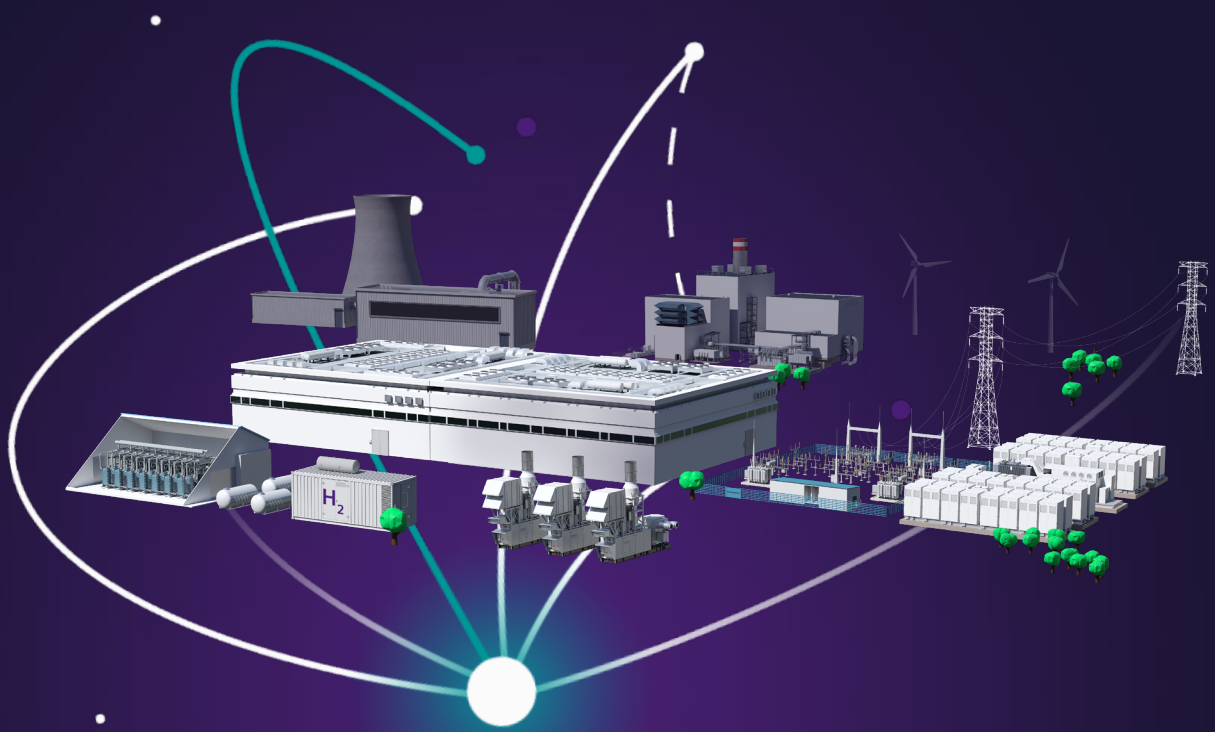
SIEMENS energy

# Our comprehensive and sustainable offer for your Data Center

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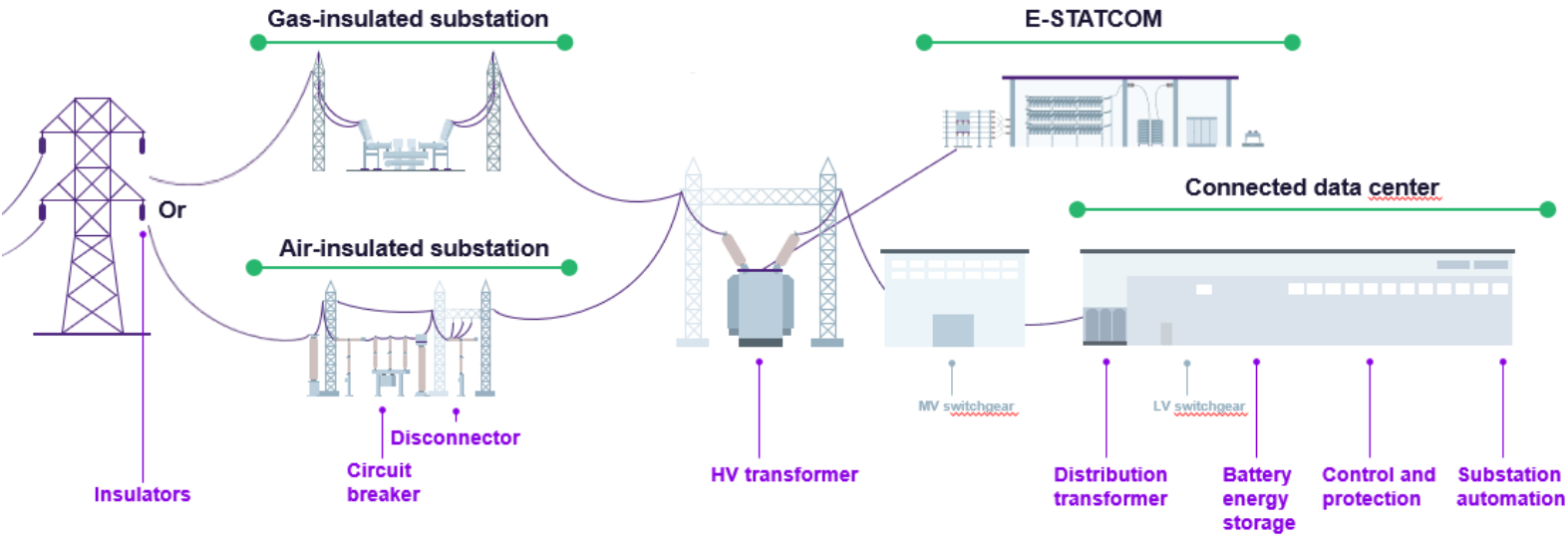


| Speed | Consistency | Scale | Agility | Knowledge |
|---|---|---|---|---|
| In line with project schedule | Acting as one team | Nationwide & global footprint | Modular & mobile concepts available | Product and utility best in class OEM |

**Figure 1: Grid technologies: reliable power supply**
We are your unique end-to-end global partner

# Your reliable partner to your Data Center

## What are the biggest challenges of data centers nowadays?

- Scaling the infrastructure efficiently,
- Improving asset performance and grid management,
- Increasing focus on environment across all industries,
- Rising global demand for electricity.

Siemens Energy Grid Technologies offers comprehensive solutions for all the challenges above, and lots more. Our wide portfolio of products and solutions, our worldwide manufacturing network and expertise ensure that with us, you are in best hands.

## Why choose Siemens Energy?

### We ensure the efficient operation of your data center by

- Offering **reliable infrastructure scaling solutions** for the current and future demand of your data center,
- Offering **optimized delivery times** due to many prefabricated solutions and also *delivery on phases*,
- Optimizing footprint to cope with **space constrains** of data centers

### We contribute to your decarbonization journey by

- Decarbonizing your operations by adopting most efficient product designs, e.g. low-loss transformers, SF6 free portfolio as well as battery storage systems.
- Decarbonizing our own operations by reducing our greenhouse gas emissions to zero by 2030 and achieved 100% green electricity on all our factories on 2023.
- Decarbonizing our supply chain by using alternative carbon-reduced materials in our products, e.g. steel, copper and insulation liquid.

### We maintain reliable power by

- Ensuring reliable and uninterrupted power supply for the safe operation through our reliable portfolio,
- Offering tailor-made yet maximum standardized solutions for your needs and requirements,
- Delivering complete solutions by offering holistic project management for design up to building.

### We offer E-STATCOM and Storage solutions specifically designed to meet the unique needs of AI datacenter grid connections.

The number of AI datacenters is increasing rapidly, leading to several challenges:

- Increased power demand leads to voltage instabilities.
- Extreme power fluctuations of AI datacenters can lead to damage of nearby equipment (e.g. gas-turbines).

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In response to these challenges, we recognize the following critical factors:

- The rapid increase in the number of AI datacenters is driving up energy requirements
- Individual datacenters have high energy demands, contributing to fluctuating loads that heighten the risk of grid instability
- Ensuring power quality is essential to protect existing assets, while voltage and angle stability are crucial for reliable grid operation

Our modular E-STATCOM solution ensures power quality by addressing both voltage stability and AI datacenter load fluctuations, making it the best fit for your needs. Its adaptable design allows it to effectively respond to the planning uncertainties associated with datacenter construction, providing a robust framework for AI infrastructure management. By reducing peak load demands, the system can lower the overall connection costs for datacenters.

Additionally, our Qstor™ Battery Energy Storage System ensures uninterrupted operations, improves power quality, and supports energy efficiency by demand response, peak shaving, and renewable energy integration. It serves as a safeguard against power outages and fluctuations.

## We offer a wide range of digital solutions by

- Securing your most valuable infrastructure and core operations with digital control and protection
- Leveraging asset digitalization for advanced software-based monitoring and diagnostics solutions
- Advisory services to address challenges like voltage stability, grid code compliance and reliability
    - A fully compliant grid connection concept for your Data Center
    - End-to-end cybersecurity solutions

## And what's more...

- We offer comprehensive service packages for all energy supply equipment and 24/7 access to our technical experts hotline.

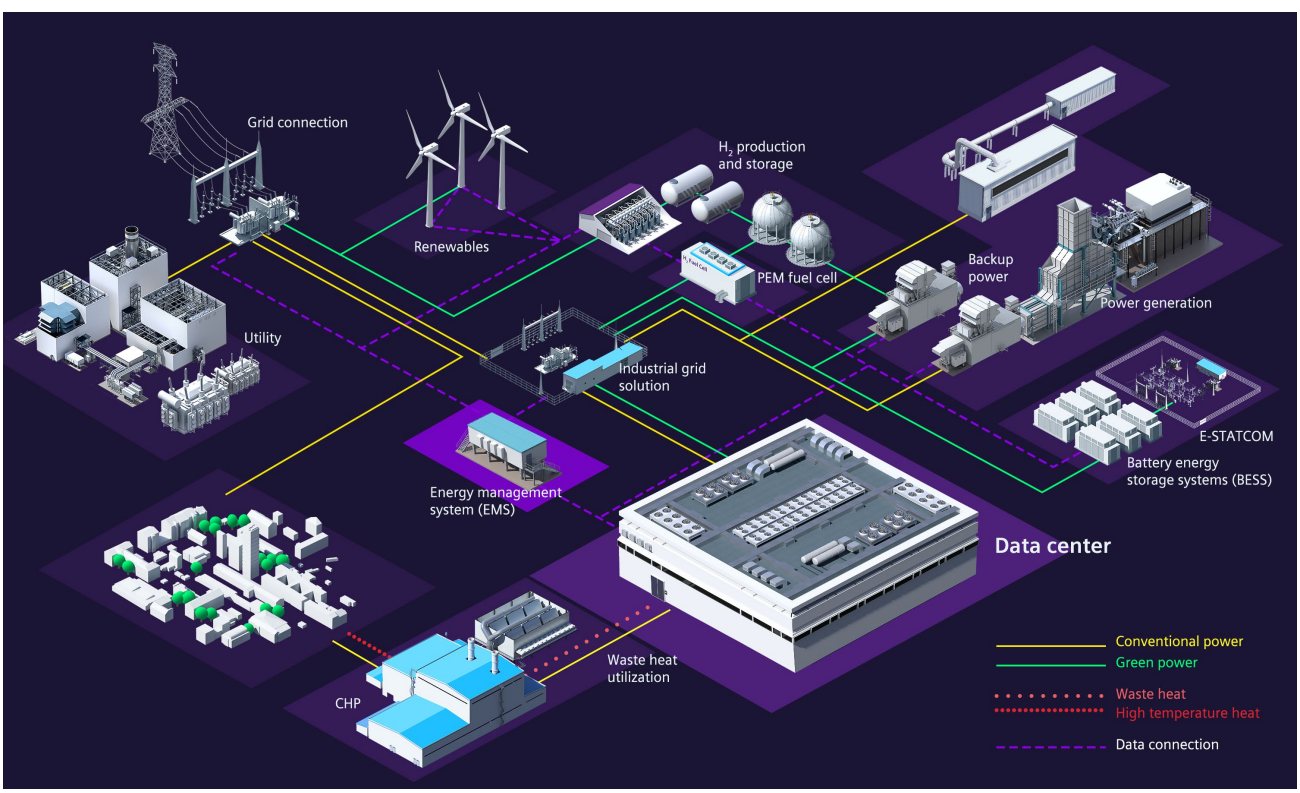


**Figure 2:** Data center energy landscape

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