

Hydrogen powered inland container vessel

19th September 2019

Maritime Hydrogen & Marine Energy Conference, Floro



Creating a zero-emissions shipping world

Our Vision

A zero-emissions shipping world by 2040

Our Mission

We will contribute to a future proof shipping world by creating new maritime value chains to make the industry free of fossil-fuels and harmful emissions.



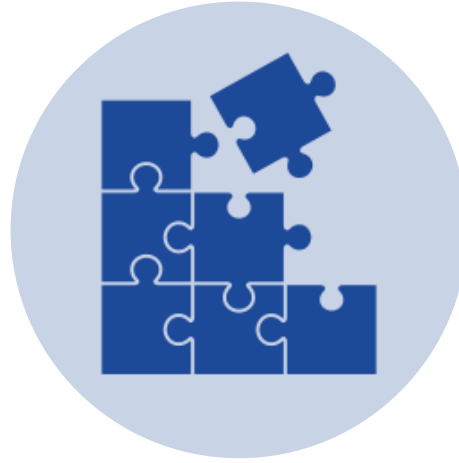
**Future Proof Shipping BV
is a network organisation
that provides zero-
emissions marine
transportation solutions.**

We offer zero-emissions marine transportation solutions



Advisory

An integrated services offering comprising technical, financial and commercial services tailored to the specific needs of our customers.



Project Development

Development of zero-emissions shipping projects and their end-to-end management.



Tonnage Provider

Zero-emissions vessels for charter.

Our first project:

Zero-emissions inland container vessel

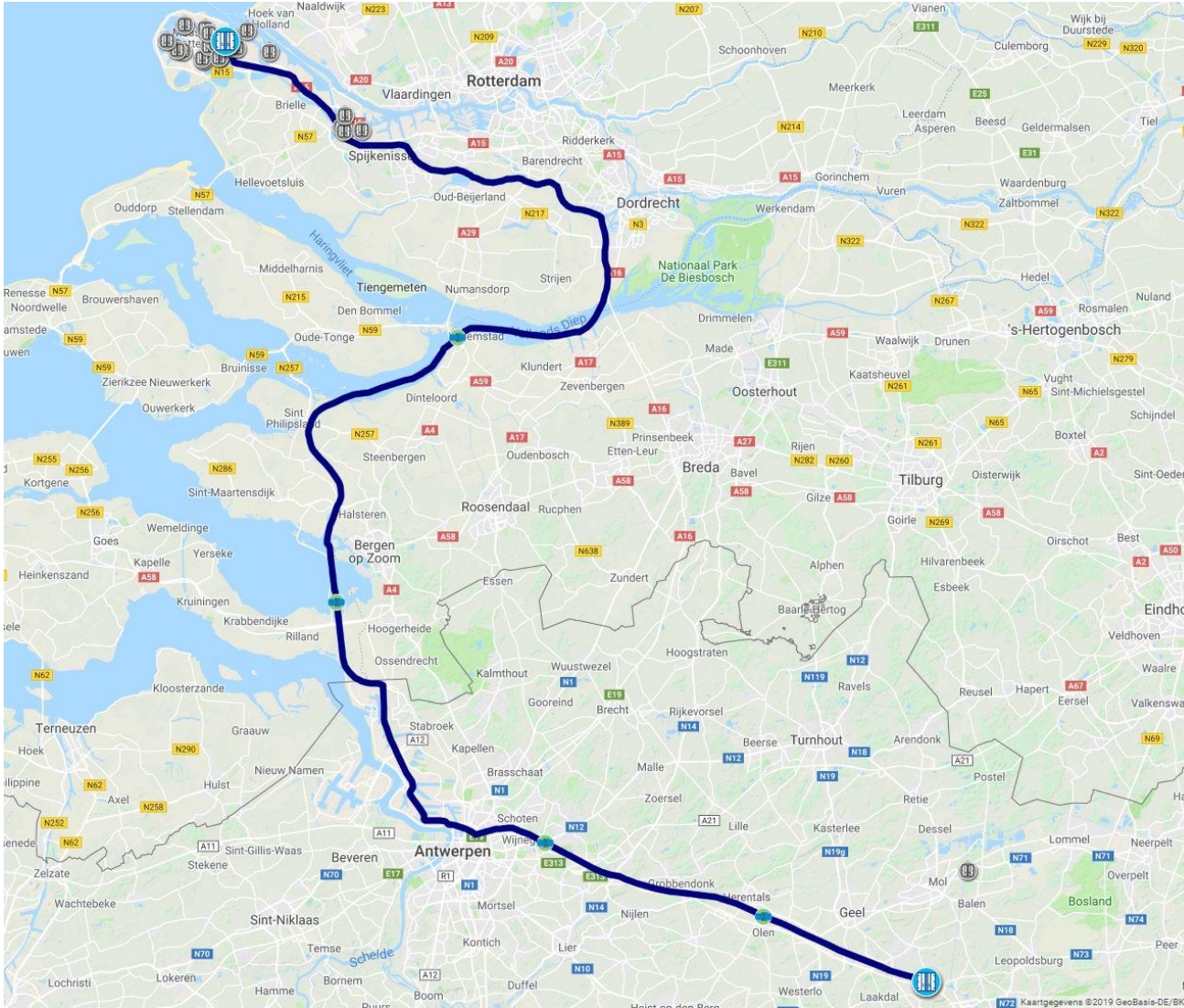
2020: Retrofit existing inland vessel with fuel cells



Concept drawing

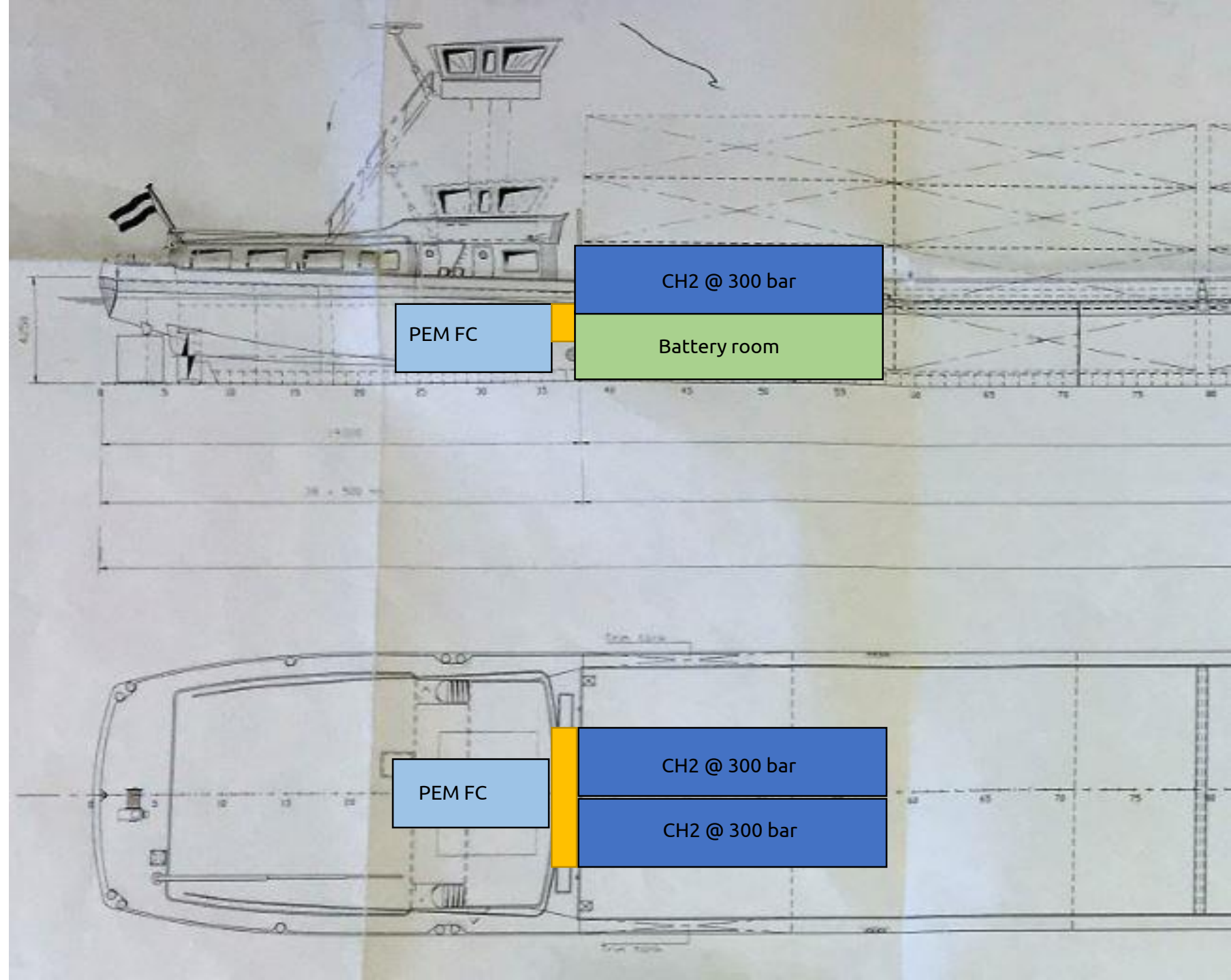
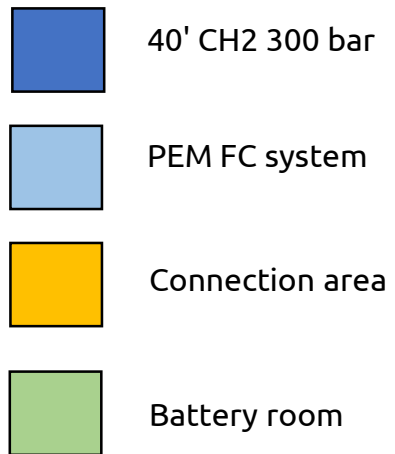
- 110*11,45m container vessel
- 635 kW installed fuel cell capacity, propulsion and auxiliary power
- 300 kWh Lithium ion battery pack for peak shaving, emergency and bridging power
- 750V DC bus bar, e-motor for propulsion

This vessel will operate between NL and BE

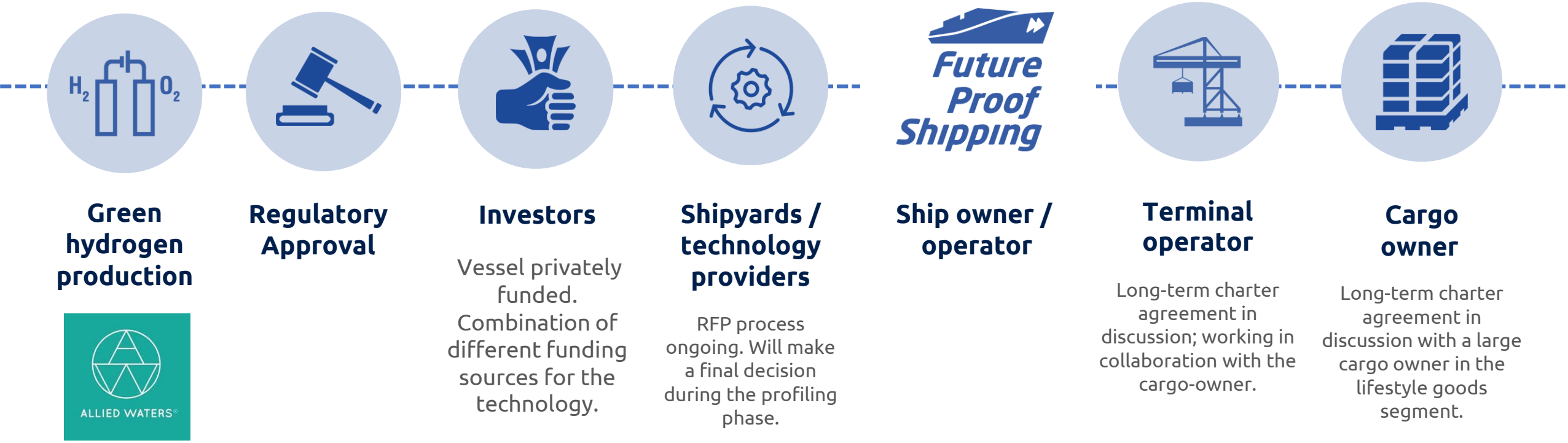


- Between ports of **Rotterdam** and **Meerhout**
- Distance: **404 km** (round trip)
- Average sailing time: **34 hours**
- Hydrogen container swap @ Rotterdam
- Hydrogen usage per **roundtrip** - **1160kg**
- Class: **Lloyd's Register**
- Require exemption from **CCNR**

System placement



We're tackling the entire value chain



Timeline



Preparation

Ongoing

**Vessel purchase
completed before 30
September 2019.**

**Official project 'launch'
on World Hydrogen Day –
8 October 2019.**

Profiling

**Start
November 2019**

Retrofit

**Expected
October - December 2020**

Hydrogen Ops

**Expected start
January 2021**

What's next?

We are navigating towards..

- 6 zero-emissions inland vessels**
- 2 zero-emissions short-sea vessels**
- 2 zero-emissions ocean-going vessels**

Let's define shipping's new normal together!

futureproofshipping.com

Prasanna Colluru

Director Corporate Strategy

Phone: +31 (0)10 800 5434

Email: prasanna@futureproofshipping.com