



## Introducing marine biofuels

*IEA Bioenergy ExCo78 workshop*

*09-11-2016*

*Sjors Geraedts – Head of Business Development*



# Our GoodFuels DNA

Advanced sustainable fuels is the best option for reducing the carbon footprint of the following transport segments:

*Aviation*



*Shipping*



*Heavy road & Rail*



**NGO's support** the fact that for these sectors, **sustainable biofuels** are the best option for **reducing the carbon footprint** significantly



# The GoodNRG Group

Downstream we focus on market development & sales, upstream our focus is on product development



## Upstream



- Product development
- Sustainability development

## Downstream



- Sales and marketing
- Market development

New products



Market pull

# Our experience with high blend renewable fuels

We work with market leaders to develop strong and visible programs, that accelerate the acceptance of sustainable biofuels and are able to influence policy makers



**Boskalis**  
Dredging & Marine Experts

Marine biofuel  
program



Rijkswaterstaat

Dutch Coast Guard



GoodShipping  
programme

Since  
2009



SkyNRG

Market leader in  
bio-kerosene



**HEINEKEN**

Climate neutral  
Corridor to USA



Climate neutral  
Customer journey



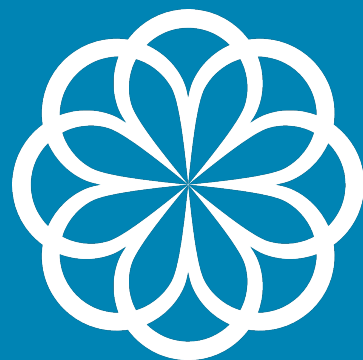
**Bredenoord**

Low carbon  
events



**DB SCHENKER**

Climate neutral  
Rail freight



# Market Development



# Drivers for developing the marine biofuel market

There are multiple levels of (potential) drivers for the market, but no coordinated approach at this moment

***Global regulation***

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***Local incentive schemes***

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***Cargo owners***

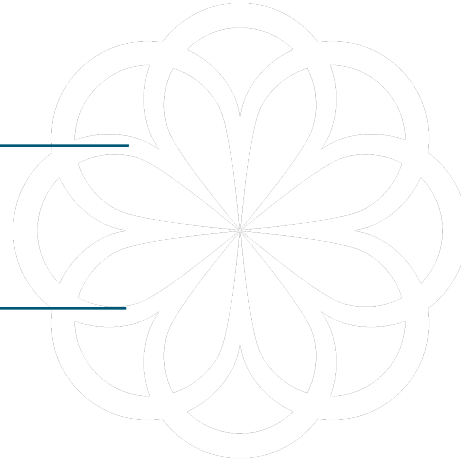
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***Tendering***

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***Product development***

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# Regulation regulations

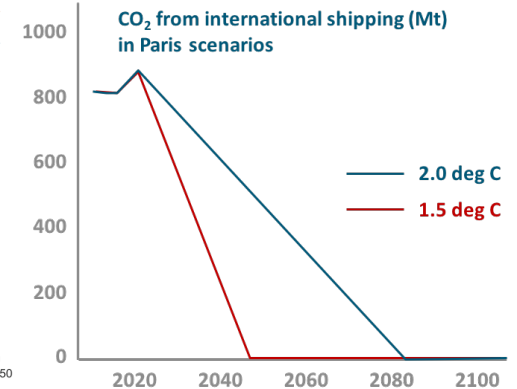
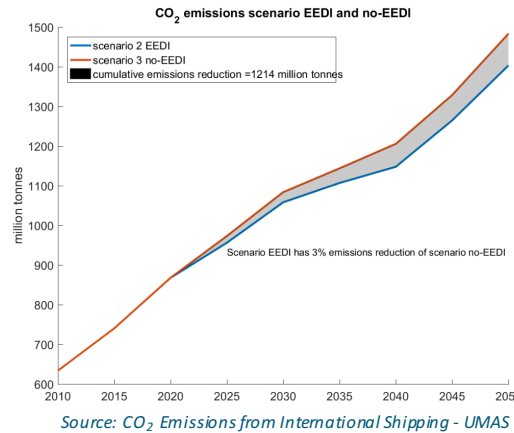
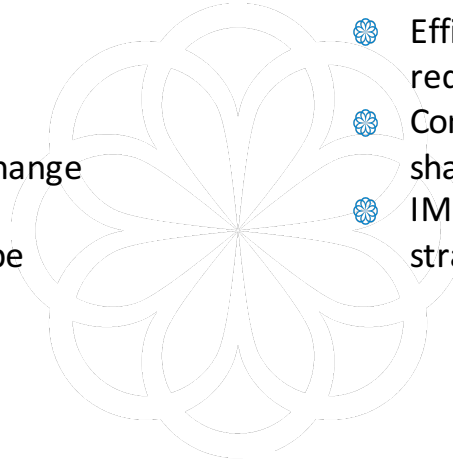
Current legislation is focused on local emissions, a shift to include GHG is needed

## Local emissions

- ❁ **SECA:** SOx emission
- ❁ **NECA:** NOx emission
- ❁ The introduction of SECAs has led to a change in the marine fuel mix
- ❁ In 2020 the worldwide sulphur-cap will be 0.5% - this will lead to more turmoil

## Where is the carbon?

- ❁ Efficiency measures (**EEDI**) are insufficient to reduce carbon emissions
- ❁ Consensus that shipping has to own its 'fair share' of emission reduction
- ❁ IMO has just postponed its definite GHG strategy to 2023



# Local incentive schemes

Local incentive schemes can create local markets for low-carbon fuels

## The Netherlands



- Inclusion of shipping in RED scheme
- Blending credits obtained in shipping help overcome the premium of biofuels
- Sub-target for advanced biofuels can help development of new fuel pathways

## Sweden



- Sweden has adopted the Clean Shipping Index as basis for their fairway and port duties
- Ships ranked on basis of their emission profile
- Reductions of 90% for ships in highest category: Up to €12,000 per passage
- Cargo-owners can use CSI for shipping partner selection



No obligation



2020: 10% mandate +  
Advanced subtarget



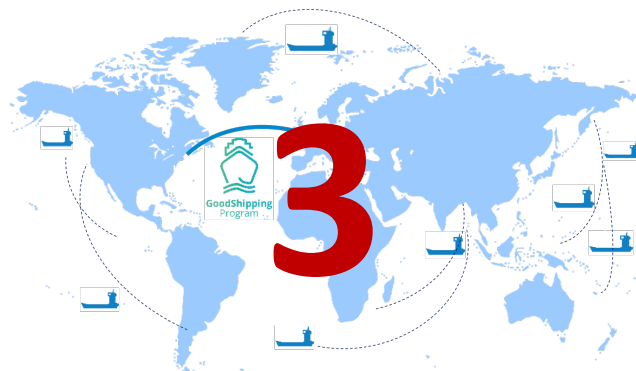
# The GoodShipping Program: Launch in November 2016

By aggregating and leveraging demand for sustainable transport by cargo-owners, GoodShipping aims to change the marine fuel mix in a market-driven way.

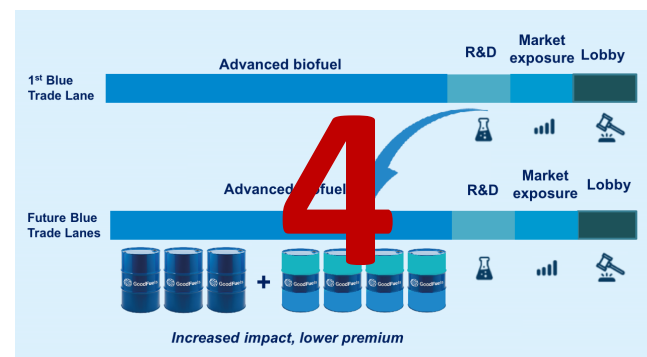
- ❁ Aimed at cargo-owners that do not own ships, but have the (will)power to push the industry
- ❁ CSR and public image of large corporates call for sustainable transport
- ❁ The GoodShipping program provides a tool to overcome these barriers



Towards sustainable shipping by market-driven change of the future marine fuel mix



## The 4 goals of The GoodShipping Program



# Tenders

Tenders for public contracts form an easy mechanism to let the market come up with most cost-efficient carbon reduction solutions

## Government contracts



- ❁ Example: **The Netherlands**
- ❁ In tenders for government contracts in waterworks CO<sub>2</sub> reduction is given a value:  
  
***Score = 0.6\*Price + 0.2\*CO<sub>2</sub> emission + 0.2\*local emission***
- ❁ Premium for biofuels can thereby be covered
- ❁ Multiple Dutch dredging companies now sailing on biofuels because of this

## Public transport



- ❁ Example: Norway
- ❁ New ferry contracts have to reduce their carbon footprint by 25%
- ❁ **DNV** has put together the **Green Coastal Shipping Program** to create TCO models for all options
- ❁ **GoodFuels** is leading the biofuel pathway



# What do we need?

The industry needs to work together, and we can learn from the aviation industry how to do this

## Global regulation

*Clear GHG reduction targets and mechanisms. Recognition of biofuels as a pathway to reduce emissions*

## Local incentive schemes

*Extend road incentives to marine, and include CO<sub>2</sub> in incentive schemes*

## Cargo owners

*Real commitment to low-carbon transport*

## Tendering

*Give CO<sub>2</sub> a substantial value, and let the market find the most cost-effective solution*

## What can we learn from the aviation sector?

There is a need for:

- 🌀 **Industry** sense of urgency and participation
- 🌀 **Recognition** of biofuels as long-term low-carbon solution
- 🌀 **Coordinated** market development -> Like **ICAO** agreement
- 🌀 **Coordinated** product development -> Like **ASTM** certification



**Join us!**



## Contact

*Sjors Geraedts*

*M: [sjors@goodfuels.com](mailto:sjors@goodfuels.com)*

*P: +31 6 46 76 6578*

