

WHO WE ARE & VISION

ADVANCING HYDROGEN INNOVATION IN THE BALTIC SEA REGION

Presenter - Valentin Bratkov:

- Director of Business Development (Estonia),
Baltic Hydrogen Group
- Head of Marine Engineering Curriculum,
Estonian Maritime Academy,
Tallinn University of Technology (TalTech)



Vision - Position the **Baltic Sea Region** as a **European leader** in hydrogen-driven maritime and mobility innovation.

Mission - We're building **scalable, real-world hydrogen solutions** — backed by applied research, hands-on testing, and trusted partners **across the Baltic region.**

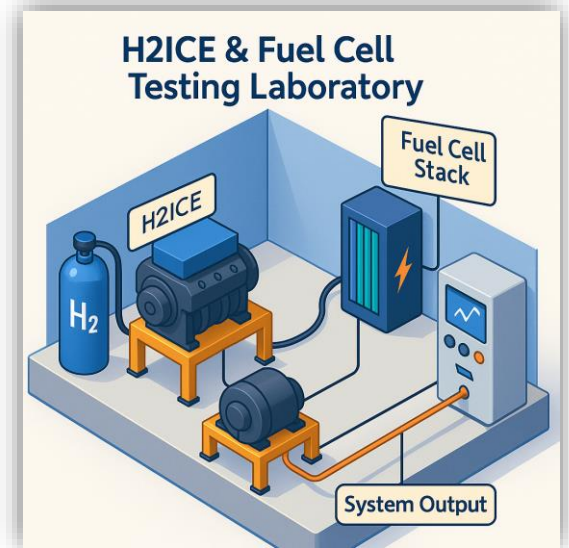
OUR COOPERATION PROJECTS

Project 1: Hydrogen ICE + Fuel Cell Testing Laboratory.

- A planned **hybrid lab for H2 internal combustion and fuel cell systems**
 - to test both fuel cell and H2ICE technologies separately, but also together, in **hybrid configurations**, so we can **evaluate shared power delivery to one load**, such as a **vessel's propulsion system** or an **auxiliary energy demand**
- Will support both **education** and **applied R&D**
- Designed to be open **for industry collaboration on prototype testing and system validation**

Project 2: Baltic H2 Infrastructure & Mobility

- Developing **regional hydrogen hubs** for maritime and logistics
- **Connecting a Baltic-wide ecosystem**: ports, energy providers, and policymakers
- Aiming for **scalable, interoperable solutions** aligned with Europe's climate goals



WHAT MAKES US DIFFERENT - We bring the best of both worlds, deep engineering know-how from **TalTech** and the agility of **Baltic Hydrogen Group** to move ideas into action.

LET'S COLLABORATE

Relevant Horizon Europe 2025 Topics:

- Efficient, sustainable and inclusive energy use
- Sustainable, secure and competitive energy supply
- Cross-sectoral solutions for the climate transition
- Clean and competitive solutions for all transport modes
- Safe, resilient transport and smart mobility services for passengers and goods

We're Open To:

- Joining a consortium as a trusted partner
- Welcoming new collaborators into our project ideas

What We Offer:

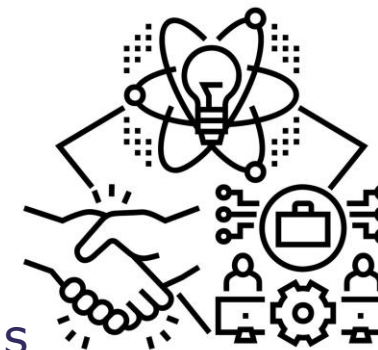
- Expertise in **hydrogen systems**, **maritime tech**, and **testing environments**
- A **cross-Baltic network** through Baltic Hydrogen Group
- Experience **leading EU projects** and building **hands-on learning**

Valentin Bratkov

For research & education: valentin.bratkov@taltech.ee

For business & infrastructure: v.bratkov@baltichydrogengroup.com

**TECHNOLOGY
PARTNER**



**TAL
TECH**



**BALTIC
HYDROGEN
GROUP**