

Decentralise for resilience. Hydrogen where you need it.

ST Engineering Energy Solutions brings to the table the next frontier in hydrogen production. We support you end-to-end in implementing hydrogen projects – from planning to commissioning – benefiting from our alkaline electrolysis technology – modular, reliable, and cost-efficient.

We enable you to grow with your operations into a greener future.



**HubGen
1-MW hydrogen
electrolyser –
the all-in-one
solution.**

Achieve energy resilience with HubGen

Safe and reliable operation is essential for the success of your project. That is why we have engineered HubGen from the ground up, incorporating decades of learning experience in the sector. And that is what sets us apart.

With one of the most experienced teams in the industry, we drive technological advancements for you. Our design philosophies take advantage of standardisation principles and industrial best practices to ensure smooth operation for both the electrolyser and your existing processes, saving you time and costs.

We know how to harness the power of data to optimise system operations and have built intelligent monitoring algorithms to maintain maximum system uptime. Protected by robust cyber security systems, we empower customers to keep operations reliable and stable.



Efficient

High system efficiency of 55 kWh / kgH₂ with operating output up to 30 bar, reducing total operating cost (TCO).



Plug-and-produce

Modular, compact system and standardisation for rapid project execution and accelerated approval process.



Safe and stable

Designed for maximum reliability, using only proven components. CE-certified in accordance with relevant EU directives and standards.



Smart and secure

AI cyber security solution for operating technology (OT), shielding operations from cyber attacks in real-time.



All-in-one and scalable

1-MW of power in minimal space – no additional buildings or support systems required. Externally accessible components for safety and easy maintenance.



Available

Standardised design based on existing supply chains. Custom-engineered power electronics.

Your trusted partner for electrolyser solutions.



Renewable
electricity,
H₂O supply

HubGen 1-MW hydrogen electrolyser:

Ready for dynamic operations,
designed for lowest LCOH

Plant
ownership
and operations

Electrolysers
and
services

EPC
service for
the entire H₂
system*

*Partnership

1. Technical support

We guide you through the technical feasibility assessment, integration into your systems, and hands-on training for the optimal operation of your electrolyser.

2. Simple digitalisation

With us, you will operate your electrolyser using intelligent AI solutions and remote monitoring for maximum uptime. Secured by a robust OT cybersecurity solution.

3. End-to-end implementation

From concept to real-world operations: As a full-service provider of energy solutions, we are your trusted partner in advancing your hydrogen transition.

4. Smart maintenance

Local expertise meets remote solutions, ensuring your operations run as reliably and smoothly as a Swiss watch.

About

ST Engineering Energy Solutions is a full-service provider of innovative solutions and technologies that advance energy and climate resilience. Based in Germany, our current focus is on decentralised systems to help decarbonise and bridge energy gaps in critical infrastructure and industrial applications. Our flagship HubGen 1-MW hydrogen electrolyser aims to speed up hydrogen adoption via a decentralised approach.

As a subsidiary of technology, defence and engineering group **ST Engineering**, we combine agility with deep global expertise to deliver secure energy solutions across industries – ultimately helping communities gain equitable access to energy, sustainably.

With a rich heritage of more than 50 years, **ST Engineering** harnesses technology and innovation to solve real-world problems. Headquartered in Singapore, the Group has operations spanning Asia, Europe, the Middle East and the U.S., serving customers in more than 100 countries.



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