


# Nya miljökrav vid horisonten

– hur påverkas sjöfarten av IMO's och EU's nya regler

**EEXI  
CII  
Fit for 55**


# Wagenborg Shipping is with ~170 MPP vessels under management one of the largest players in the dry bulk segment in Europe, Baltic and Americas



**~170**  
MPP vessels




**3.000**  
employees



**4.500**  
voyages per year (incl. TC)



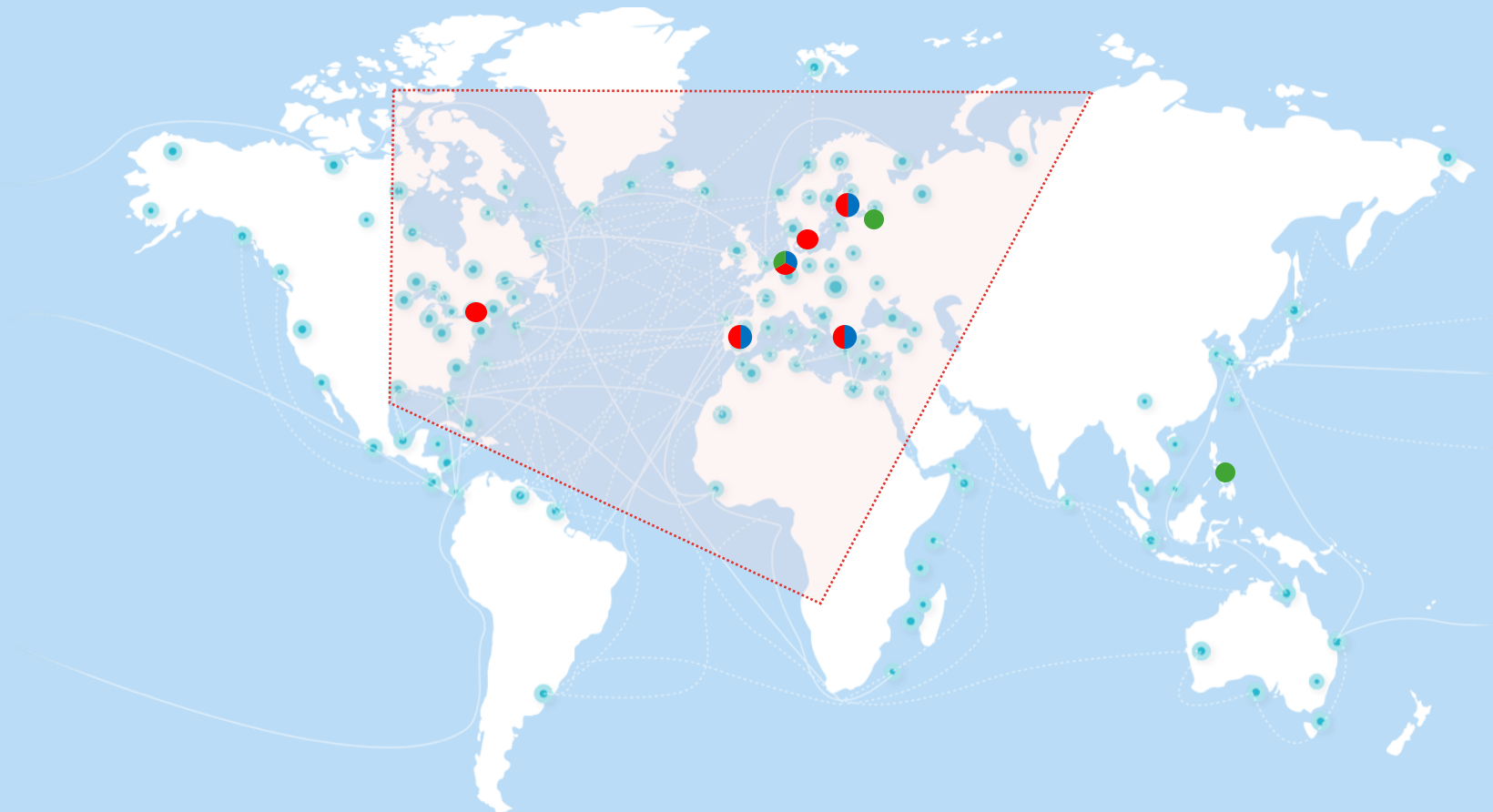
**30.200.000**  
tonnes cargo



**8.000**  
port calls

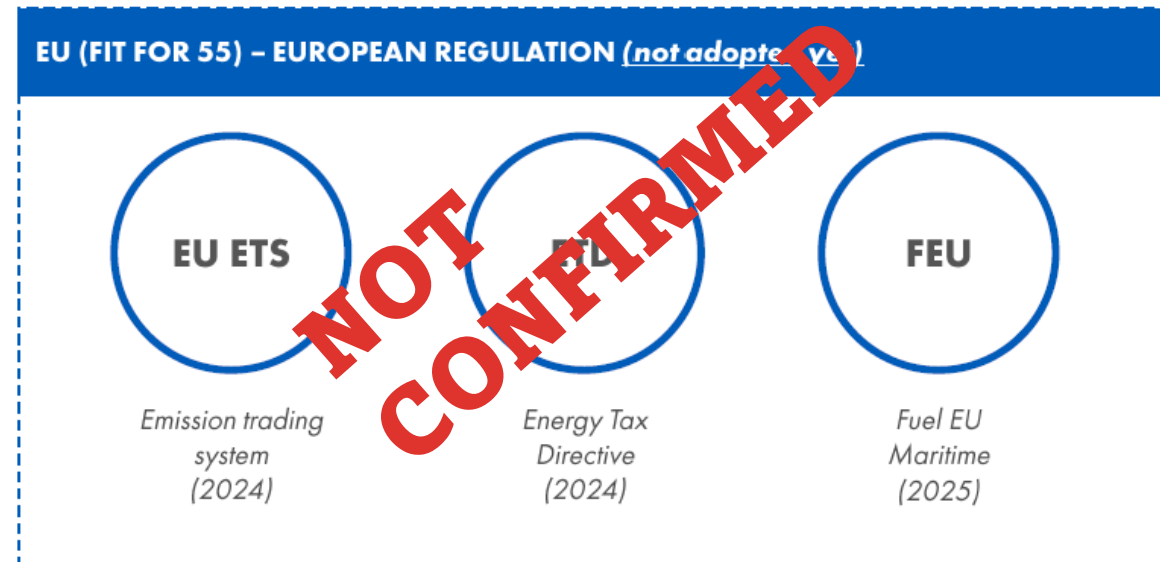
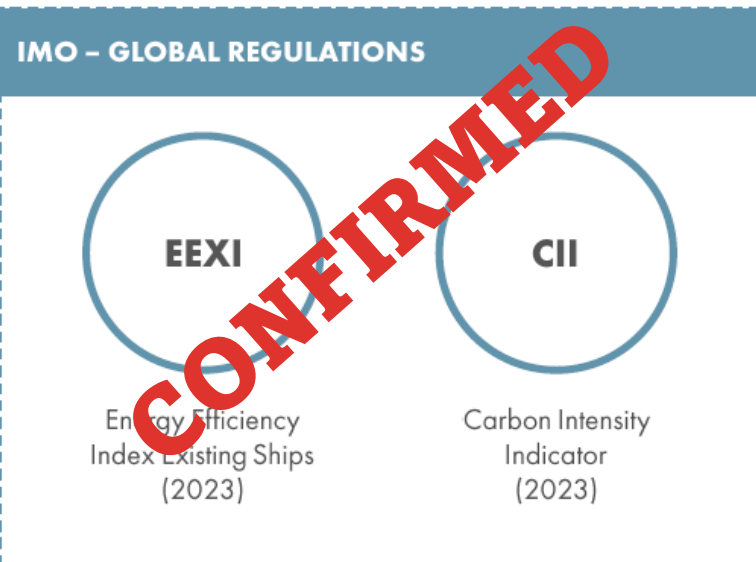


**300 x**  
around the world

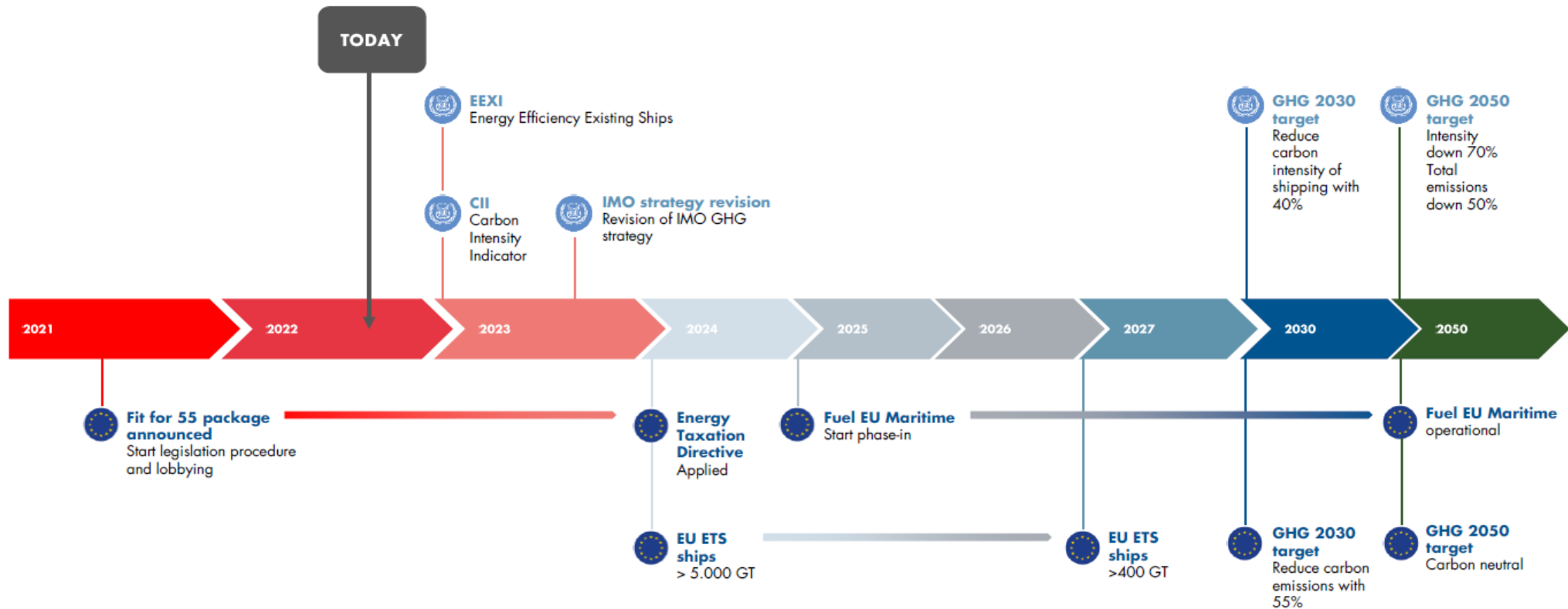


● Wagenborg chartering office    ● Wagenborg agency office    ● Wagenborg crewing office

## These are all IMO and EU rules affecting the maritime industry



## Timeline introduction IMO regulations and proposed EU regulations



## EEXI – Energy Efficiency Index for Existing Ships

Starting 1st of January 2023 for vessels **>400 GT**

EEXI is a:

- A design index, not an operational index
- Metric expressing the CO<sub>2</sub> emissions relative to the design conditions (engine power, transport capacity and ship speed)
- License to operate (one-time certificate)



$$\text{EEXI} = \frac{\text{Fuel consumption} * \text{CO}_2 \text{ factor}}{\text{DWT} * \text{reference speed}}$$



## What does EEXI means in practice for shipowners?

Physical modifications may be required to comply with EEXI

Examples of physical ship modifications:

- Engine power limitation
- Increase capacity: deepening / lengthening
- Energy-saving devices
- Other fuel types

### Do you know:

*94% of Wagenborg MPP fleet is already compliant with the 2023 EEXI regulations*



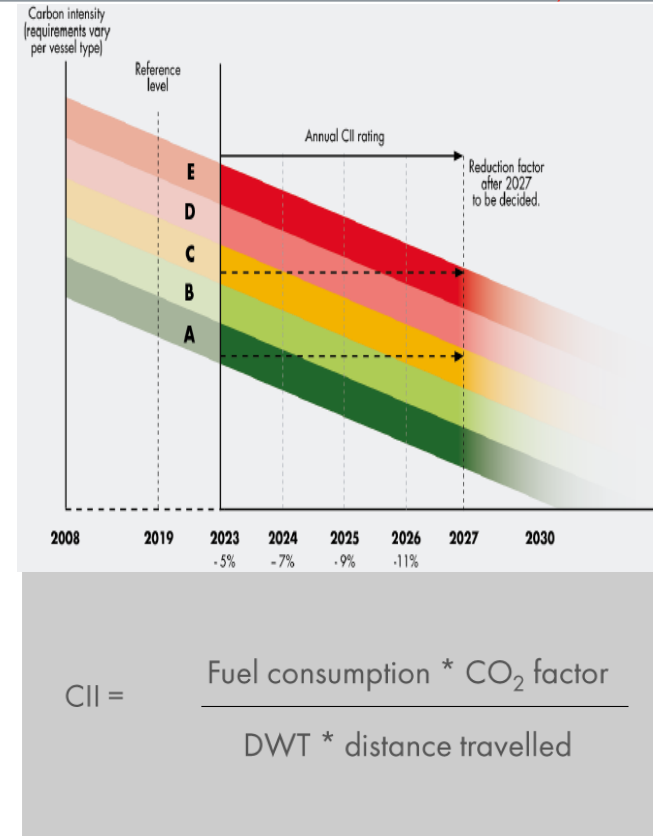
$$\text{EEXI} = \frac{\text{Fuel consumption} * \text{CO}_2 \text{ factor}}{\text{DWT} * \text{reference speed}}$$

## CII – Carbon intensity Indicator

Starting 1st of January 2023 for vessels **>5.000 GT**

CII is a:

- annual operational index, based on the actual CO<sub>2</sub> emissions, the distance sailed and the cargo carried
- annual rating on a scale from A-E.
- scale which will become increasingly stringent over time



## What does CII means in practice for shipowners?

Efficient daily operations has an impact of CII

Examples of physical ship modifications:

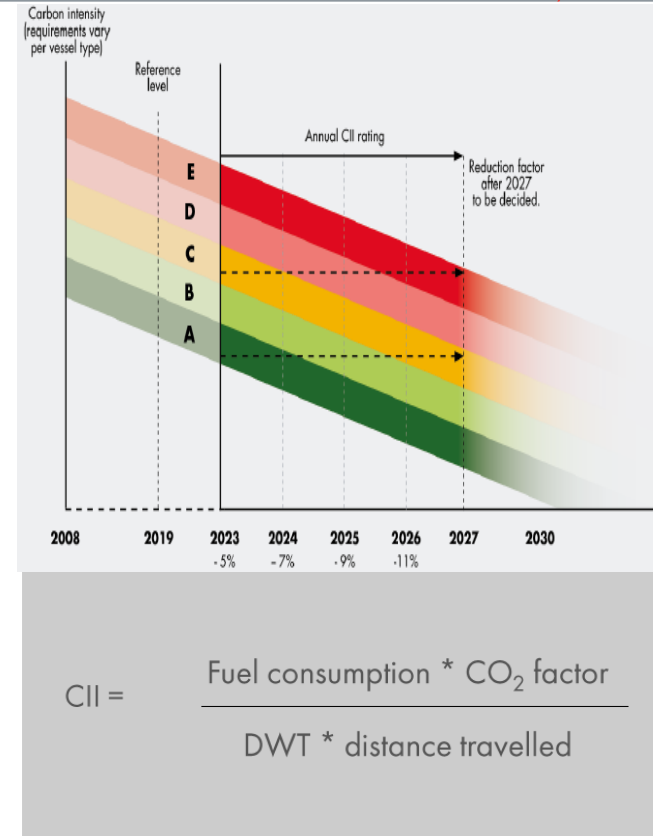
- Engine power limitation / slowsteam
- Increase capacity: deepening / lengthening
- Energy-saving devices
- Other fuel types

OR

Optimize your voyages to minimize overall CO<sub>2</sub> emissions

### Do you know:

*Wagenborg has since 2008 actively worked with live data connection, weather routing, technology, trim- and hull optimization, combinator sailing, fuel efficiency actions and deepening of various vessels allowing for overall good CII-grades.*





## Fit for 55 – EU ETS

EU Shipping part of EU ETS (price on CO<sub>2</sub> emissions)

- 1st phase expected to start 1st January 2024 affecting ALL vessel > 5000GT.
- 2nd phase expected to start 1st January 2027 affecting ALL vessels > 400GT
- **ALL** CO<sub>2</sub> emissions are accounted for.



## Fit for 55 – Fuel EU Maritime

Limits GHG density of fuels for ships in EU and encourage use of low carbon- and biofuels.

- Shipowners must limit the GHG intensity of fuels by a certain percent
- All fuels are considered from a well-to-wake-perspective
- Mandatory for all EU ports to offer shore connection

Intro year	% low carbon fuel
2025	2%
2030	6%
2035	13%
2040	26%
2045	59%
2050	75%

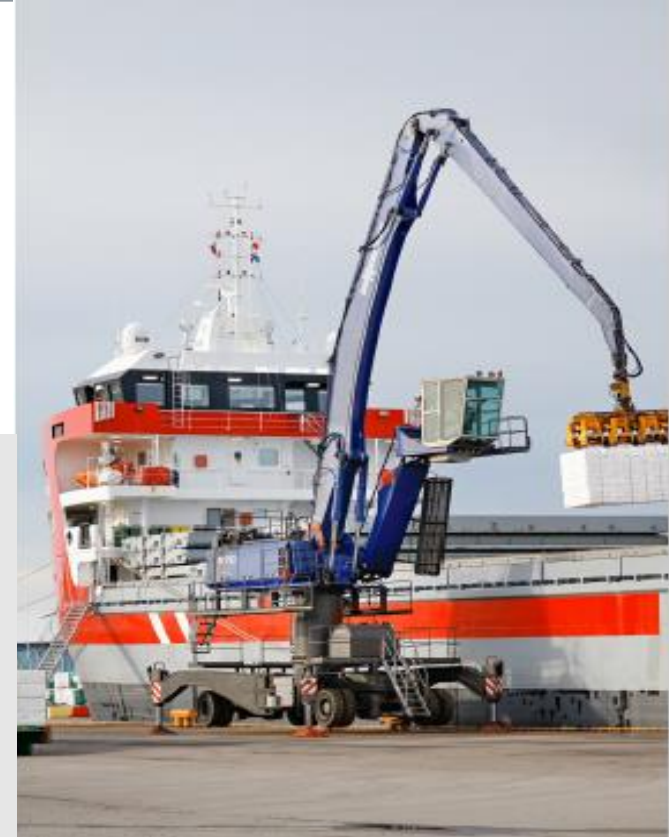


## Fit for 55 – Energy Tax Directive

EU Tax initiative on maritime fuel.

- Tax based on GJ pending on fuel type.
- Fossil fuels will be taxed harder than biofuels and advanced sustainable biofuels/electricity.
- Minimum tax on Carbon free fuel for 10 years

Fuel type	EUR per GJ	EUR per mton
HFO	0,90	36,00
MGO	0,90	38,70
LNG	0,60	28,80
Bio fuel	0,15	5,70
Carbon free	0,00	0,00



## Fit for 55 – Consequenses

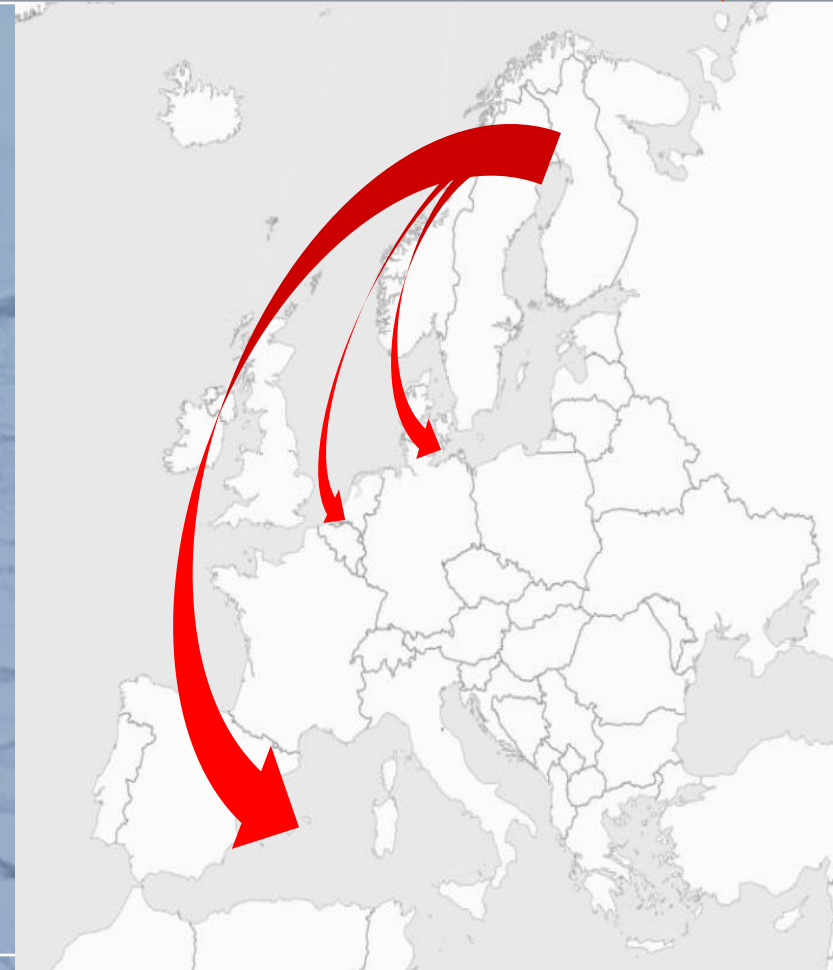
- Shipping will get **greener**
- Shipping will get **more expensive**

N.Bothnia – N.Germany: € 10.000 / € 0,70 pmt

N.Bothnia – ARA: € 15.000 / € 1,10 pmt

N-Bothnia – West Med: € 35.000 / € 2,5 pmt

**Are the increased rates sufficient to create a turn point for next generation fossil free shipping?**





**Thank you!**

