

Making electrolytic H2 production profitable. More than just the electrolyzer

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Problem Statement

In low-carbon hydrogen production, electrolysis with renewable energy is promising, yet the crucial but often overlooked power supply system (rectifier) significantly influences project economics. This presenter examines rectifier technology's impact on large H2 production plants.

Solution Approach

We evaluate two technologies

- Conventional Thyristor based
- Advanced Transistor based (IGBT)

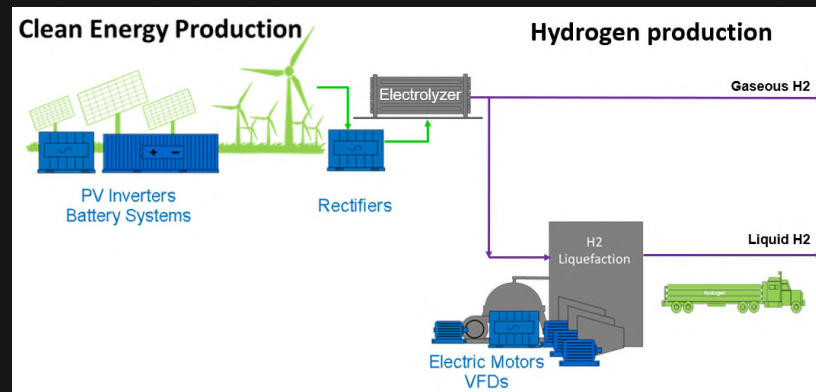
Key Results

Advanced IGBT based rectifiers

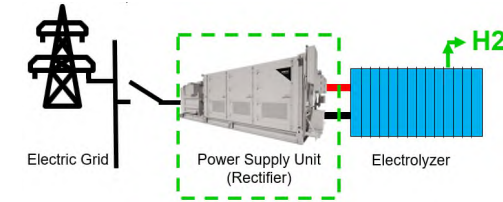
- Reduce CAPEX
- Certainty in grid-side performance
- Flexible ramp up and down

Keys to success

- Large CAPEX & IRA tax benefits
- Pick bankable solution partners
- Engage early, de-risk your project



Rectifier: the glue between grid and electrolyzer



Download the whitepaper



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