



Interreg



EUROPEAN UNION

North-West Europe GenComm

European Regional Development Fund

GENerating energy secure COMMunities
through Smart Renewable H2

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Agenda

1 *Who we are*

2 *What is GenComm?*

3 *First Results*

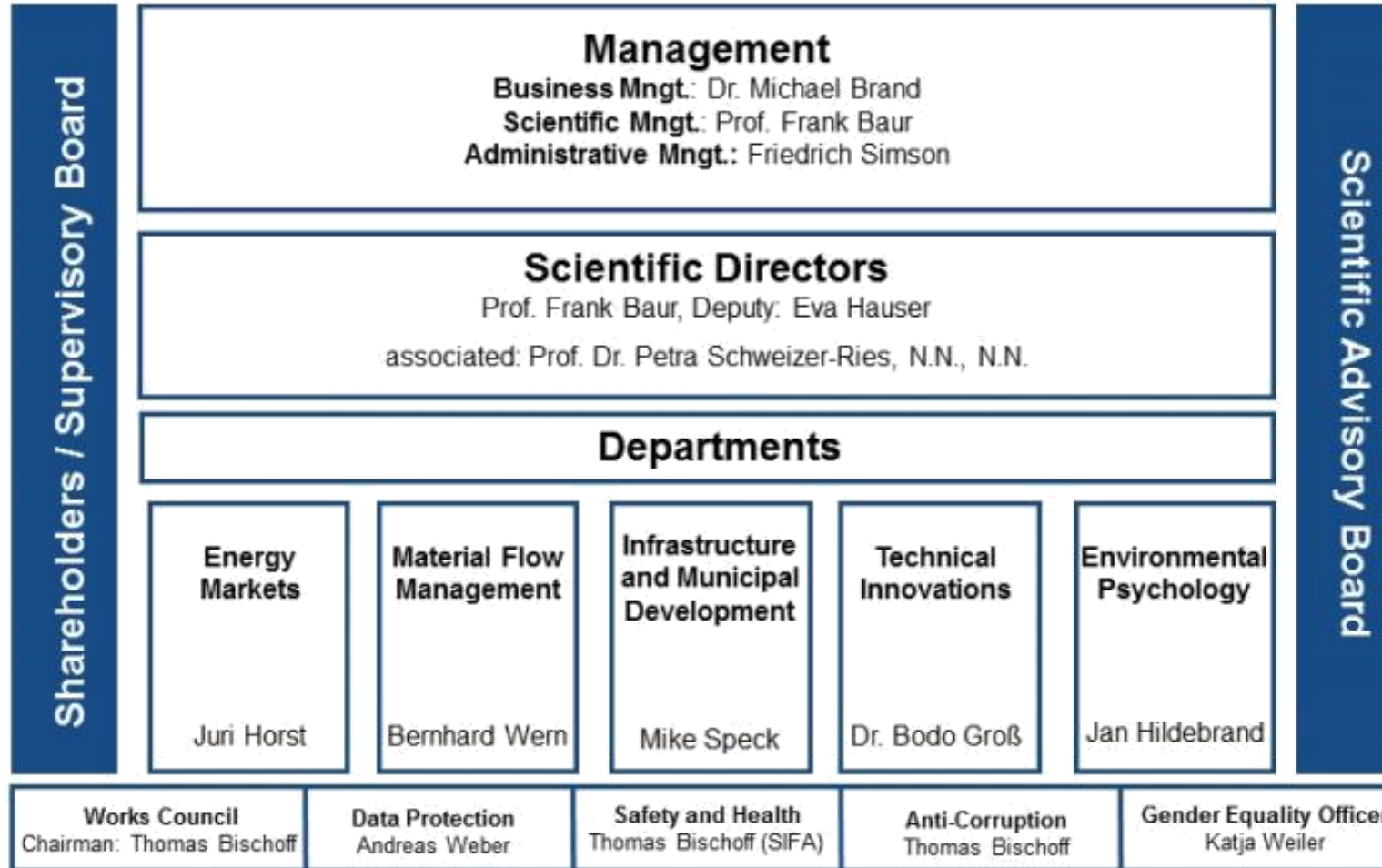
4 *Conclusion*

IZES gGmbH

- Research institute in Saarbruecken
- founded in November 1999 by the initiative of the Federal State Saarland, several energy utilities, the University of Saarland and the University of Applied Sciences Saarbruecken
- Focus on climate protection and energy transition
- 3 Mio. € turnover
- > 70 % third-party funds
- ~ 40 employees
- Coordinator for e-Mobility Saarland (this includes FCEVs)



IZES - Organization



GenComm - Overview



- ERDF Funding 5.63 Million €
- Total Budget 9.39 Million €
- Project Leader: Belfast Metropolitan College
- 10 European Partners, in 5 different countries

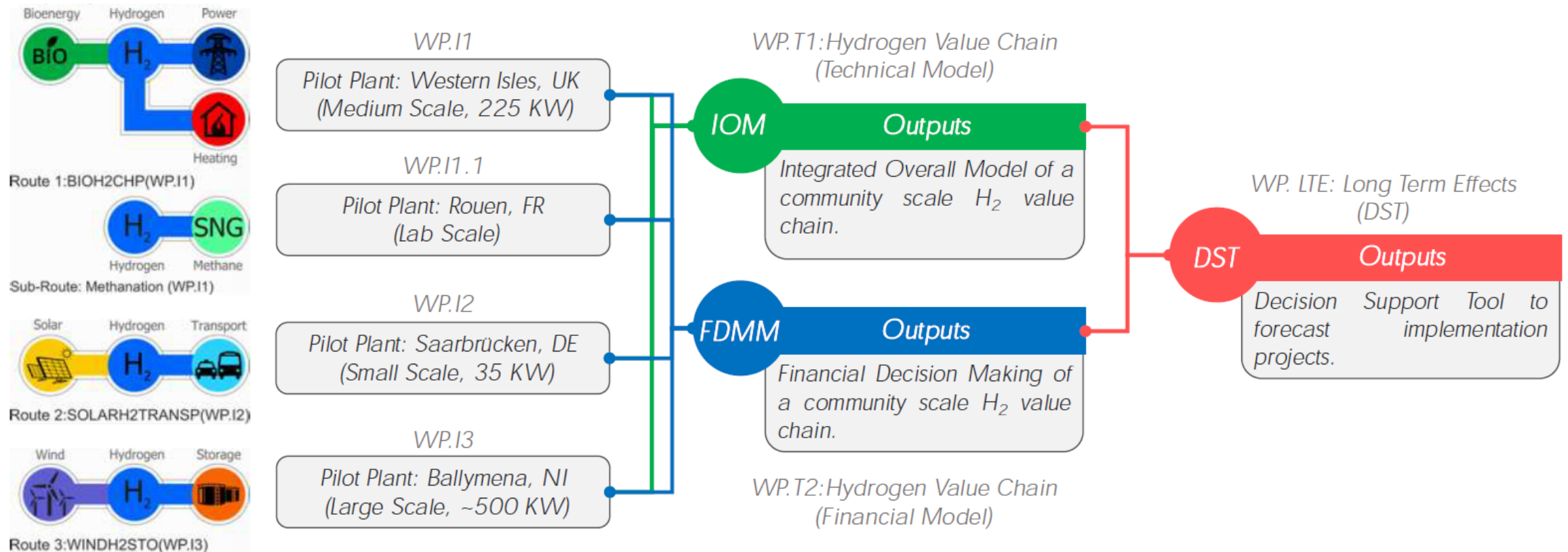


GenComm - Objectives

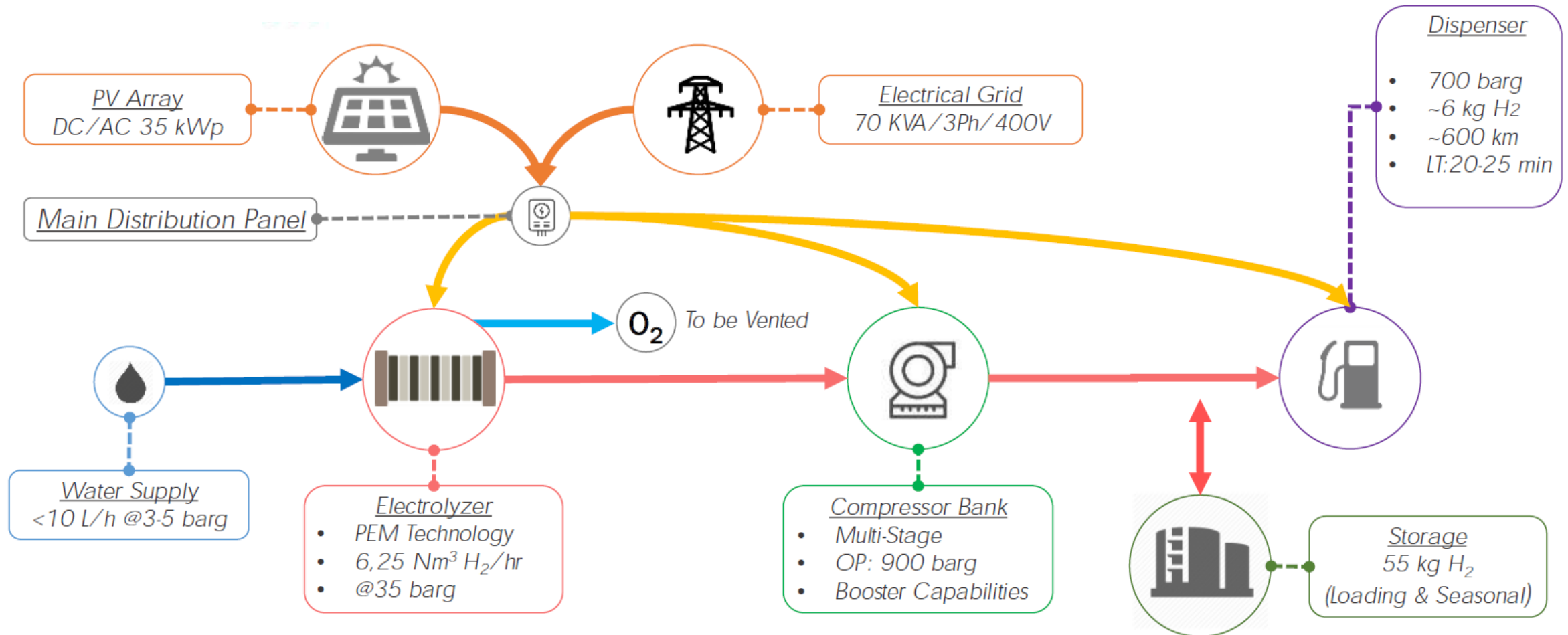


- Implementation of 3 pilot plants with different renewable sources
 - Solar Power, Wind Power and Bioenergy
- Usage in the main forms of energetic demand
 - Heat, Power and Transportation
- Validation of the maturity level of hydrogen technologies
- Development of integrated technical and financial decision support tools

GenComm - Structure



GEeComm - Saarbruecken



GenComm - Saarbruecken

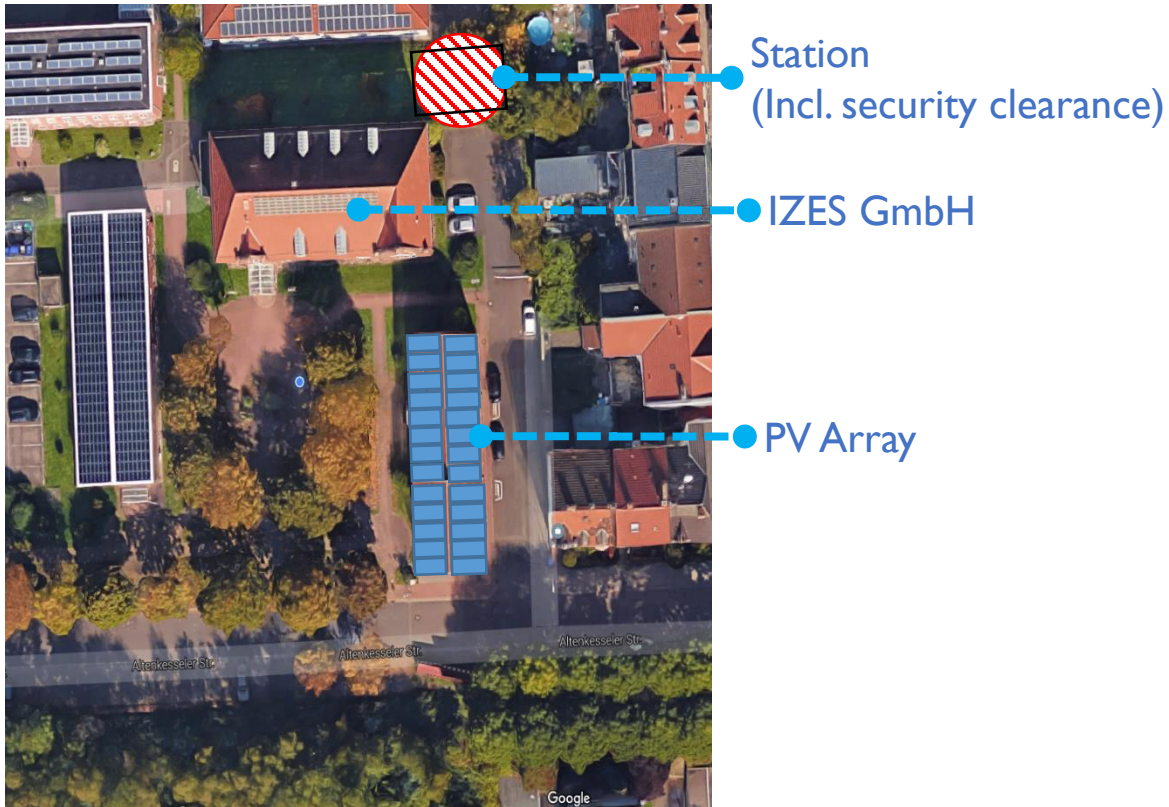


Fig1.H₂ Refueling Station Location
(Source Google Maps)

SCOPE

- Location: Innovation Campus Saar
Saarbrücken, Germany
- Semi-Autonomous Operation (PV Array)
- 700 barg loading
- Seasonal and Loading Storage (1 Vehicle)*
- Peak Production Expansion
- Water Treatment Unit
- Containerized Solution
- Monitoring and Plant Management System

GenComm – First Results

- Technical approval and building permission takes time and extensive research and explanations.
- No existing standards for Hydrogen under high preassure.
- Mutual learning processes together with
 - Technical Inspection Associations
 - Building Permit Authorities
 - Fire Departments
 - Health and Safety
 - Environmental Protection Agency



GenComm – Conclusion

- Hydrogen is a promising energy carrier for the future.
- Technical approval and construction of hydrogen sites are not common processes.
- Learning curves can be steep and time consuming.
- Cooperation in the early stages is crucial.

Thank you for your attention!

[IZES gGmbH Contact Points](#)

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