VOYEX

Hydrogen Powered

WHAT WE DO

Challenge: the world mainly uses diesel as fuel for heavy duty mobility which emits CO_2 and other pollutants.

We develop technology to substitute diesel with Hydrogen (H_2) using Liquid Organic Hydrogen Carrier (LOHC) technology.

We synthesize the liquid carrier and manufacture systems to bond and release Hydrogen.

VOYEX LOHC-

Circular re-use
>500 cycles

VOYEX LOHC+

WHAT MAKES OUR LOHC DIFFERENT?

- ✓ H_2 storage capacity: 60 kg H_2 / ton LOHC
- ✓ Flashpoint higher than diesel
- ✓ Toxicity: safer than diesel – not carcinogenic
- ✓ H_2 supply chain efficiency: 35 - 40%
- ✓ Made from sustainable raw materials
- ✓ Stored at room temp. & atm. pressure

WHAT'S IN IT FOR YOU?

Re-use existing diesel infra
Cost-efficient to Zero Emission
Fast permitting & realization

VOYEX CORE ACTIVITIES

Synthesis

Production of the liquid hydrogen carrier

Hydrogenation

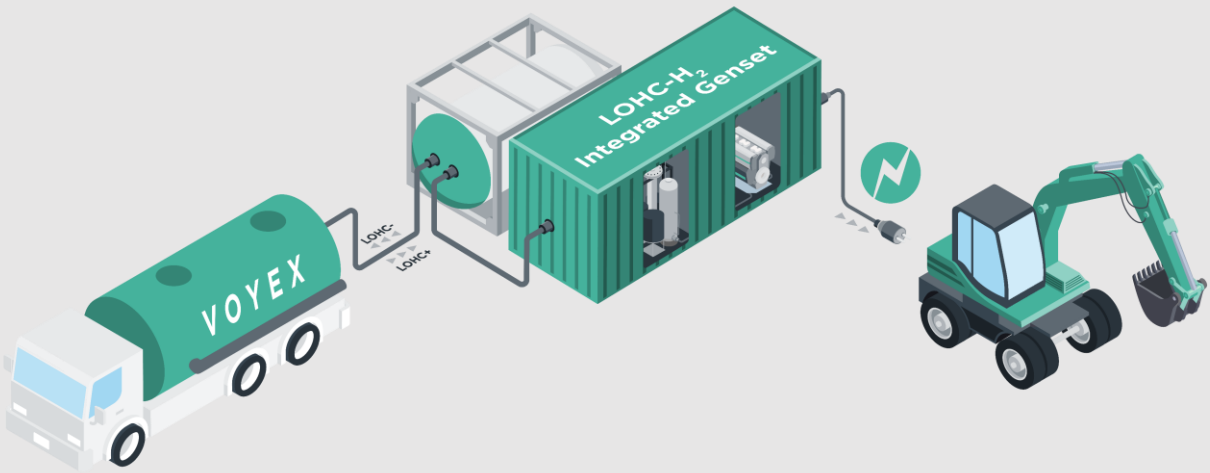
Bonding of hydrogen to the liquid carrier

De-hydrogenation

Release hydrogen and supply to engines

VOYEX TARGET MARKETS

- ✓ Construction (example below) → Gensets (100-250 kVa)
- ✓ Maritime → Up to 4MW
- ✓ Import-Export (storage & transport) → Most dense & safest LOHC



VOYEX ROADMAP

2021 & 2022
Proof of Principle & Upscaling to kg/l scale

TRL : 4 > 5

Q1 2024
Voyex Two
30kW
de-hydrogenation

TRL : 5

2025
Pilot Scale
1.5MW de-hydrogenation
600 kg H_2 p/d Hydrogenation
50-100 ton p/a LOHC synthesis

TRL : 6 > 7

2026+
Industrial scale
GW de-hydrogenation
60+ T H_2 p/d

TRL : 8 > 9

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