



Terra Innovatum Launches Initiative to Enhance SOLO™ Reactor Output and Efficiency

June 17, 2026

Targets ~25% higher electrical output per reactor through advanced power conversion and sCO₂ turbomachinery solutions from Baker Hughes

NEW YORK, June 17, 2026 (GLOBE NEWSWIRE) -- Terra Innovatum Global N.V. (NASDAQ: NKLR), the developer of the SOLO™ Micro Modular Reactor (MMR), today announced a major initiative to scale its next generation reactor platform and unlock higher efficiency for larger, more cost effective clean energy installations.

As part of this initiative, Terra Innovatum is advancing an optimized power conversion architecture designed to increase net electrical output per reactor and reduce the number of units required for multi-megawatt installations. Early engineering assessments indicate a significant improvement per-reactor in electrical output, enabling more efficient deployment across industrial, distributed energy, and off grid markets.

This initiative includes the integration of advanced turbomachinery solutions, **including supercritical CO₂ (sCO₂) power conversion technology provided by Baker Hughes**, an energy technology company that provides solutions to energy and industrial customers worldwide. These systems may support higher cycle efficiency, a smaller footprint, and simplified balance-of-plant requirements for Terra Innovatum's future reactor configurations. Under a recently signed **Memorandum of Understanding**, the two companies will collaborate to accelerate Terra Innovatum's reactor configuration optimization, including evaluation of Baker Hughes' sCO₂ power conversion solutions.

Key highlights of the initiative include:

- **Reactor efficiency enhancement:** Preliminary studies indicate a potential increase from ~1 MWe to as much as ~1.25 MWe per SOLO™ reactor.
- **Reduced system complexity:** Higher per unit output may allow customers to reach target capacities with fewer reactors—for example, achieving 5 MWe with four reactors instead of five.
- **Flexible scaling:** Terra Innovatum is evaluating multiple turbomachinery technologies, including both simplified and more complex sCO₂ cycles, as well as steam cycle alternatives, for use across small-, medium-, and large-scale installations.
- **Pathway toward future commercial deployment:** The initiative accelerates Terra Innovatum's configuration decisions and supports its planning for near-term market introduction.

Terra Innovatum remains the sole architect and integrator of the overall SOLO™ reactor platform responsible for system design, safety, licensing, and deployment.

Terra Innovatum's analysis will determine optimal power conversion solutions based on project size, customer requirements, and performance criteria. This includes the potential use of sCO₂ technology for compact installations, steam cycle equipment for large-scale deployments, and hybrid architectures for specialized applications.

“This initiative represents a critical step in our mission to deliver high-efficiency, scalable clean energy solutions,” said Alessandro Petruzzi, Co-Founder and CEO of Terra Innovatum. **“Leveraging Baker Hughes’s technical know-how and advanced turbomachinery equipment allows us to accelerate performance optimization and support the broad range of applications our customers require.”**

This effort reinforces Terra Innovatum's commitment to bringing compact, safe, and commercially viable nuclear energy solutions to global markets at a pace that meets rapidly growing demand.

ABOUT TERRA INNOVATUM & SOLO™

Terra Innovatum's mission is to make nuclear power accessible. We deliver simple and safe micro-reactor solutions that are scalable, affordable and deployable anywhere 1 MWe at a time.

Terra Innovatum is a pioneering force in the energy sector, dedicated to delivering innovative and sustainable power solutions. Terra Innovatum plans to leverage cutting-edge nuclear technology through the SOLO™ Micro-Modular Reactor (SMR™) to provide efficient, safe, and environmentally conscious energy. With a mission to address global energy shortages, Terra Innovatum

combines extensive expertise in nuclear industry design, manufacturing, and installation licensing to offer disruptive energy solutions. Committed to propelling technological advancements, Terra Innovatum and SOLO™ are dedicated to fostering prosperity and sustainability for humankind.

It is anticipated that SOLO™ will be available globally within the next three years. Conceptualized in 2018 and engineered over six years by experts in nuclear safety, licensing, innovation, and R&D, SOLO™ addresses pressing global energy demands with a market-ready solution. Built from readily available commercial off-the-shelf components, the proven licensing path for SOLO™ enables rapid deployment and minimizes supply chain risks, ensuring final cost predictability. Designed to adapt with evolving fuel options, SOLO™ supports both LEU+ and HALEU, offering a platform ready to transition to future fuel supplies.

SOLO™ will offer a wide range of versatile applications, providing CO2-free, behind-the-meter, and off-grid power solutions for data centers, mini-grids serving remote towns and villages, and large-scale industrial operations in hard-to-abate sectors like cement production, oil and gas, steel manufacturing, and mining. It also has the ability to supply heat for industrial applications and other specialized processes, including water treatment, desalination and co-generation. Thanks to its modular design, SOLO™ can easily scale to deliver up to 1GW or more of CO2-free power with a minimal footprint, making it an ideal solution for rapidly replacing fossil fuel-based thermal plants. Beyond electricity and heat generation, SOLO™ can also contribute to critical applications in the medical sector by producing radioisotopes essential for oncology research and cancer treatment.

To learn more, visit: <https://investors.terrainnovatum.com/>. Follow us on X: <https://x.com/TerraInnovatum> and LinkedIn: <https://www.linkedin.com/company/terra-innovatum-solo/>.

FORWARD LOOKING STATEMENTS

This press release includes “forward-looking statements” within the meaning of the federal securities laws, including, but not limited to, opinions and projections prepared by Terra Innovatum’s management. Forward-looking statements generally relate to future events or future financial or operating performance, including pro forma and estimated financial information, and other “forward-looking statements” (as such term is defined in the Private Securities Litigation Reform Act of 1995). The recipient can identify forward-looking statements because they typically contain words such as “outlook,” “believes,” “expects,” “will,” “projected,” “continue,” “increase,” “may,” “should,” “could,” “seeks,” “predicts,” “intends,” “trends,” “plans,” “estimates,” “anticipates” or the negatives or variations of these words or other comparable words and/or similar expressions (but the absence of these words and/or similar expressions does not mean that a statement is not forward-looking). These forward-looking statements specifically include, but are not limited to, statements regarding estimates and forecasts of financial and performance metrics, projections of market opportunity and market share, expected timing for regulatory approvals and commercialization and the potential success of Terra Innovatum’s strategy and expectations. Forward-looking statements, opinions and projections are neither historical facts nor assurances of future performance. Instead, they are based only on current beliefs, expectations and assumptions regarding the future of Terra Innovatum’s business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of Terra Innovatum’s control. These uncertainties and risks may be known or unknown. Factors that may cause actual results to differ materially from current expectations include, but are not limited to: changes in domestic and foreign business, market, financial, political and legal conditions; failure to realize the anticipated benefits of the proposed business combination; risks relating to the uncertainty of the projected financial information with respect to Terra Innovatum; future global, regional or local economic and market conditions; the development, effects and enforcement of laws and regulations; Terra Innovatum’s ability to manage future growth; Terra Innovatum’s ability to develop new products and services, bring them to market in a timely manner, and make enhancements to its platform; the effects of competition on Terra Innovatum’s future business; and the outcome of any potential litigation, government and regulatory proceedings, investigations and inquiries and other risks and uncertainties described under the heading “Risk Factors” in documents Terra Innovatum files from time to time with the Securities and Exchange Commission. If any of these risks materialize or the Terra Innovatum’s assumptions prove incorrect, actual results could differ materially from the results implied by the forward-looking statements contained herein. In addition, forward-looking statements reflect Terra Innovatum’s expectations and views as of the date of this presentation. Terra Innovatum anticipates that subsequent events and developments will cause its assessments to change. However, while Terra Innovatum may elect to update these forward-looking statements in the future, each of them specifically disclaims any obligation to do so. Accordingly, you should not place undue reliance on the forward-looking statements, which speak only as of the date they are made.

CONTACTS

Giordano Morichi

Founding Partner, Chief Business Development Officer & Investor Relations
Terra Innovatum Global N.V.
E: g.morichi@terrainnovatum.com
W: www.terrainnovatum.com

Investor Relations

Simon Willcocks, Alliance Advisors IR
E: TerraIR@allianceadvisors.com

Media Relations

Alliance Advisors IR

E: TerraR@allianceadvisors.com