SIEMENS

Press

Zug, Switzerland, November 17, 2025

AI and digitalization power the next phase of clean energy transition, Siemens report finds

- **65 percent of companies in energy sector believe electrification is most feasible way to achieve net zero**
- **74 percent say that smart grids and grid software are crucial enablers of the clean energy transition, accelerating progress on renewables, energy efficiency and electrification**
- **Energy industry executives expect increased use of autonomous systems to lower operating costs, improve energy efficiency, provide greater reliability**
- **Siemens' biennial study of 1,400 global executives explores the state of the infrastructure transition across energy, industry and buildings**

According to new research, over 70 percent of energy sector respondents believe that digital technologies, particularly artificial intelligence (AI) and grid software, are essential to enabling the clean energy transition. Such technology supports the integration of renewables, transition to electrification, and optimization of energy efficiency, all of which are key to reducing fossil fuel usage.

The *Siemens Infrastructure Transition Monitor 2025*, which surveyed 1,400 senior executives, shows that 59 percent of energy industry leaders plan major investments in autonomous systems for grids, and 68 percent view them as crucial for cutting emissions. Nearly three-quarters (72 percent) of organizations in the sector say that, over the next three years, AI will transform how their business operates, with 74 percent saying that AI is helping to make critical infrastructure more resilient.

Siemens AG
Communications
Head: Christiane Ribeiro

Werner-von-Siemens-Straße 1
80333 Munich
Germany

Respondents indicated that the most likely outcomes from increased use of autonomous systems to manage power grids are lower operating costs, increased energy efficiency, and greater reliability.

While the 2025 study indicated significant progress on a number of important goals such as the phase-out of fossil fuel energy and the expansion of large-scale energy storage and renewable generation compared to results in the 2023 Infrastructure Transition Monitor, there are still opportunities for even greater progress.

Indeed, over half of companies in the energy sector (58 percent) say uncertainty about future energy system design is delaying investment in clean energy technologies. And, while 65 percent agree that electrification is the most feasible way to achieve net zero energy systems, 73 percent report that it is being held back by inadequate grid infrastructure.

Sabine Erlinghagen, CEO of Siemens Grid Software, said: “Outdated grid infrastructure poses a serious threat to the clean energy transition. By harnessing digital technologies to move towards autonomous grids, it is possible to boost grid capacity, ensuring its reliability and resilience. To that end, regulation must also keep pace with digitalization and innovation - ensuring that our energy systems are equipped to meet the demands of a clean energy future.

About the Siemens Infrastructure Transition Monitor:
The *Siemens Infrastructure Transition Monitor 2025* is a biennial study commissioned by Siemens, surveying 1,400 senior executives and government representatives in 19 countries across energy, buildings and industries.

This press release is available here.

For more information on Siemens Smart Infrastructure, please see Siemens Smart Infrastructure.

Contact for journalists
Siemens Smart Infrastructure
Lena Carlson
Phone: +49 0159 0168 4611; E-mail: lena.carlson@siemens.com

Follow us on X at: www.x.com/siemens_press, www.x.com/siemensinfra

Siemens Smart Infrastructure (SI) is shaping the market for intelligent, adaptive infrastructure for today and the future. It addresses the pressing challenges of urbanization and climate change by connecting energy systems, buildings, and industries. SI provides customers with a comprehensive end-to-end portfolio from a single source – with products, systems, solutions, and services from the point of power generation all the way to consumption. With an increasingly digitalized ecosystem, it helps customers thrive and communities progress while contributing toward protecting the planet. To protect this journey, we foster holistic cybersecurity to ensure secure and reliable operations. Siemens Smart Infrastructure has its global headquarters in Zug, Switzerland. As of September 30, 2024, the business had around 78,500 employees worldwide.

Siemens AG (Berlin and Munich) is a leading technology company focused on industry, infrastructure, mobility, and healthcare. The company's purpose is to create technology to transform the everyday, for everyone. By combining the real and the digital worlds, Siemens empowers customers to accelerate their digital and sustainability transformations, making factories more efficient, cities more livable, and transportation more sustainable. A leader in industrial AI, Siemens leverages its deep domain know-how to apply AI – including generative AI – to real-world applications, making AI accessible and impactful for customers across diverse industries. Siemens also owns a majority stake in the publicly listed company Siemens Healthineers, a leading global medical technology provider pioneering breakthroughs in healthcare. For everyone. Everywhere. Sustainably.
In fiscal 2025, which ended on September 30, 2025, the Siemens Group generated revenue of €78.9 billion and net income of €10.4 billion. As of September 30, 2025, the company employed around 318,000 people worldwide on the basis of continuing operations. Further information is available on the Internet at www.siemens.com.