

The usage of **green Hydrogen** in a **CHP-Unit** to **decarbonize** the **heat and power** production



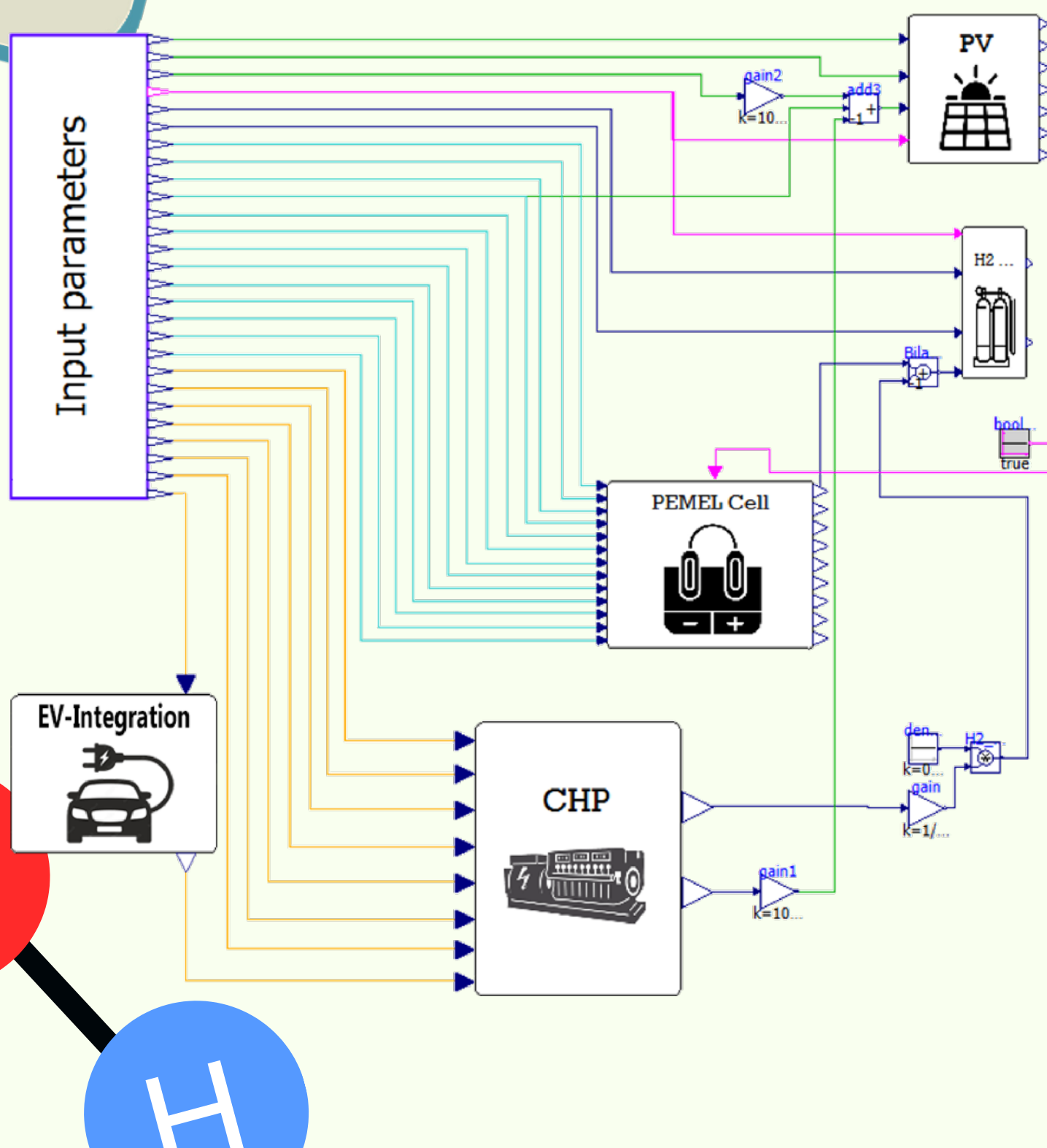
Real-lab CO₂-neutral pilot innovation region Upper Rhine: Development of energy and mobility solutions



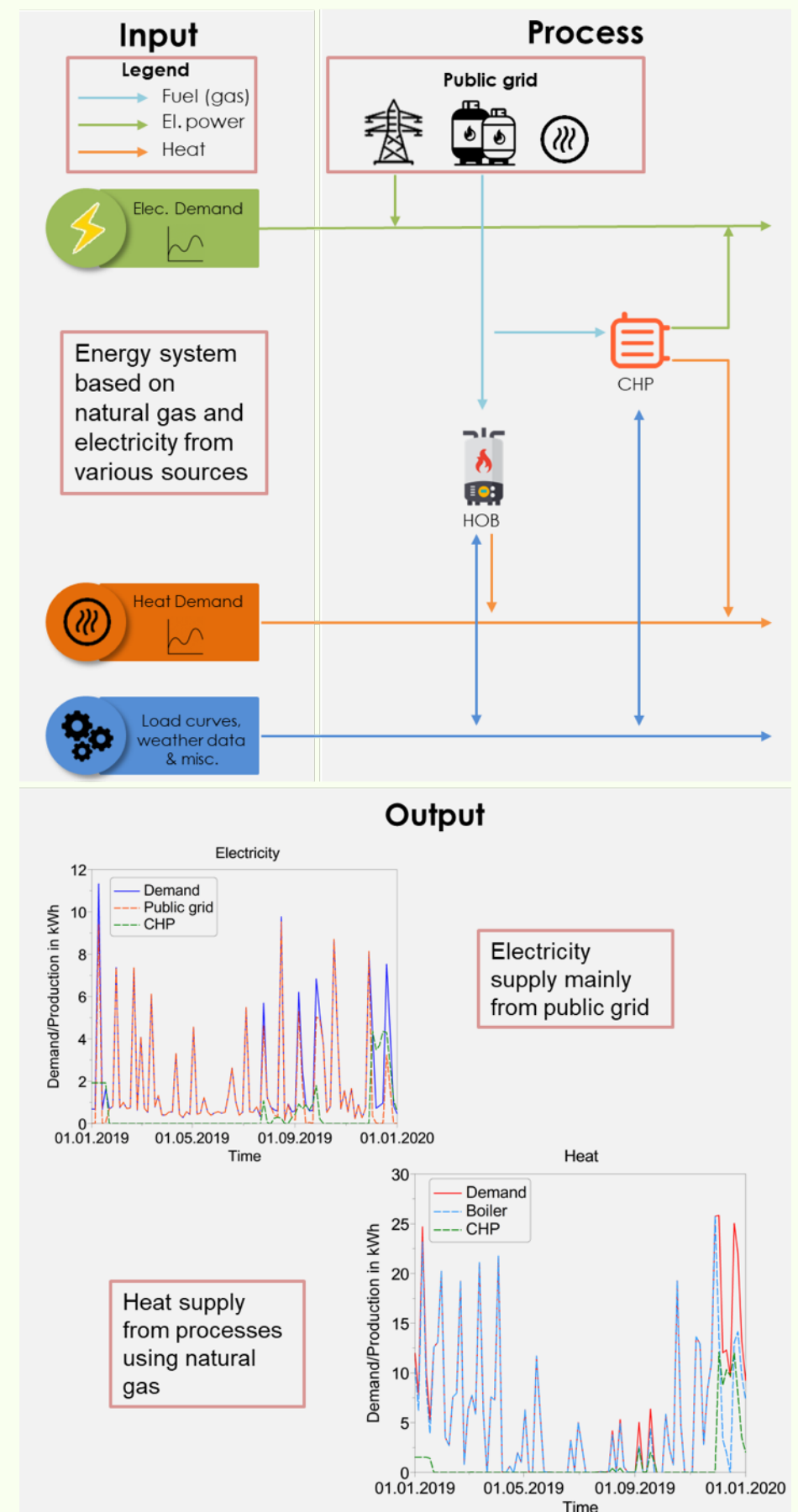
INFORMATION

The Upper Rhine region is set to become a pilot for a greenhouse gas emission-free economic zone, focusing on **sustainable energy** and transport. The CO₂InnO project aims to transform the area into a **climate-neutral hub**, showcasing hydrogen-based solutions for **power generation, heating, and e-mobility**. Core of the project: Developing a hydrogen-based CHP unit as a demonstrator. The goal is to prove and promote **decentralized, climate-neutral energy**. Additionally, a simulation program will help assess the system's benefits for local situations.

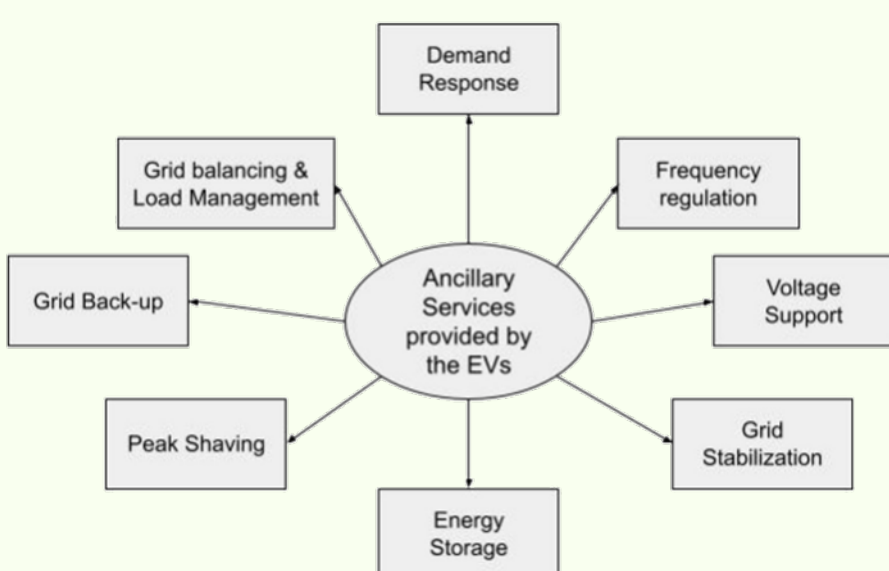
Simulation Model



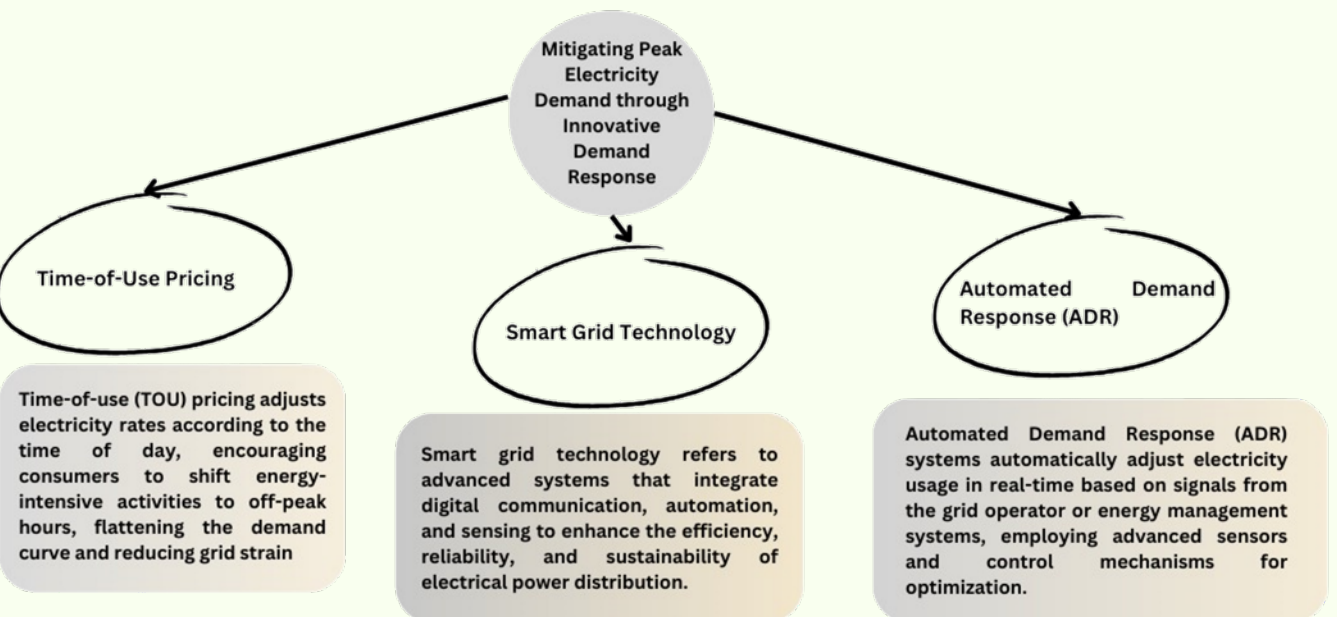
Example Case Study: Kindergarten Offenburg



How can EVs help shave peak energy demands?



EVs can reducing peak electricity demand with innovative demand response techniques:



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