

Sulphur Regulation



Continuous Monitoring Systems

Gothenburg, Feb. 12th 2014

Agenda

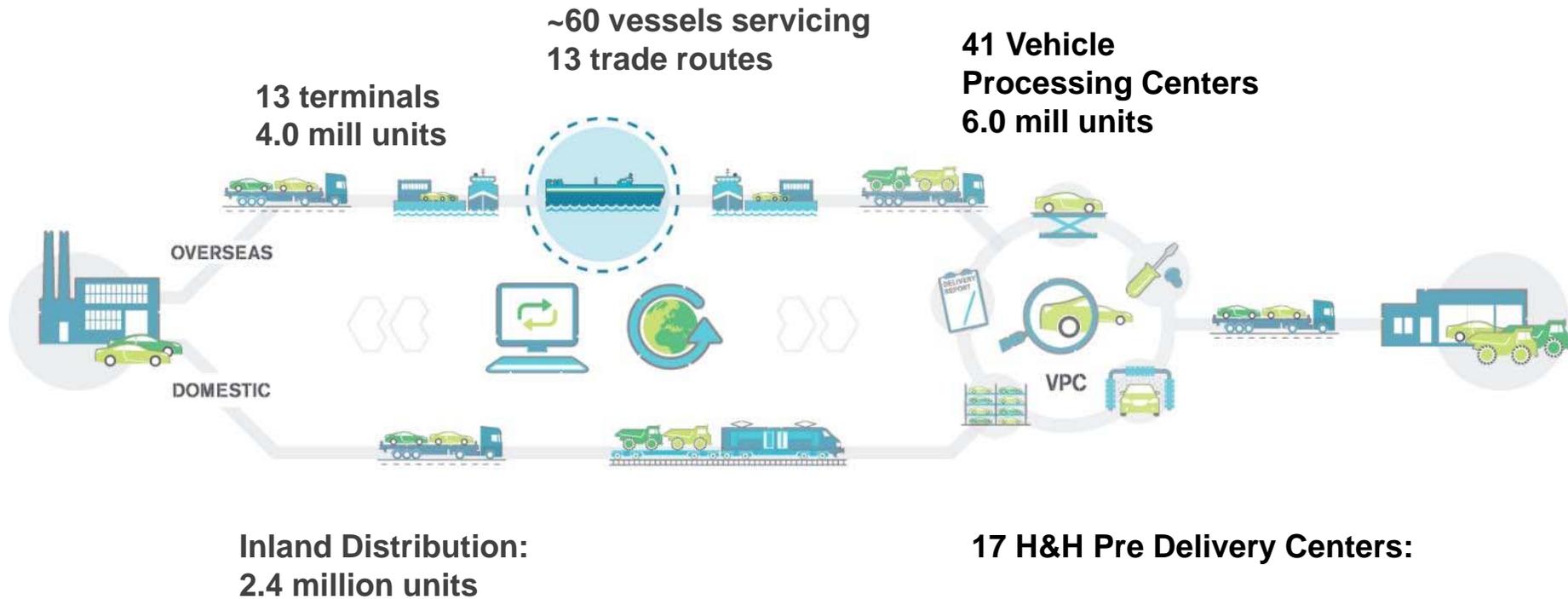


- » WWL at a glance
- » The sulphur challenge – a shipowner's perspective
- » Compliance & enforcement

WWL by the numbers



2013 Revenue: USD 2.8 Billion (est.)
About 5800 employees in wholly and partly owned companies
(1800 office workers / 4000 production workers)

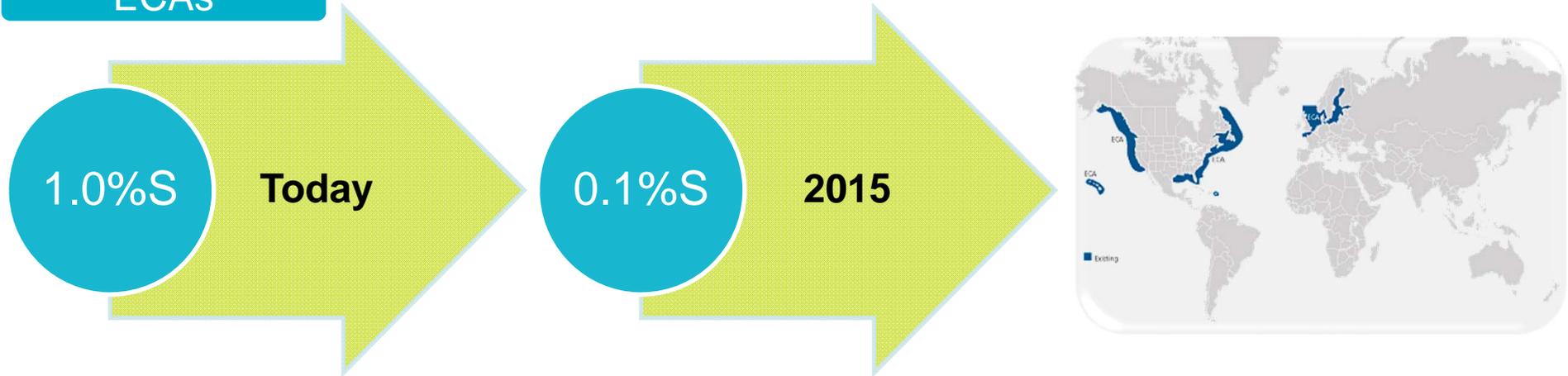




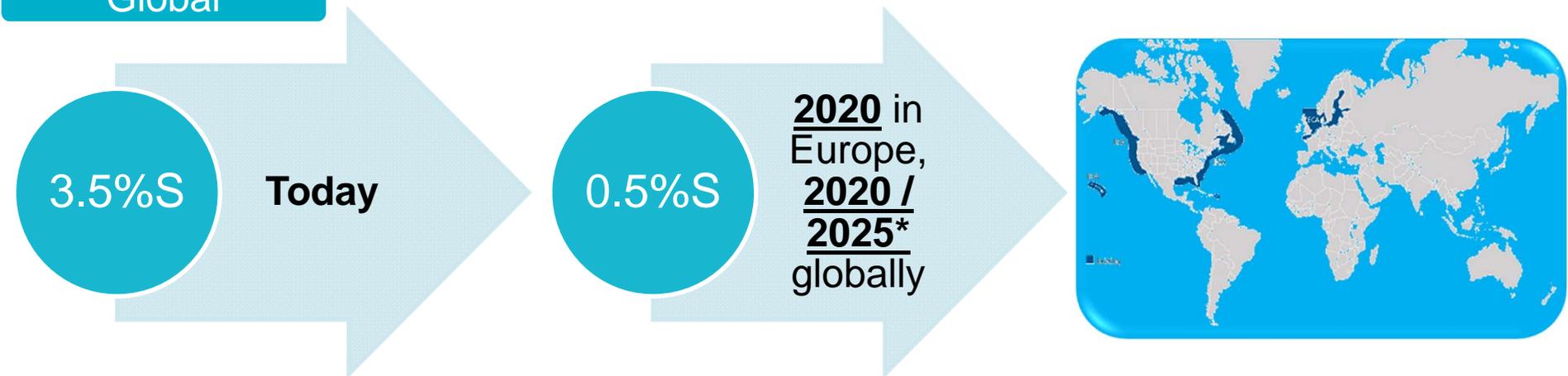
**The sulphur challenge
- a shipowner's perspective**

Two major regulations

ECAs



Global



ECA: Emission Control Areas (established by the International Maritime Organisation)

* 2020 / 2025 to be determined by IMO pursuant to a review in 2018

S: Sulphur

Not regulation as normal

The Challenges

Extent

- All newbuilds & 55,000 existing vessels

Impact

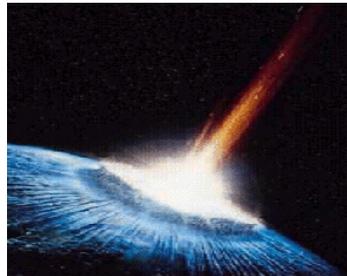
- Change of fuel or major retrofit

Cost

- Cannot be absorbed by industry

Uncertainty

- Lack of proven solutions

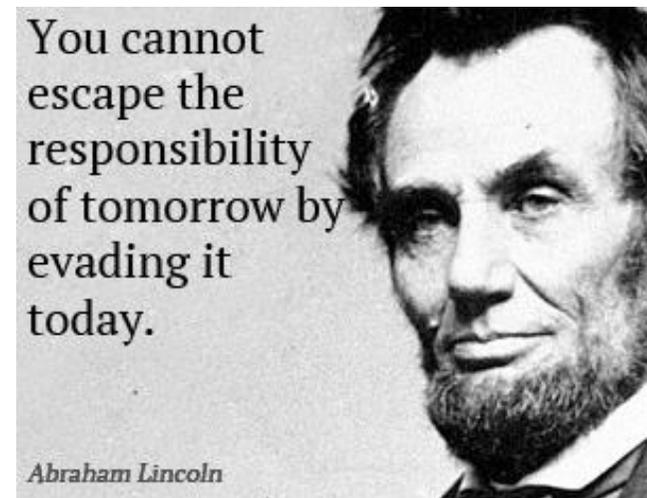


Some see it like this...

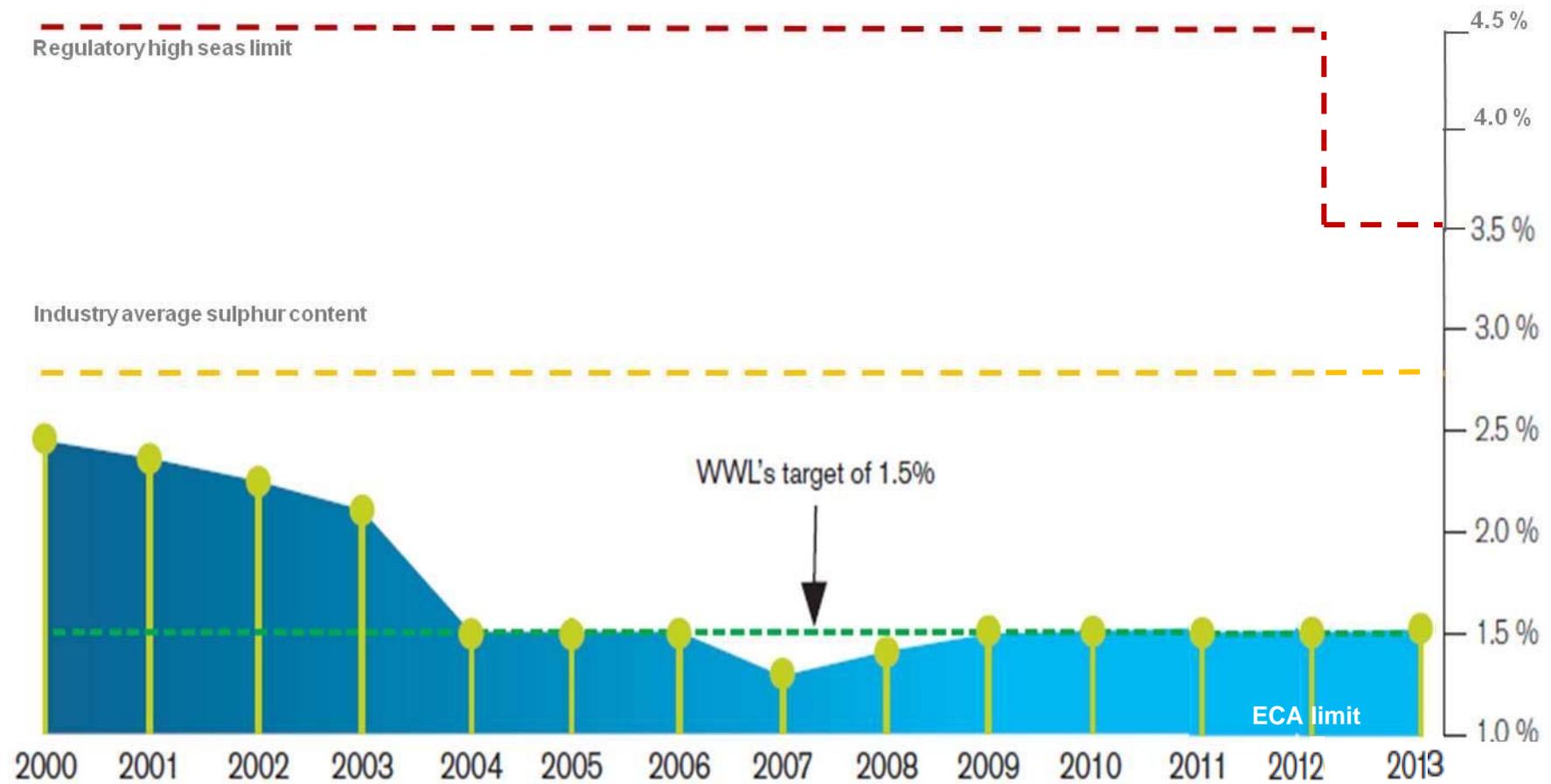


WWL position

- » **Strict, global regulations with strong enforcement is fundamental for sustainable shipping**
- » **Implementation without delay**
- » **Sustainable solutions**



WWL's 1.5% sulphur policy



W&W

WALLONIUS WILHELMSEN
LOGISTICS

TORTUGA



Compliance & Enforcement

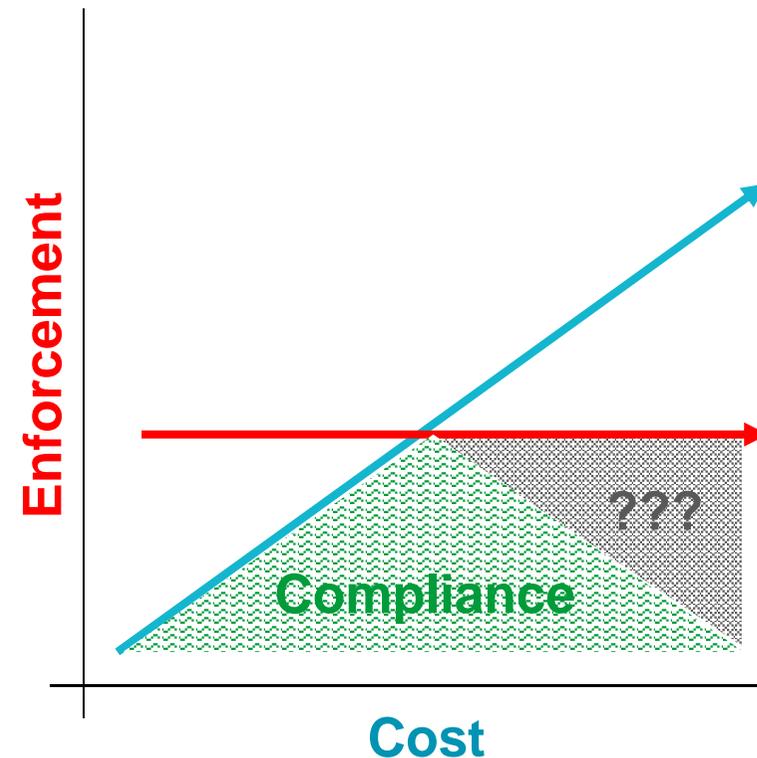
Sulphur: quick facts

- » 2015 countdown
- » 1/4 sailing days
- » MGO + Scrubbers
- » USD15,000 / day / vessel



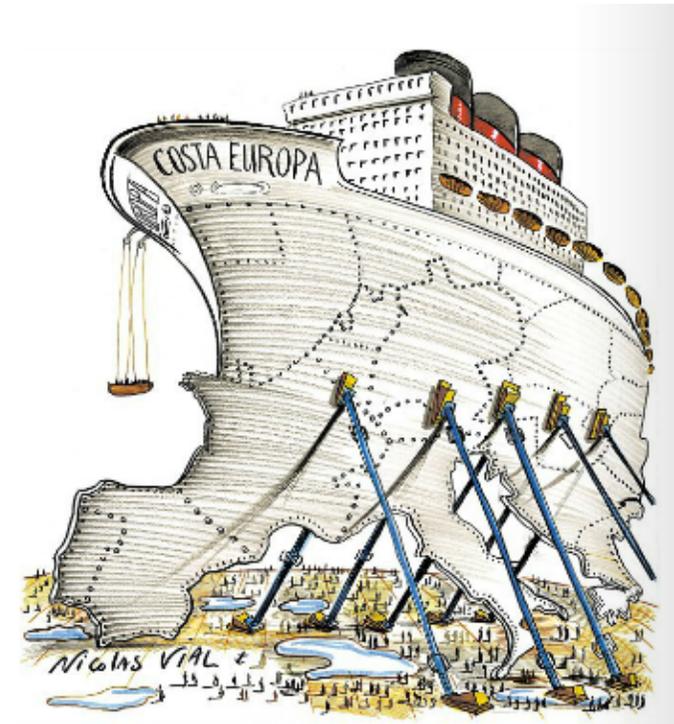
'Law' of the seas

➤ ***In the maritime industry, as the cost of compliance increases, it is enforcement, more than just regulation, which is the driver of environmental progress.***



The other European crisis

- » 1/250 vessels inspected
- » No WWL checks
- » 50% fail
- » Bunker mismatch
 - Whereas...
- » US: regulatory teeth



No umpires

- » **Competition distorted**
- » **Environment, health loose**
- » **Phantom costs**
- » **Innovation stalled**
- » **Not self-correcting**



A better approach...



Problem specifics, possible solutions

- » High seas; 2015 & onwards
- » Indicative results
- » Ship based or...
- » HFO, MGO: temp
- » AIS
- » If you build it...



**“The most effective way to
manage change is to create it.”**

Peter Drucker
business sage

