



GE Vernova releases AI-powered autonomous inspection software designed to transform energy asset inspections

- Autonomous Inspection is a cloud-based computer vision software program that leverages AI/ML algorithms to automate manual-intensive processes and help enable faster, safer, and more cost-effective inspections and monitoring
- Brings visual data and insights to GE Vernova’s Asset Performance Management (APM) and helps accelerate progress on digital transformation and energy transition goals

CAMBRIDGE, Mass. (May 2, 2024) – [GE Vernova](#) (NYSE: GEV)—a global leader in electrification, decarbonization, and energy solutions—today announced the launch of [Autonomous Inspection](#), a cloud-based computer vision software solution designed to automate the manual inspection and monitoring of industrial assets by utilizing image capture devices and artificial intelligence/machine learning (AI/ML) algorithms. This new software integrates with select applications within GE Vernova’s Asset Performance Management (APM), a suite of software and services designed to help asset performance and operations and maintenance (O&M) efficiency across equipment, plant, and an entire fleet. Designed to be industry-agnostic, Autonomous Inspection can help users in energy generation and other industries access and act on visual data and insights within APM applications to improve asset and operational outcomes.

"In the energy industry, computer vision is not just about seeing, it’s about foresight. Autonomous Inspection is the eyes of our APM suite and is powered by AI technology that turns images into rich data that can help power insights to transform how we safeguard, optimize, and propel the future of energy," said [Linda Rae](#), **General Manager of GE Vernova’s Power & Energy Resources Software business**. "Digitalizing operations has helped customers in quality, safety, and performance improvements, as well as emission management."

Despite significant digital progress witnessed by the energy industry, traditional manual asset inspection processes often continue to slow momentum and pose challenges. They are often resource intensive, prone to safety risks and errors, and difficult to scale. Furthermore, they are fast becoming unsustainable due to the rapidly changing energy landscape with decentralization of assets due to renewables sources, workforce availability challenges, and tougher generation requirements.

Autonomous Inspection is designed to support and contribute to the digital transformation of the energy industry in multiple ways, including:



- **Accelerating operational excellence:** By removing bottlenecks like manual-intensive and siloed inspection workflows through automation, a major oil and gas firm was able to reduce inspection review time for corrosion images from two weeks to 30 minutes using Autonomous Inspection during a pilot.[\[1\]](#)
- **Helping with safety and compliance:** Workers need to perform inspections at elevated heights or near heated equipment that pose serious risks to personal safety. With Autonomous Inspection, cameras and AI/ML models can be used to reduce such safety risks. The technology can also lessen the need for inspection-specific travel, as gathered inspection data and insights can be accessed remotely over the cloud. A major European utility is using Autonomous Inspection to monitor critical electrical equipment like transformers and switchyards and facilitate their transition to a remote-enabled, safer, and more efficient asset inspection model.
- **Helping performance goals while transforming:** It's crucial for energy firms to meet their profitability goals while adapting to energy transition needs. According to **John Villali, Senior Research Director for IDC Energy Insights, IDC**, "Over 20% savings on O&M cost could be realized from leveraging autonomous visual asset inspections." Autonomous Inspection automates the manual-intensive workflows to help workers save time and effort. It is designed to enable workers to detect defects faster and sends them alerts to enable earlier actions for improving asset uptime.

Additionally, Autonomous Inspection can be useful when it comes to inspecting geographically dispersed assets like solar and wind farms, where a manual inspection approach isn't effective.

Designed as an industry-agnostic solution, Autonomous Inspection can serve applications in industries beyond energy generation. The cloud-based, AI-powered software has the capability to automate inspection and monitoring workflows, including automated image data collection, processing, integration, analysis, and management. It's available for a range of use cases, including automated gauge reading, corrosion detection and severity classification, and thermal profiling of equipment. By leveraging computer vision, Autonomous Inspection tackles the traditional inspections bottleneck, enabling smarter, data-driven inspections and helping firms accelerate progress on digitalization and energy transitions goals.

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Forward-Looking Statements

This document contains forward-looking statements – that is, statements related to future events that by their nature address matters that are, to different degrees, uncertain. These forward-looking statements often address GE Vernova's expected future business and financial performance and financial condition, and the expected performance of its products, the impact of its services and the results they may generate or produce, and often contain words such as "expect," "anticipate," "intend," "plan," "believe," "project," "seek," "see," "will," "would," "estimate," "forecast," "target," "preliminary," or "range." Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about planned and potential transactions, investments or projects and their expected results and the impacts of macroeconomic and market conditions and volatility on the Company's business



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operations, financial results and financial position and on the global supply chain and world economy.

About GE Vernova

GE Vernova (NYSE: GEV) is a purpose-built global energy company that includes Power, Wind, and Electrification segments and is supported by its accelerator businesses. Building on over 130 years of experience tackling the world's challenges, GE Vernova is uniquely positioned to help lead the energy transition by continuing to electrify the world while simultaneously working to decarbonize it. GE Vernova helps customers power economies and deliver electricity that is vital to health, safety, security, and improved quality of life. GE Vernova is headquartered in Cambridge, Massachusetts, U.S., with more than 80,000 employees across 100+ countries around the world. Supported by the Company's purpose, The Energy to Change the World, GE Vernova technology helps deliver a more affordable, reliable, sustainable, and secure energy future. Learn more: [GE Vernova](#) and [LinkedIn](#).

GE Vernova's **Electrification Software** business is focused on delivering the intelligent applications and insights needed to accelerate electrification and decarbonization across the entire energy ecosystem – from how it's created, how it's orchestrated, to how it's consumed. Its **Power & Energy Resources Software** helps improve reliability and drive decarbonization.

[1] *These results were achieved by a pilot customer. Actual results for other customers may vary.*

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