



VORZEIGEREGION  
ENERGIE

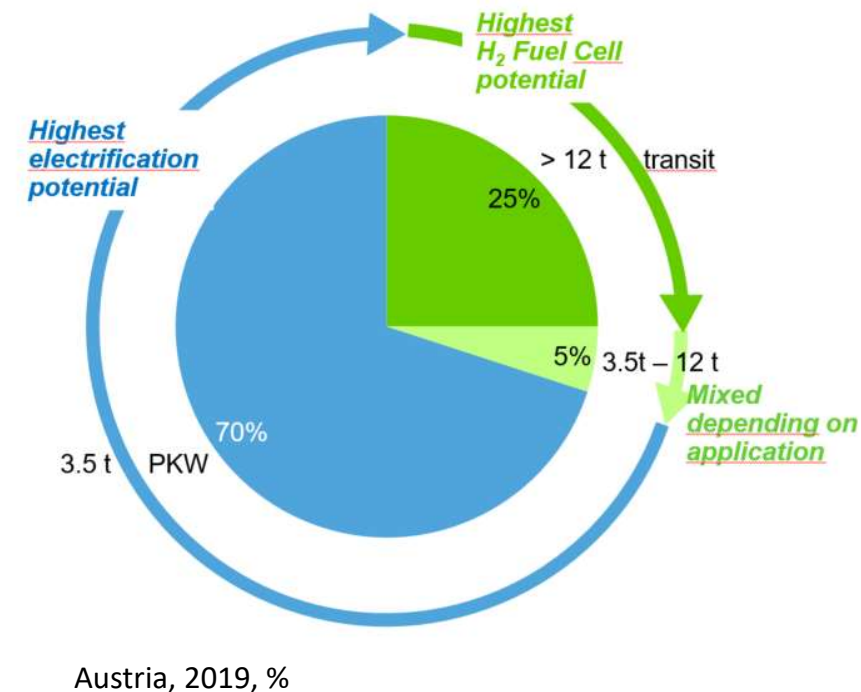
**WIVAP&G**  
Energy Model Region



**UpHy II „Upscaling of green hydrogen for mobility and industry“**

## Motivation for UpHy II

- ▶ Demonstration of “**Zero emission**” mobility in “**hard to electrify**” **Mobility-Segment** (Bus, HDV, MDV) (25% to 30% share of mobility in AT)
- ▶ **Reduction of up to 15.000 t/a CO2-Emissions** during hydration of fuels
- ▶ Utilization of H<sub>2</sub>-Hub at the refinery for **economy of scales production of green H<sub>2</sub>**
- ▶ **Position green H<sub>2</sub> as ecological & commercial attractive**
- ▶ Development of calibrated **mass- and quality metering** as basis for the roll-out of the H<sub>2</sub> filling station infrastructure



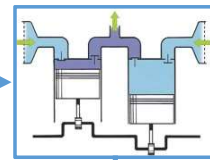
# UpHy - green H<sub>2</sub> production for refinery & mobility

“*First-of-its-kind*” green H<sub>2</sub> project in refinery with infrastructure to supply  
“*Hard-to-electrify*” segment

## Green H<sub>2</sub> in the refinery



## Trailer Filling Hub



Trailer Filling



300 to 500 bar

## Green H<sub>2</sub> Filling station



350 + 700 bar HRS



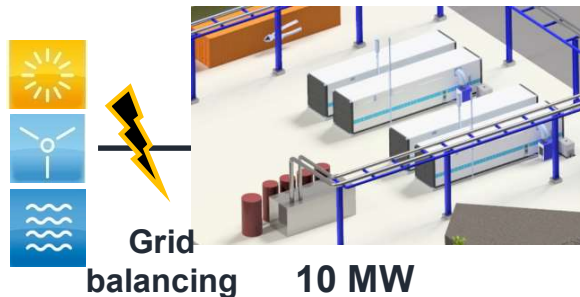
700 bar HRS



## Green H<sub>2</sub> Mobility CO<sub>2</sub>-free logistics



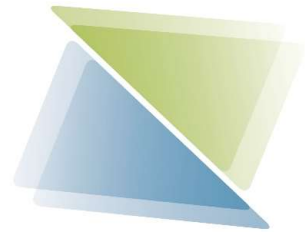
## Green H<sub>2</sub> - Production by electrolysis



## Sustainable investment decision of OMV

### Unique Project in EU

- ▶ **10 MW-Electrolysis** → Largest electrolysis in Austria, among the largest in Europe
- ▶ Up to **25 mn EUR** investment for electrolysis
- ▶ **Integrated logistic chain** (Tie-in, compression, trailer loading & transport, buffer tank)
- ▶ **OMV-filling station** and supply of **first H<sub>2</sub> powered heavy duty fleet in Austria planned**
- ▶ **Strong partnerships** from industry and Research & Development:  
R&D-Partners: **HyCentA & V&F** (metering technology), **EI-JKU-Linz, EVT - Leoben**
- ▶ **Nucleus for roll-out of Austrian H<sub>2</sub>-mobility:**  
Sufficient green hydrogen for **10 additional H<sub>2</sub>-filling stations up to 150 buses in Austria or 17 mn km without emissions**  
Several further heavy duty operators are in discussion





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**Thank you for your attention!**



DI Dr. Michael-Dieter Ulbrich,  
OMV R-T Business Transformation

Vienna, 9. March 2021