

ALP STORE



## Pilot Region Belfort

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Hydrogen : greener mobility

Christophe Renaudin

## Before AlpStore: Our Challenges

- Absence of platforms in the region promoting research in storage
- Social and political reluctance in investment in hydrogen research

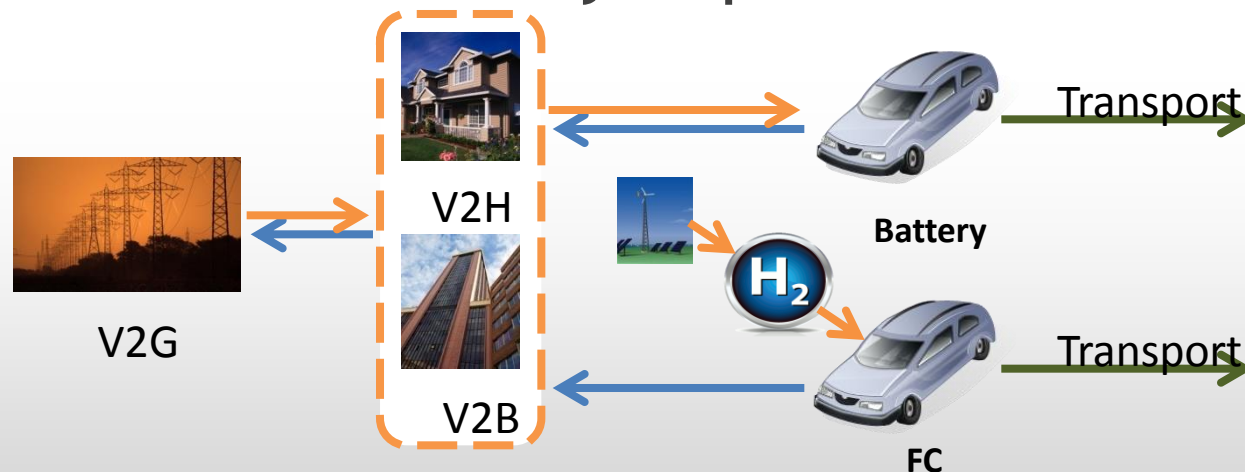
### FRANCHE-COMTÉ REGION

Experimentation territory  
and deployment  
of hydrogen technologies

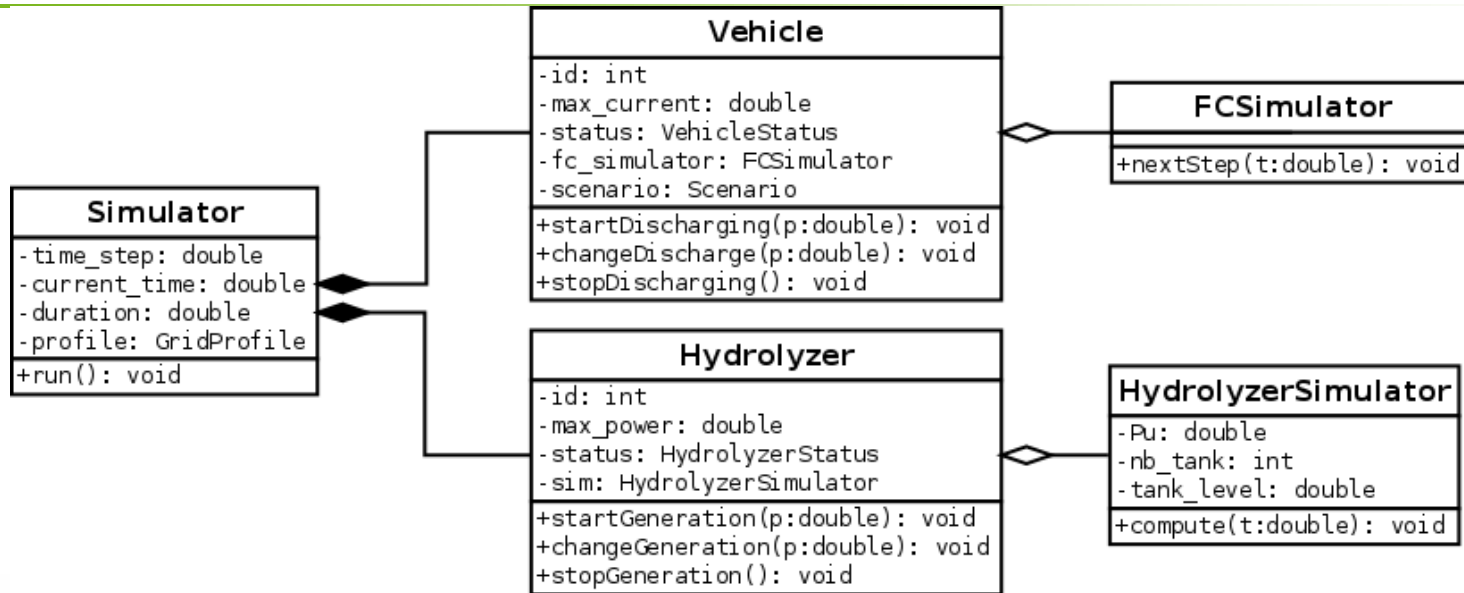


## During AlpStore: Our Activities

- Virtual research platform for studying hydrogen as an interface between excess electricity and mobility
- Communication protocols for energy aggregators, grid stations and electrolysis plants



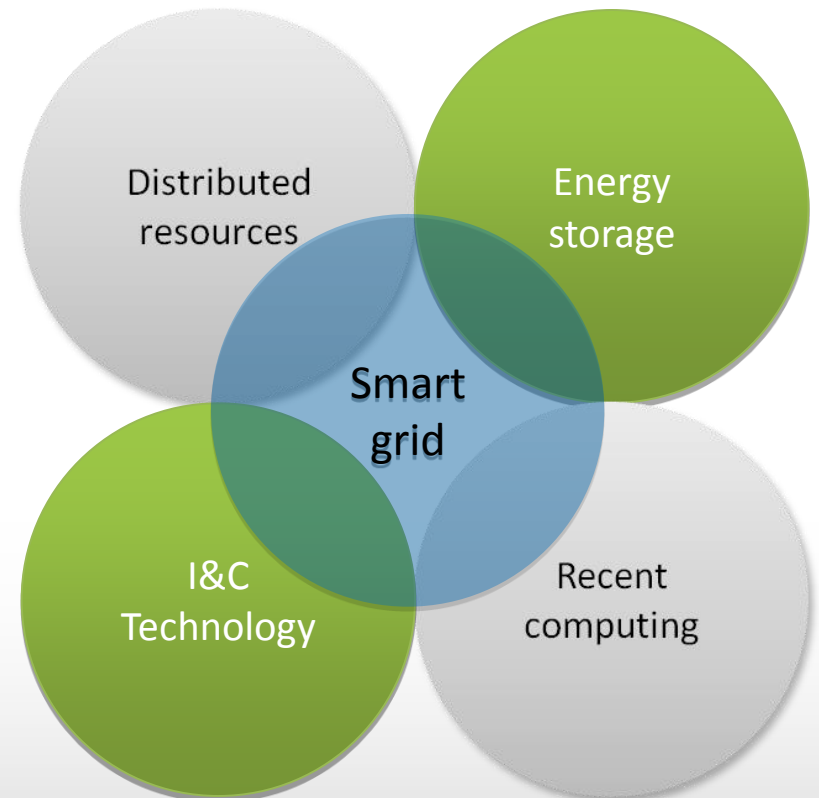
# Simulator



- Simple architecture:
  - Simulator (aggregator and grid)
    - Vehicles
      - Fuel cell model
    - Electrolyzers
      - Hydrogen generation model.

## After AlpStore: Our Achievements

- ✓ Simulated validation of hydrogen production as energy storage medium
- ✓ Defined communication standard between different agents for resource optimization



Space for other logos



## After AlpStore: Our Recommendations

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1. Large scale experimental validation
2. Scenarii based on real data
3. Revision of economic figures for better costing and pricing
4. Include other means of hydrogen usage
5. Promotion on regional level