



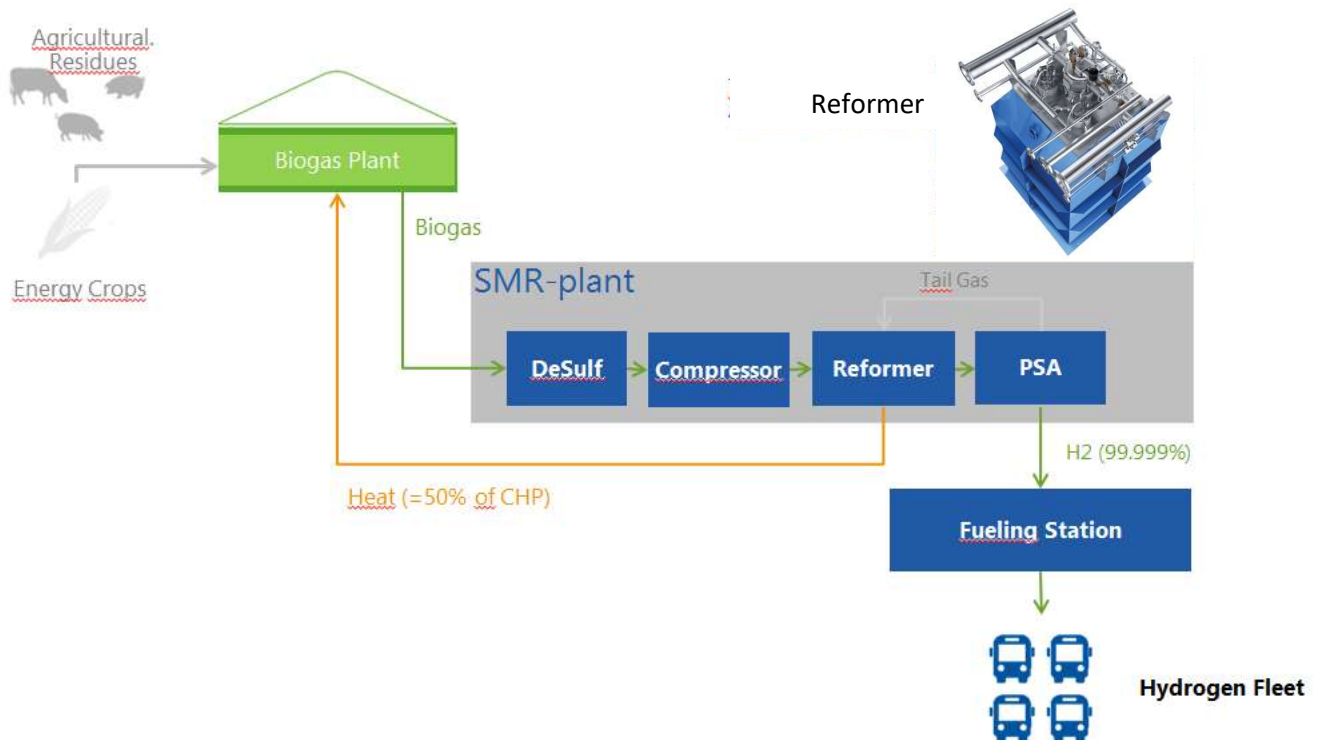
BIO-WASSERSTOFF

## Green hydrogen from biogas

In Germany there are more than 9,000 biogas plants that contribute almost 15% to renewable electricity generation.

Using the industrially proven technology of **steam reforming**, hydrogen can be continuously made available **from biogas for electromobility** in close proximity to filling stations. The theoretical potential almost covers the needs of heavy commercial vehicles or 20% of car traffic.

During **steam reforming**, the hydrogen bound in the biogas and process water is extracted. The required chemically bound energy per kg of hydrogen produced is as high as electricity required for electrolysis. The efficiency disadvantage of the fuel cell compared to battery vehicles is compensated via the steam reforming path.



The economic efficiency calculation shows that the currently most cost-effective production of **green hydrogen** is steam reforming of **biogas**. The generation path can therefore make a significant contribution to the goals of the “National Hydrogen Strategy (NWS)” of building a regional and industrial hydrogen infrastructure by 2030.

**Agriculture** is a supporting pillar and can demonstrate its role in the transformation to CO<sub>2</sub>-neutral mobility.