SUSTAINABLE LOGISTICS. SIMPLIFIED.

TACKLING THE OCEAN FREIGHT DECARBONIZATION CHALLENGE WITH CARBON INSETTING

4 November 2022





Introducing our experts...



Kathrin Brost Global Head of GoGreen DHL Global Forwarding



Dirk Kronemeijer Chief Executive Officer GoodShipping



Mauricio Campos Cardozo Global Ocean Freight LCL Manager DHL Global Forwarding

Agenda

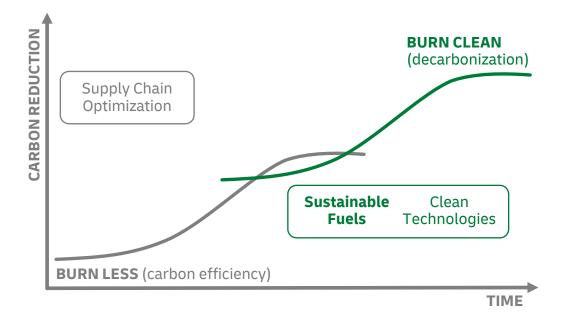
- 1. Welcome & Introduction
- 2. Sustainable Fuels the key to accelerating decarbonization of ocean freight Kathrin Brost, Global Head of GoGreen, DHL Global Forwarding
- 3. Sustainable Fuels and Insetting a perfect match Dirk Kronemeijer, CEO Good Shipping
- 4. Q&A & Wrap up

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Path towards Zero Emissions

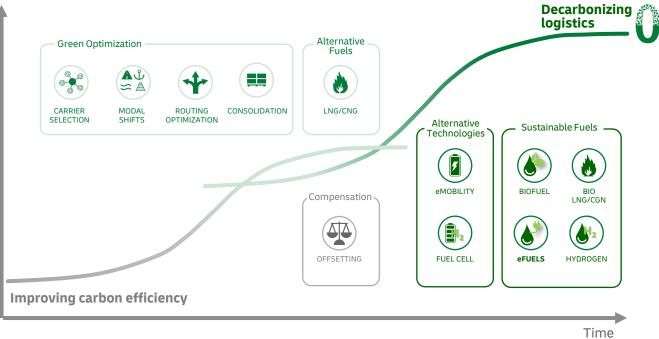
Reaching the next level by leveraging sustainable marine fuels (SMF)



Decarbonizing logistics is possible but requires a collaborative effort. Sustainable fuels will play a key role as vessels have been optimized to a maximum.

The path toward zero emissions – reaching the next level of carbon reduction by leveraging the latest technologies

Carbon Reduction



Container vessels and aircrafts are close to reach their efficiency limits.

While supply chain optimization efforts still leave room for further efficiency increases, new technologies and alternative fuels are currently being developed, scaled and rolled-out.

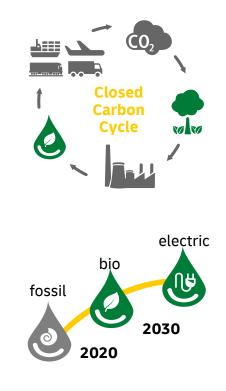
Setting the path towards decarbonized logistics.

Role of Sustainable Fuels – Key Facts

During 'production' of sustainable fuels, **CO**₂ **is absorbed from the air**. Only this **previously absorbed CO**₂ **is released during combustion** of the fuel, making it a closed carbon cycle

Biofuels and e-fuels ('Drop-in fuels') require no or little change in engine technologies and will play a key role in the next 10 years

Biofuels are readily available. A **fuel switch** needs to happen **onboard** of a vessel **at locations** where sustainable fuel **is available**



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Burn clean - Decarbonization with GoGreen Plus

OFFSETTING INSETTING FUNDS Compensation OUTSIDE INSIDE the logistics industry industry



DGF's INSETTING SERVICE





Maximum Flexibility

- Any trade lane
- One shipment or ٠
- Some shipments or ۰
- All shipments .

Worldwide Service



Agenda

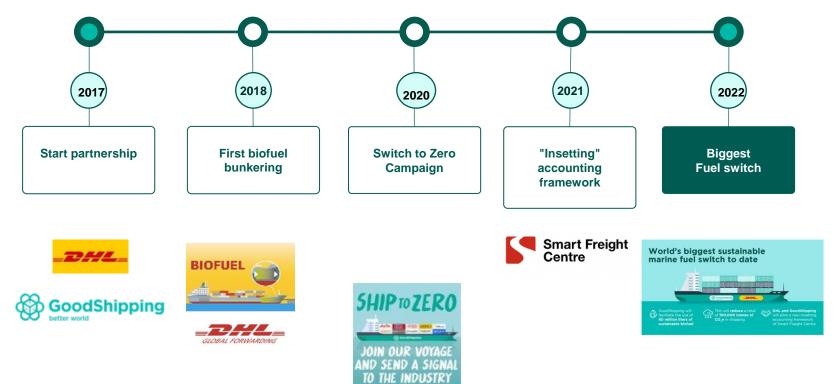
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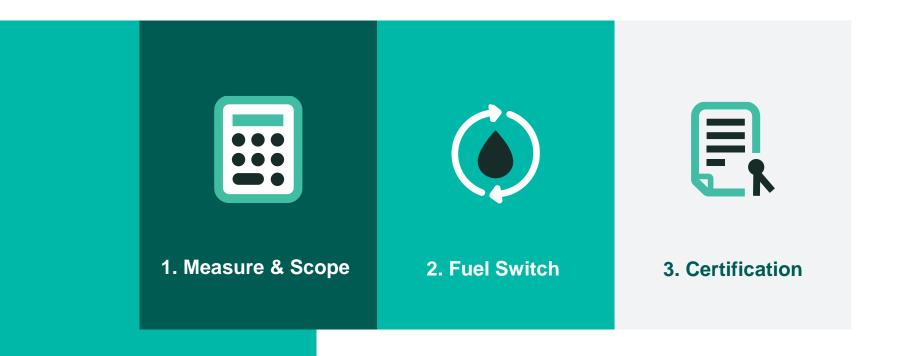
DHL & GoodShipping milestones



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Insetting: how does it work?



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One atmosphere



Only truly sustainable biofuels

SUSTAINABILITY PRINCIPLES

- Waste and residue based only
- No competition with food
- No direct or indirect land use change
- No deforestation or biodiversity loss
- No higher quality application possible
- Minimum of 75% co₂-reduction
- No negative social or legal impacts

FLEXIBLE IN FEEDSTOCK QUALITY ACCEPTANCE



OUR SUSTAINABILITY BOARD



ANNE MARIT POST-MELBYE Head of industry policy Miliøstiftelsen ZERO



MARTIN JUNGINGER

Professor of bio-based economy Utrecht University



PATRICIA **OSSEWEIJER** Professor of sustainability TU Delft

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Insetting empowers innovation & accelerated scaling

Announced investments in sustainable-fuel-production facilities by process type ¹

Hydrotreating

O Other advanced technologies²



Research by Mc Kinsey suggests that investments in sustainable fuels are gaining momentum, with a projected capacity of 46 million metric tons expected by 2025

Source: Mc Kinsey analysis "Charting the global energy landscape to 2050: Sustainable fuels." July 7, 2022



World's biggest sustainable marine fuel switch to date





Key takeaways for Shippers



Sustainable Marine Fuels **are key to decarbonizing ocean freight i**n the next 10 years



There is a **sufficient supply of Sustainable Marine Fuels**

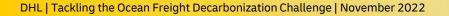
You can decarbonize your LCL shipments (for free) and FCL shipments (at cost) **already today**

Q&A SESSION

If you have any further questions, contact your usual Account Manager or Customer Service Representative, or email us at <u>GoGreen.DGF@dhl.com</u>

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