



Hydrogen Delivery Risk Assessment and Impurity Tolerance Evaluation

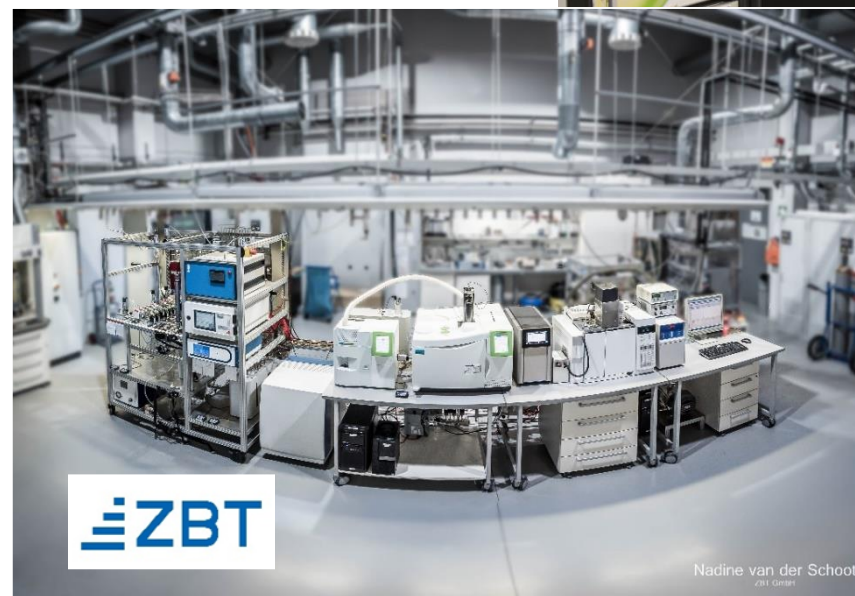


3 analytical
laboratories ready
ISO 14687

H₂ fuel quality for
transport applications



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<https://hydraite.eu>

Project overview:

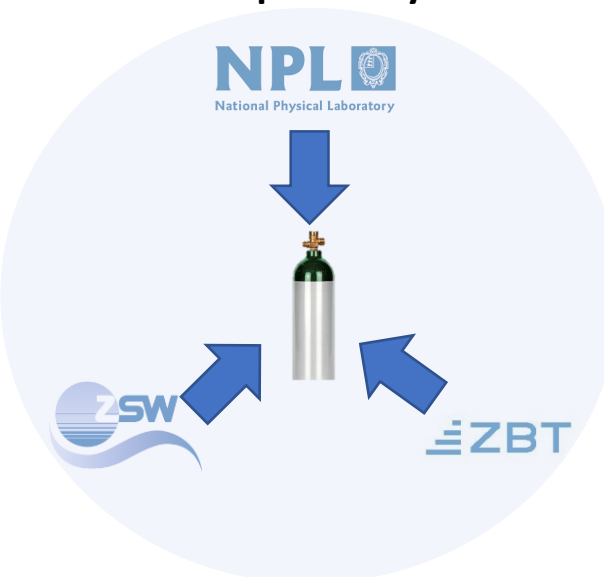
- 3-year EU-funded (FCH JU) project: 01/2018 – 12/2020
- Grant 3.5 M€, coordinated by VTT
- 6 European leading FC research centres and independent European automotive stack manufacturer

Project objective: To solve the hydrogen quality for transportation applications

- Effects of the hydrogen supply chain derived contaminants on the fuel cell systems in automotive applications

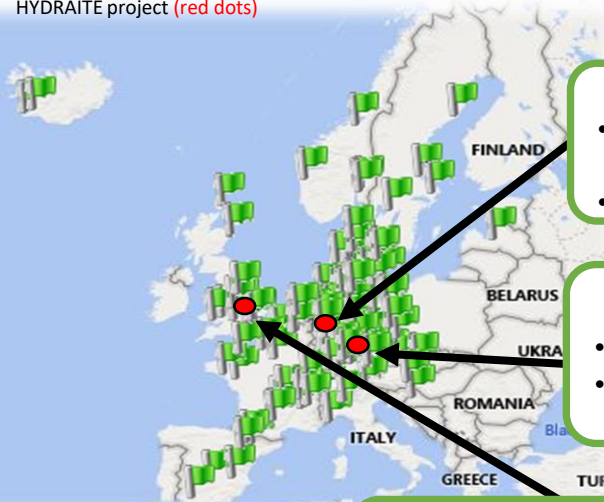
- Recommendations for current ISO 14687 standard
- Establish three European laboratories, capable of measuring all of the contaminants according to ISO 14687

Multiple inter-comparisons: demonstrate capability and comparability




Availability
And
Quality

Map of the opened H2 refuelling stations in Europe in 2019 (green flags) and of the three independent analytical laboratories established in HYDRAITE project (red dots)




3 analytical laboratories ready ISO 14687

ZBT (Duisburg, DE)

- Capable ISO 14687 in Q2 2020
- Gas sampling 

ZSW (Ulm, DE)

- Capable ISO 14687
- Gas sampling 

NPL (London area, UK)

- Capable ISO 14687
- Gas sampling 