



# RH<sub>2</sub>INE Conference 2024: Workshop results

Duisburg

September 30, 2024

# WS 1: How to develop a practice-orientated hydrogen infrastructure

- Prof. Dr. Oliver Türk: **Welcome adress**
- Prof. Dr. Dörte Fouquet (BBH PartGmbB): **EU law on hydrogen**
- Johannes Eng (Duisport) & Karim Durand (Lhyfe): **Gateway into NRW for the Hydrogen Economy**
- Mario König (Professional fire brigade Mannheim / TÜV Süd): **Hydrogen fire protection**
- Florian Konrad (KWS Energy Knowledge eG): **Hydrogen training centre**
- Ton Neumann (Province of Limburg): **Rhombus-Project**
- Thorsten Goschler (Transferstelle Bingen): **Project update “Compendium H<sub>2</sub> Port Infrastructure”**

Presentation of WS results

# WS 2: Requirements to set-up a hydrogen tank tainer pool

Alexis Licha - Engie

**RH<sub>2</sub>INE –**

*Facilitating a hydrogen ecosystem in inland  
waterway transport*

*Workshop 2: TankTainers*

Alexis Licha, ENGIE SA  
Stefan Garche, Energy4Climate.NRW  
RH<sub>2</sub>INE Conference, 30.10.2024

# TankTainer: Multi Element Gas Container (MEGC)

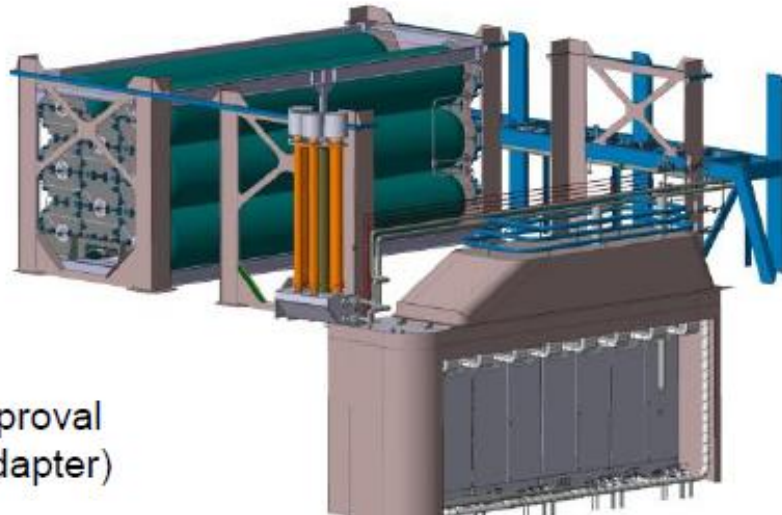
## Sichere und "state-of-the-art" (nahe) Zukunft Lösungen

20ft ISO MEGC 500kg@ 500bar, ADR approval 20ft oder 40ft  
300bar also possible



Source: © Argo-Anleg GmbH

9ft MEGC 126kg@500bar, ADR approval  
Info: Hier 3x MEGC (auf 20ft ISO-Adapter)



CESNI approval expected Q1/2025

## Open discussion:

What do we exactly expect from the company ?

- TankTainers acquisition
- Maintenance of TankTainers
- H2 sourcing & purchasing
- Logistics of TankTainers (empty and filled)
- Order to Cash: selling H2 including TankTainer + logistic costs

# Governance & key principles:

- Agreed on CONDOR principles
- Company principles:
  - Profit based but neutral and no exclusivity to shipowners/h2 suppliers
  - Cheaper service than the ship owner gets on his own
  - Easy to manage „as a service“ for ship owners
  - Operate in different (or all) EU Member States
  - Multi sector uses for TT because low income better than no income while „parked“

# Governance & key principles outcomes

- Proof of concept
  - Gather existing assets owners
  - Test the TTC concept for one years +/-
- Requirement RH2INE support
  - no taxes on diesel (big price gap to H2)
  - Member States should take the example of the Netherlands with EU ETS 2



# Results and Follow up

## Result:

- Everybody understood the necessity of a TTC as!
- Propose a “**whitepaper**” – organised by the RH2INE secretariat

## Follow up / Next steps:

How to make this happen and what do we need for that?

Who writes the whitepaper? (→ action plan 2025 of secretariat?)

- Including funding TTC entity/company
- Including shareholders
- Including business plan

Presentation of WS results

# WS 3: Financing for zero emission shipping

**Michiel Smit** – Zero Emission Services

# Recap workshop financial tools & Carbon Insetting



Fit for 55 is just an instance away, we need to act now

Carbon insetting is an important financial support tool for the Inland Waterway energy transition

Risks:

Intransparent processes, unclear modality applications, stakeholder benefits & value chain responsibilities

Drivers for a carbon insetting success:

Implemented in GHG protocol & regulatory frameworks, process transparency, education & communication

A call to action: We're only one handshake away to realize this transition together throughout the value chain

