

Hydrogen Valleys in Austria

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Introduction:

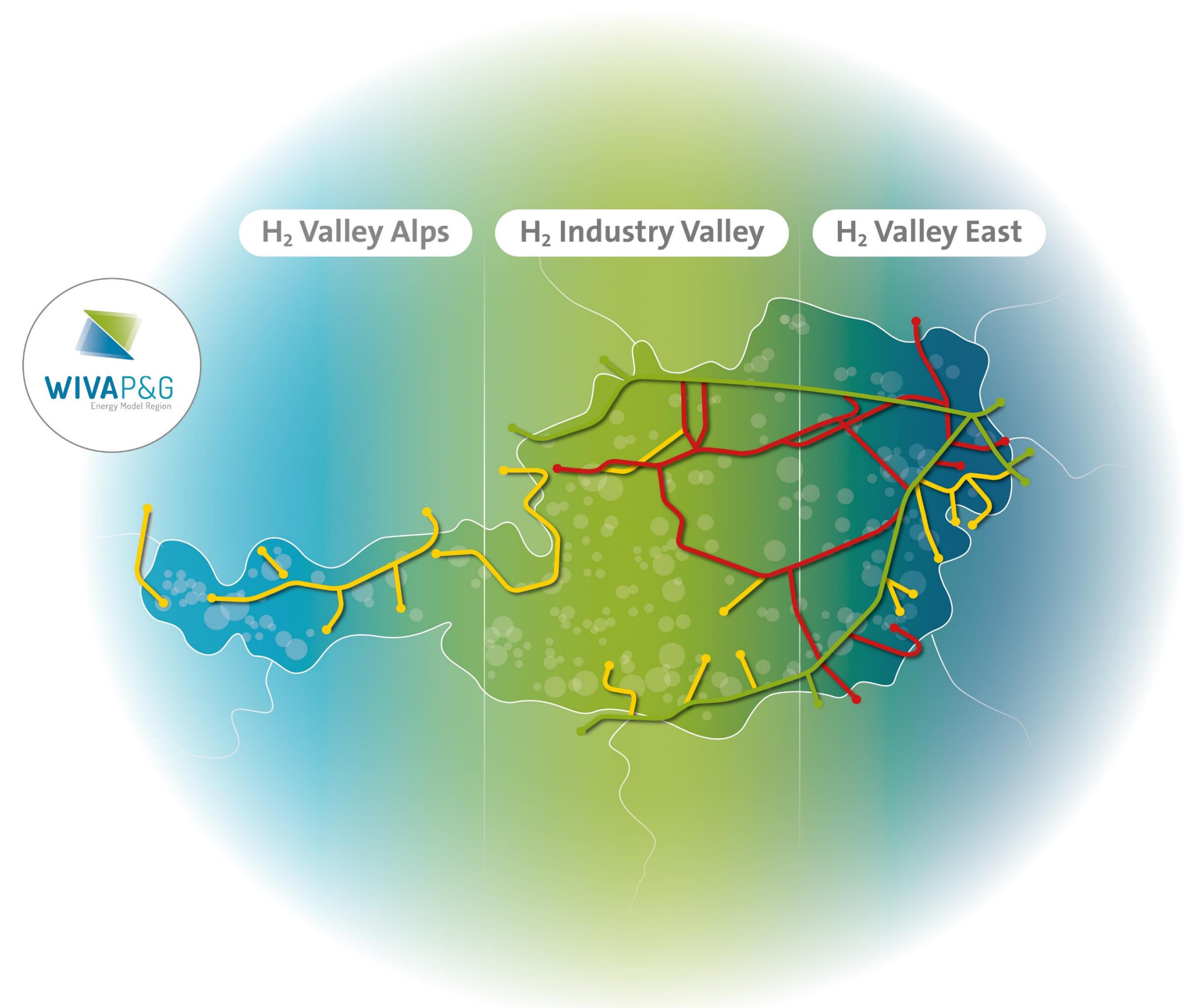
In order to be able to counteract climate change and achieve the necessary goals, the European and Austrian economic systems need to be further developed, including through increased integration of renewable hydrogen.

There are currently more than 30 completed and ongoing WIVA P&G projects in Austria to test innovative overall solutions for reducing emissions through the use of green hydrogen under real conditions. In order to further improve, all national existing hydrogen projects need to be linked via Hydrogen Valleys.

Definition:

A Hydrogen Valley is a geographical area where carbon-neutral hydrogen is produced and used locally by households, local transport and industrial facilities. Within a valley, both, the exchange of climate-neutral hydrogen and knowledge exchange play an important role. Therefore, knowledge creation on the one hand and transfer on the other play a major role.

The aim is to create an energy system that is individually tailored to the needs of the respective region, but at the same time can serve as a model for other regions. This creates a strong connection between the hydrogen valleys.

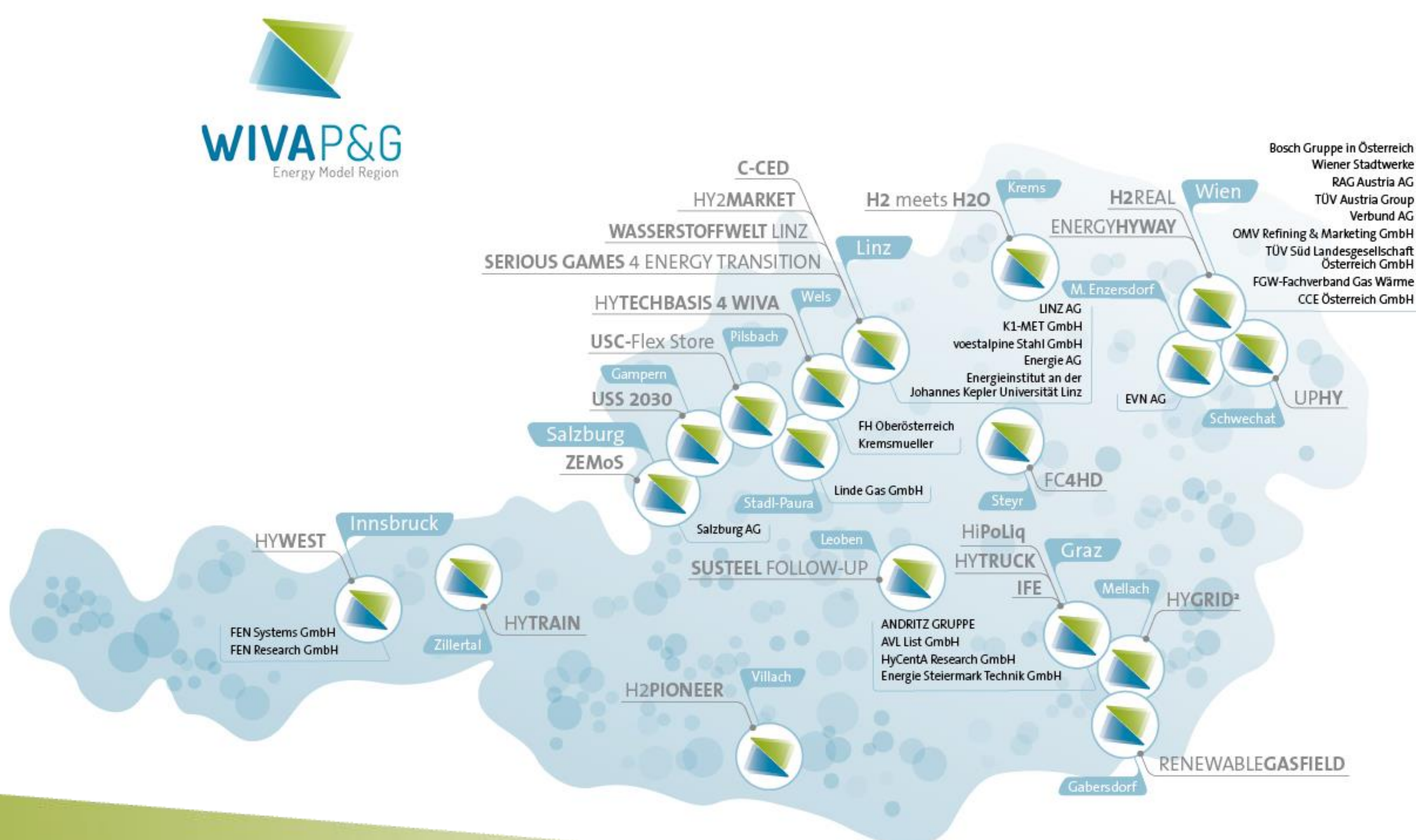


Future Hydrogen Valleys in Austria:

West: The first building block for a Hydrogen Valley has already been laid with the WIVA P&G HyWest project [1]. This lighthouse project serves to build an exemplary regional climate-neutral hydrogen economy. Now the borders should be expanded both locally and thematically and the neighboring countries Germany and Italy will be included. This is intended to create a green hydrogen corridor in the west of Austria. What is important here is the development of infrastructure, sector coupling and the use of H2 in mobility.

Centre: In the federal states of Upper Austria, Styria and Carinthia another Hydrogen Valley is already formed. The Hydrogen Industrial Inland Valley (HI2 – Valley) has a strong focus on industry which would like, on the one hand, to replace gray hydrogen with green hydrogen in industrial processes and, on the other hand, to develop new areas of application for green hydrogen in hard-to-abate processes. In the area of mobility, there are also various, often multimodal solutions to become more climate-neutral. In order to distribute the hydrogen produced in the Hydrogen Valley to the various stakeholders, pipeline and trailer projects are important and therefore also being considered.

East: The WIVA P&G project H2REAL [2] is intended to form the foundation for a hydrogen valley around Vienna. The project pursues the development of novel hydrogen technologies, the connection of regional demonstration projects and the networking of relevant stakeholders to build a sustainable hydrogen economy along the entire value chain. Over the next few years, the project will be expanded and cooperation with the Czech Republic, Slovakia and Hungary established.



[1] www.wiva.at/project/hywest/

[2] www.wiva.at/project/h2real/