing.com



Anouk.Meevis@ing.com



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