Upscaling of green hydrogen for mobility and industry – UpHy

Cooperation of OMV, VERBUND Solutions GmbH, HyCentA, VF Services and WIVA P&G

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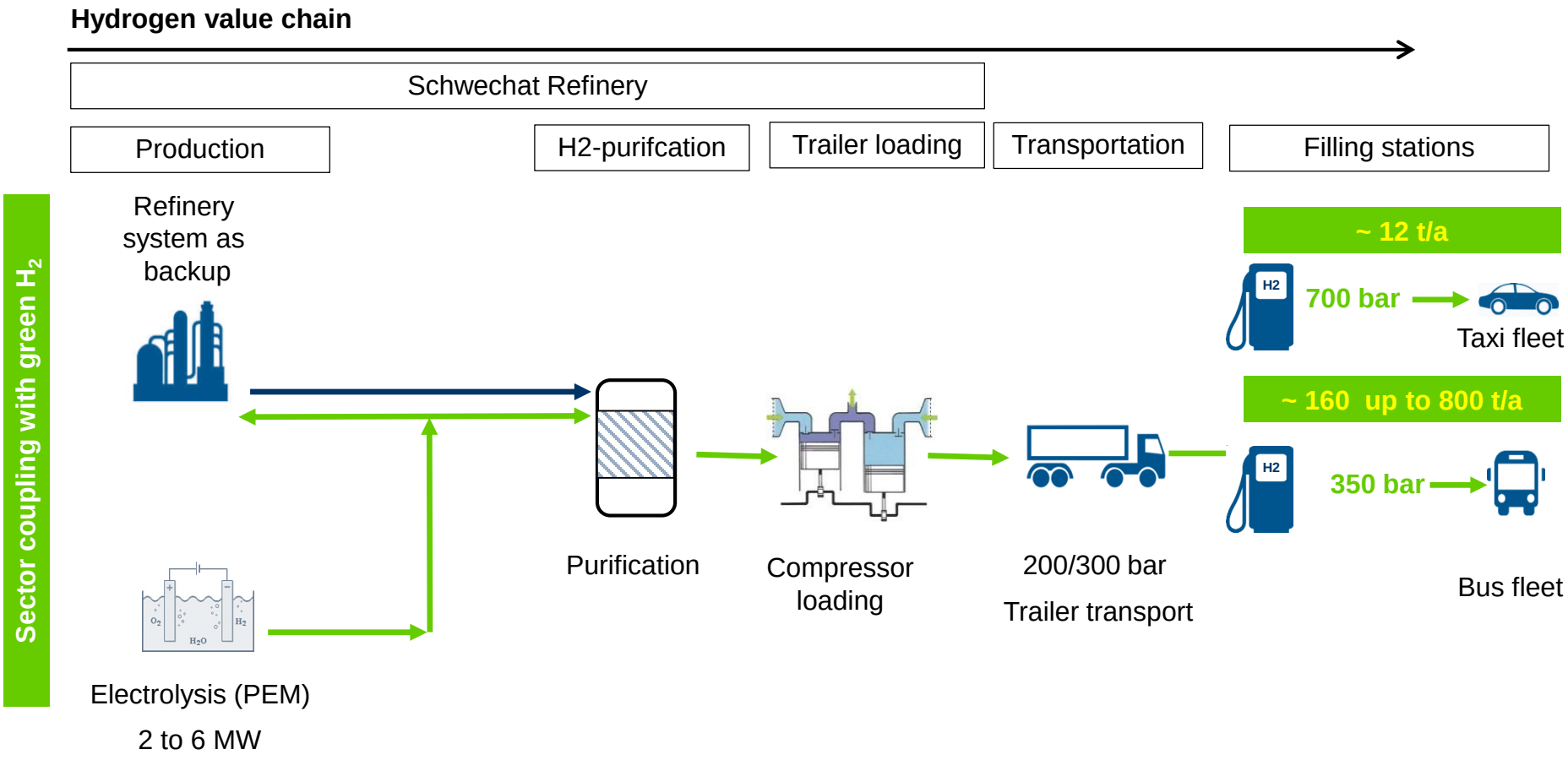
Moving more. Moving the future.

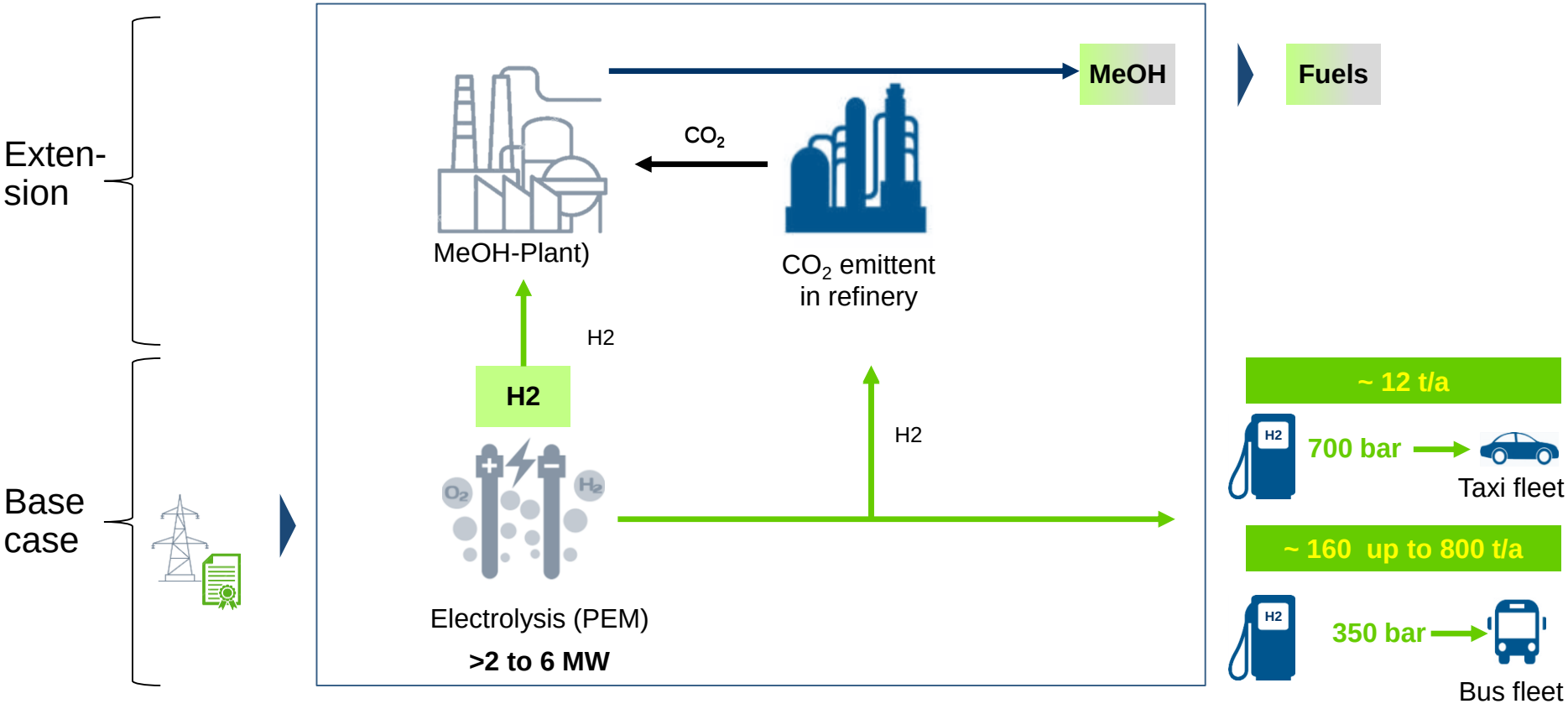
Key drivers for the project

- CO2 reduction by green H2 mobility
  (Phase 1: 4,600 t CO2/a reduction / extension to up to 15,000 t CO2/a)
- Demonstration and optimization of value chain for real life H2-mobility application (commercial bus and taxi fleet)
- Sector coupling of green power production, refining and mobility with green hydrogen
- Development of novel metering techniques to enable roll-out of H2 refilling stations (validation of H2 quality acc. ISO 14687-2 and official calibration of H2 mass at HRS)

UpHy I project set-up for phase I – mobility & refining



Potential extension by CO_2 Hydrogenation (e-fuels) under investigation



Key success factors for the project

- **Low power supply costs (energy and grid)**
  - Utilization of existing green power production
  - Exemption from grid fees for power for green H2-production
  - Funding of higher OPEX of green vs grey H2-production

- **Reduced specific CAPEX for green H2 production and logistics**
  - Significant (60%) CAPEX and OPEX funding for set-up of initial projects
  - Economies of scale by demand growth of green H2
  - Possibility of funding for hydrogen vehicles

- **Competiveness of green H2 for refinery applications**
  - Accountability of green H2 (electrolysis) as renewable fuels of non-biological origin towards min. 14% renewable share in transport target, also when it is used as intermediate product for the production of conventional fuels

UpHy partners

OMV

Verbund

WIVA P&G
Energy Model Region

HyCentA
HYDROGEN CENTER AUSTRIA

V&F Analyse- und Messtechnik GmbH