
SIEMENS
Ingenuity for life
On-Site Energy Solutions
From a normal day to an extraordinary one, be prepared for anything.
usa.siemens.com/onsite-power

Ensuring Life Goes According to Plan

Through on-site energy solutions, Siemens puts power and control in your hands

Electrical energy. It powers everyday life. It enables progress and productivity and makes life predictable. When it's not available, lives are disrupted, plans are changed – organizations come to a standstill.

Today, there are more threats than ever to our power supply. Extreme weather, cyber attacks, and fluctuations in the power grid can quickly turn a normal day into an extraordinary one. But with foresight, planning, and know-how, a predictable power supply can be protected.

Power at the Point of Need

Siemens on-site energy solutions help organizations of all types be prepared for anything. With local energy generation, distribution, storage, and management, we engineer tailored solutions for customers looking to take control of their power supply and enhance reliability, resiliency, and sustainability. Dependence on the central grid is a thing of the past.

Take Charge

In an age when 24/7, always on presence is the norm and breakthrough technologies are more widespread, local generation has never been more important, or more viable. Siemens helps ensure operational continuity with

energy supply, storage, and management solutions for enterprises of all sizes and needs. We integrate new technologies, such as turbines and solar arrays, with existing assets to create manageable microgrids that keep your power on when the unexpected happens.

Take Control

On-site energy solutions offer a better way to proactively manage power consumption and help transform your organization from a passive consumer of power to an active prosumer. Siemens experts create energy solutions and strategies that go beyond reliability and provide greater control. You can more effectively manage power consumption and energy sources, reducing power usage and your organization's carbon footprint.

With the ability to connect and disconnect from the grid, you have more flexibility and the opportunity to generate significant cost savings. Energy can be purchased from the grid when rates are low and generated locally when costs are high. Excess energy can be sold back to your local utility.

Our team of energy experts helps develop an energy strategy and implementation that's configured around your needs. Whether it's an average day, or something altogether different, you'll be prepared.

Powerful Automated Controls

Local microgrids, made smart and simple to operate

Declare Independence

Siemens automation controllers for energy generation assets and microgrids put self-sustainability and independent operation within reach. Our Spectrum Power™ management software helps you optimally manage all your generation resources and interact with the central grid.

With Siemens Spectrum Power ADMS, you can plan, optimize, and professionally manage your own microgrid. The software predicts power loads and dynamically controls assets by integrating generation data with forecasting data and outside information, such as weather conditions.

Spectrum power management also enables revenue-generating capabilities, such as demand response. It identifies ideal situations for cost-savings, such as when to generate power independently.

Bring it All Together

Our automated control technology is the "glue" that brings your new and existing assets together into a single, operable microgrid. It provides a detailed view of all power assets so you can proactively manage generation and usage accordingly. During outages, you can easily island your operations from the grid.

Siemens automation controls create a seamless grid that's resilient and cyber secure. In addition to monitoring standard power generation, they also integrate diverse power sources such as wind and solar, biomass fuel cells and cogeneration plants, and legacy systems, like diesel generators. Even assets from different suppliers can be integrated. Create and manage your energy mix without fear of outages or power interruptions.

Power Generation Assets

A complete range of generating assets designed to meet any need

A leading player in power generation, Siemens offers one of the broadest portfolios of generation assets in the market, including gas turbines, combined heat and power (CHP), and renewables. Our customers range from universities to hospitals to energy-intensive manufacturers to local communities and power cooperatives. No matter your specific needs for power efficiency, reliability, and intensity, we have the assets to match it.

Tailor-Made Performance

Our portfolio of industrial gas turbines range from 2 to 53MW and are ideal for small energy producers and industrial operations. Aero derivative gas turbines offer a compact, lightweight design that delivers efficiency with fast start-up – ideal for situations when energy is needed quickly. Large, multi-building customers can access high-performance steam and gas turbines up to 100MW for more robust needs.

We have extensive experience in developing CHP solutions. Combining a gas turbine and a steam turbine that recycles heat exhaust, efficiency is improved by as much as 90%, reducing fuel consumption and your carbon emissions.

Siemens renewable solutions deliver reliability along with sustainability. Our experts can specify, design, and install complete solar arrays or customize a wind solution using technology developed for mid-to-low wind sites. We configure new solutions to work with other renewables as well as legacy assets in a full, turnkey solution.

Project Financing Options

At Siemens, we're committed to providing financially viable solutions that make it easier for your organization to have its own on-site energy solution. Siemens Financial Services offers investment solutions ranging from advisory services to technology and equipment finance. Our new turnkey approach, DBOOM (short for Design, Build, Own, Operate, and Maintain), provides upfront construction financing and removes the burden of infrastructure ownership with payments made based upon energy usage.

Energy Storage Solutions

The latest technology adds flexibility and cost savings

Modular energy storage systems make our on-site energy solutions that much more efficient. They provide one of the greatest assets of all – flexibility. You can accrue energy during low load periods and then release it during peak periods, balancing the energy equation in your favor, and adding cost savings.

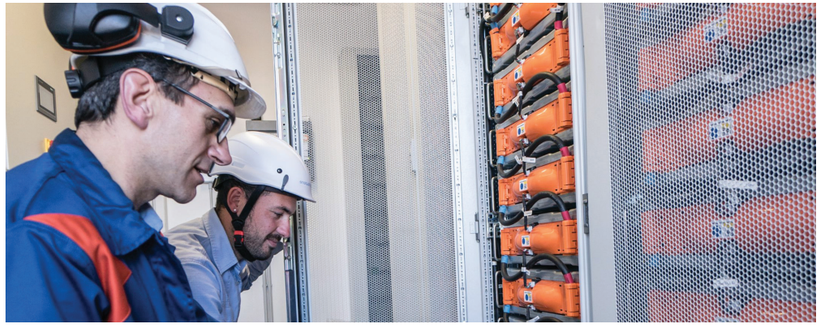
Performance Guaranteed

Siemens energy storage systems are built around Lithium-ion battery technology that is integrated into the local energy system via automated controllers. All our solutions are designed based on your specific infrastructure and backed with a performance guarantee.

In addition to managing supply and demand cost-effectively, our energy storage solutions help ensure balance over your on-site energy system. Storage technology helps optimize the performance of all assets by stabilizing frequency and voltage. It can also be used to mitigate the intermittency of renewable assets, like wind and solar, storing energy when it is sunny or windy, and releasing it when it's not.

Built to Last

Energy storage solutions from Siemens are customized to your specific needs and scalable to allow more assets in the future. They integrate with a wide range of generation assets, including renewables and fossil-based generation, as well as legacy and third-party assets, such as solar arrays and diesel generators.



Energy Engineering Expertise

Customized, engineered solutions with support at every stage

Our mission is simple: provide solutions that enable our customers to implement, run, and optimize an on-site energy system that meets their specific goals. We bring to the table expertise from across the energy spectrum to make this happen.

A Smarter Approach

Siemens provides expert consultative and technical services to support your solution from installation through commissioning. The process begins with conceptual design and technology selection and includes project feasibility studies, project design, construction and commissioning, and service and performance.

For all projects, we utilize on-staff energy modeling experts to match demand and supply needs and provide ongoing optimization based on factors like cost and weather conditions. And, we work with you to ensure smart integration of new and existing assets.

A Technology Partner

You can trust Siemens experts to be at your side providing guidance and direction that encompass the entire on-site energy solution – from generation, to storage, to control.

Committed Support
Siemens provides service and support to ensure optimal operations and maintenance of your on-site energy solution. We provide flexible service options based upon our customers' specific needs and capabilities. Services are designed to support the entire project lifecycle – including upgrades and condition monitoring – to optimize performance and maximize success.

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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract. The document contains a general product overview. Availability can vary by country. For detailed product information, please contact the company office or authorized partners.