



# Sustainable Logistics - AAPN

Rebecca Dunn, Sustainability Product Manager, Maersk

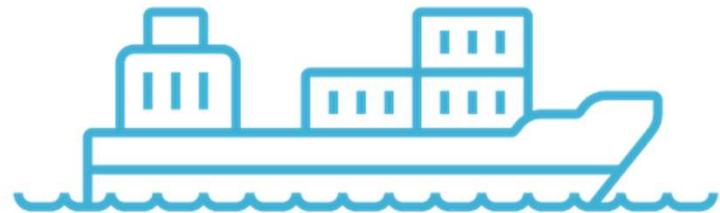


## Fashion and Logistics are two major polluters

Textiles represent about **2-8%** of global emissions annually



Cargo carrying transport represents about **11%** of global emissions annually



# What are scope 1, 2, 3 emissions?

- **Scope 1**

- **Direct emissions** from owned or controlled assets

- **Scope 2**

- **Indirect emissions** from purchased energy

- **Scope 3**

- **Indirect emissions** from value chain, including logistics
- Typically the largest share of a company's emissions and the most difficult to mitigate – that's where we come in!

Maersk's emissions:

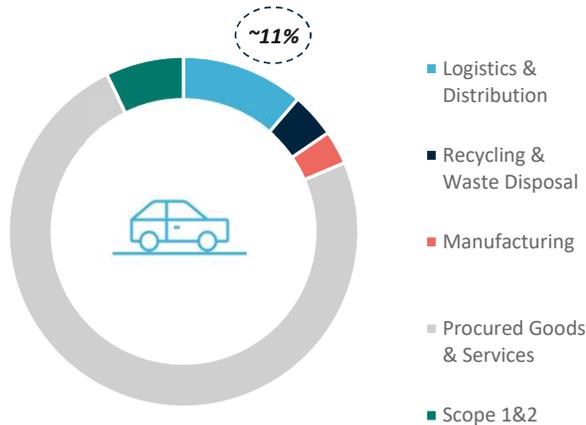


# We can solve a real problem for our customers – abating their Scope 3 emissions

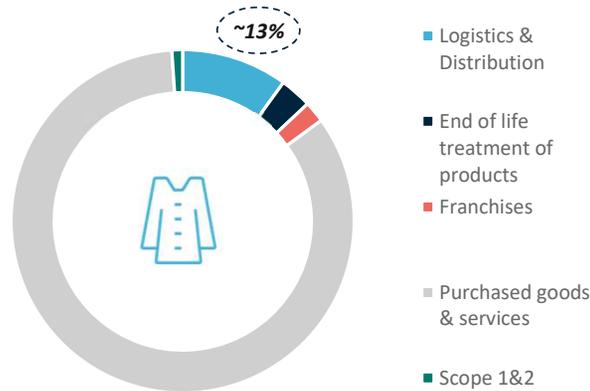
## Select customer emission scopes and characteristics

■ Scope 1+2 emissions    
 ■ Logistics share of scope 3 emissions    
 ■ ■ ■ Other scope 3 emissions

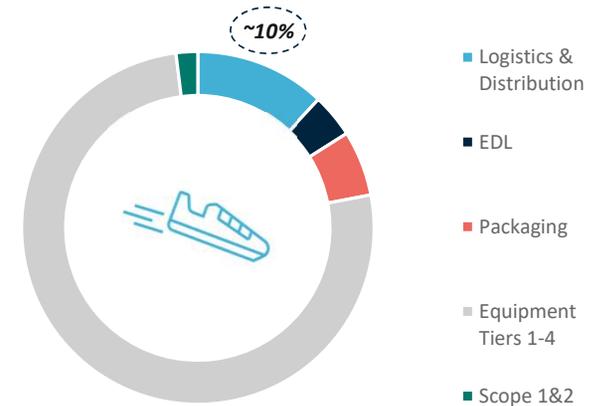
### Automotive Customer



### Apparel Customer



### Sporting Goods Customer



The ECO Delivery product is an attractive and proven value proposition for customers

# Comparing routes for CO<sub>2</sub> emissions

*Example: Santo Tomas to Atlanta*



Routing via...	Total Distance	CO <sub>2</sub> per FFE
Miami	2574 km	1.47 kg
Savannah	2601 km	0.82 kg
<b>Difference</b>	<b>1%</b>	<b>-44%</b>

Small changes can have big results, but the small changes cannot ultimately get you to net zero emissions

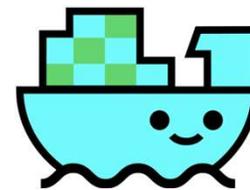
## Growing body of research...

Consumers

“71% of global consumers are making changes to the way they live and the products they buy in an effort to live more sustainably. It’s clear that companies need to put these concerns at the heart of their go-to-market strategies – or risk being left behind.”  
– study by Simon Kucher

Investors

Board Members



# SHIP IT ZERO

# California Regulatory Landscape



## CARB Actions to Reduce Emissions due to Trucks

- Advanced Clean Trucks
- Heavy Duty Engine and Vehicle Omnibus (to drastically cut smog-forming nitrogen oxides (NOx) )
- Heavy Duty Inspection and Maintenance
- Advanced Clean Fleets

## Advanced Clean Trucks rule, 2020

- sets a timeline for manufacturers to phase out most gas-powered heavy-duty vehicles by 2035. By 2035, ZE truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. At least six states — Massachusetts, Vermont, New York, New Jersey, Washington and Oregon — have already moved to adopt the rule

## Advanced Clean Fleets, April 2023

- Drayage trucks will be required to start transitioning to ZE technology beginning in 2024, with full implementation by 2035. All drayage trucks intending to begin or continue operations at a California seaport or intermodal railyard must be registered with CARB. Combustion powered trucks (non-zero-emission) must register in the CARB Online System by 12/31/23. Only ZE drayage trucks can register in the CARB Online System beginning 1/1/24. Beginning in 2035, only ZE drayage trucks in the CARB Online System.

## Warehouse Indirect Source Rule 2305 (WAIRE Program) May 2021 (implemented between 2022-24)

- The Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program, a menu-based points system. Each warehouse operator must earn or obtain WAIRE Points to meet their compliance obligation on an annual basis, or pay the penalty. ZE Truck visits allow warehouse operators to earn points

# Ocean Regulatory Landscape

## EU Emissions Trading System (ETS)

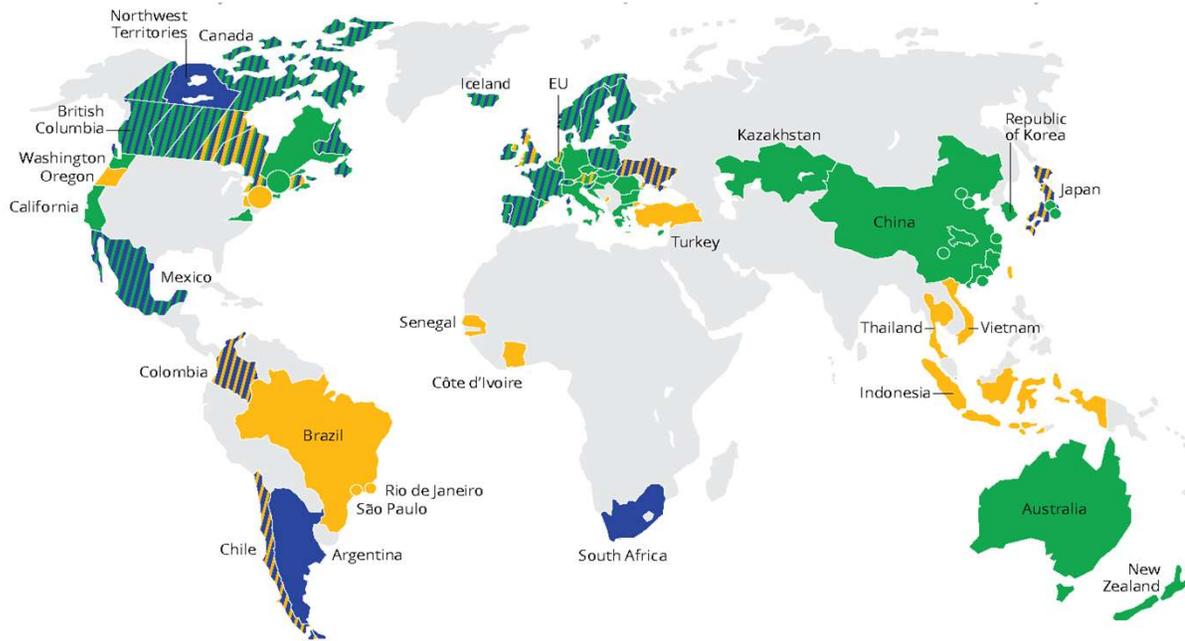
- Beginning January 1, 2024, any cargo moving in/out/around the EU will have an emissions surcharge applied
- Will cost the industry \$3B in 2024 – cost will be passed on to customers as a mandatory, standalone surcharge on top of contracted rates
  - Other carriers are doing the same
- Surcharge adjusted quarterly, like BAF
- Phase in period:
  - 40% 2024; 70% 2025; 100% 2026
- Ports within 300 nautical miles of the EU will be covered
- The only way to avoid the surcharge is to switch to net zero fuels on a TTW basis (ECO Delivery for Maersk)

## IMO 2027

- Member states voted unanimously to set a net zero target for the entire industry by/around 2050
- Focus on zero/near zero fuels
  - Implicitly excluding offsetting and LNG
- Discussion around an emissions pricing mechanism



# Governmental and regulatory bodies are creating additional pressure for companies to grow green



- ETS implemented or scheduled for implementation
- Carbon tax implemented or scheduled for implementation
- ETS or carbon tax under consideration
- ETS and carbon tax implemented or scheduled
- Carbon tax implemented or scheduled, ETS under consideration
- ETS implemented or scheduled, ETS or carbon tax under consideration
- ETS and carbon tax implemented or scheduled, ETS or carbon tax under consideration

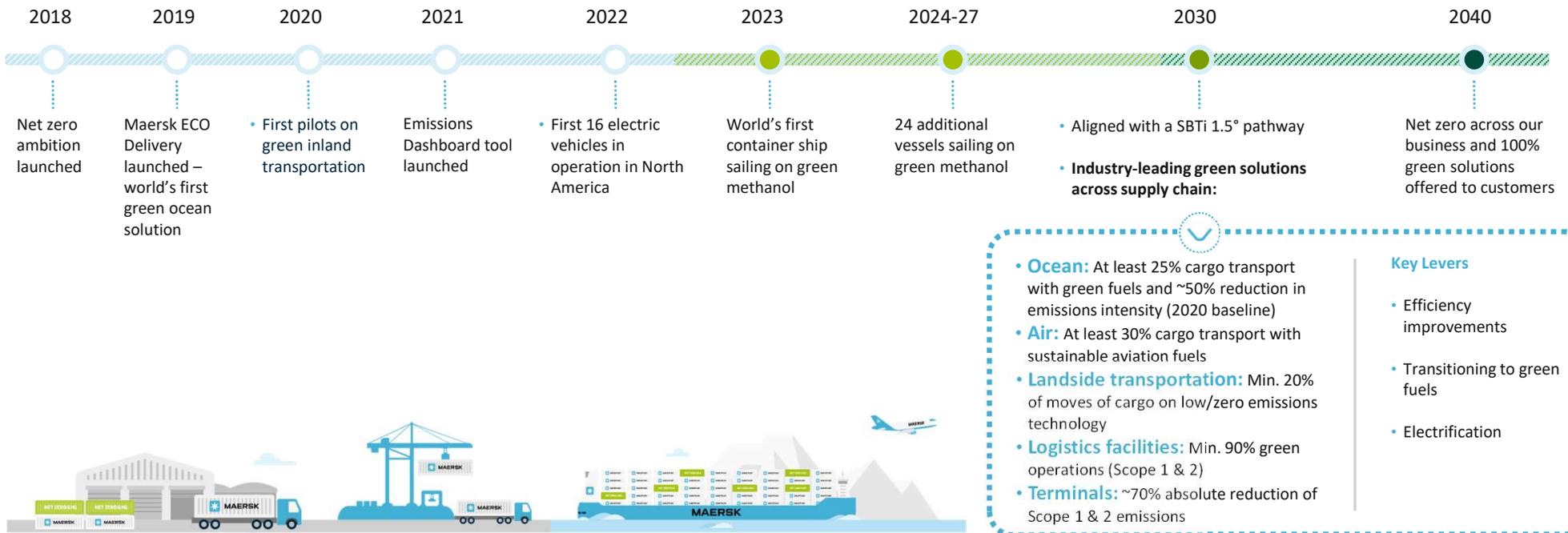
IMO 2027 – member states discussed a GHG pricing mechanism

The cost of emitting will continue to rise, which will impact the cost of doing business unless green solutions are employed.



# Roadmap to deliver net zero by 2040

We have **accelerated our decarbonisation target by a full decade** as there is no time to wait! We are taking a lead in decarbonising the logistics industry through **partnerships with customers and suppliers**, as well as **bold investments**.

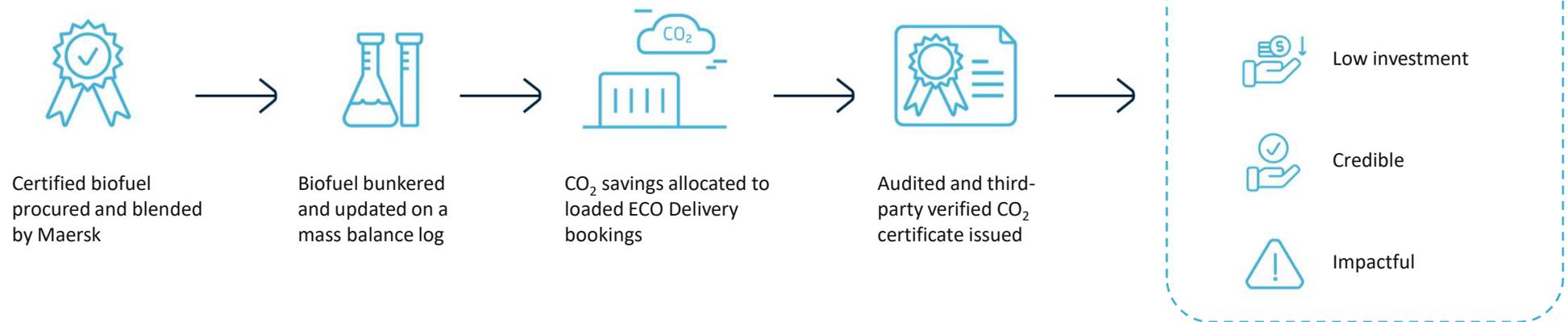


# Ocean ECO Delivery:

## Solves the scope 3 problem in an easy and credible way

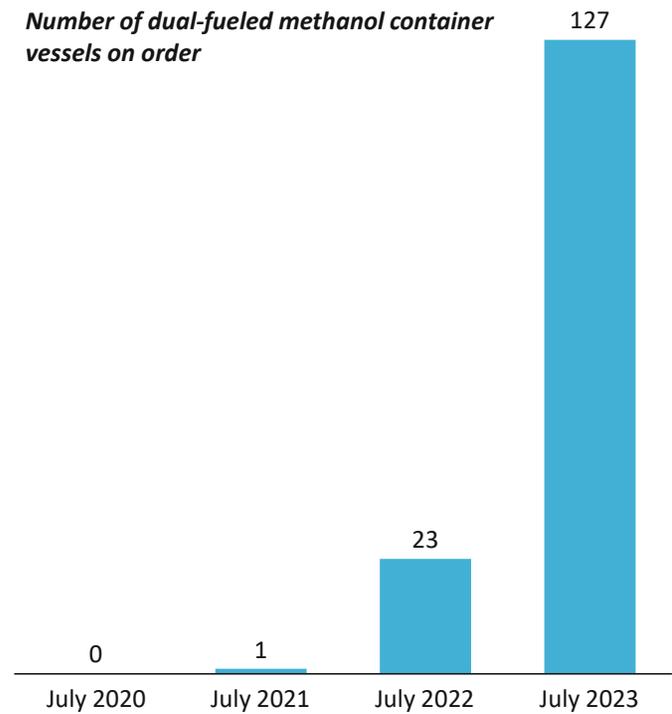
The Ocean ECO Delivery product offers emissions reduced shipping based on biofuels enabling immediate and externally verified GHG savings for customers

### How it works



Customers have the **flexibility** to allocate ECO Delivery usage by volume, lane, or budget

And here it is – history in the making and an exponential curve unfolding





**ALL THE WAY TO ZERO**

## To wrap it up

### Count

Align to a global standard that is credible

Most important is your ability to track progress

### Collaborate

No one can do meaningful reductions without working together

### Tell your story (carefully)

Never underestimate the power of some good PR

### Employ ready solutions

Know/secure an operating budget for employing ready made and credible solutions