Terra Innovatum Global Advances SOLO™ Microreactor Licensing with Completion of Key PIRT Milestone Ahead of U.S. NRC Submission

February 2, 2026

- U.S. NRC technical report submission targeted for February 2026, advancing SOLO™ along its licensing pathway.
- Completion of the SOLO™ Phenomena Identification and Ranking Table (PIRT), delivering a structured, expert-driven assessment of the key physical phenomena governing system behavior to inform modeling, design, and safety decisions.
- SOLO™ PIRT was developed by a formal expert panel, in alignment with U.S. NRC guidance and industry best practices.
- PIRT outcomes will directly support upcoming licensing filings, including the Preliminary Safety Analysis Report ("PSAR").
- To recognize this milestone and the panel's contributions, Terra Innovatum hosted the PIRT expert panel at its new headquarters in Lucca, Italy.

NEW YORK, Feb. 02, 2026 (GLOBE NEWSWIRE) -- Terra Innovatum Global N.V. ("**Terra Innovatum**" or the "**Company**") (NASDAQ: NKLR), a developer of micro-modular nuclear reactors announced today the completion of the Phenomena Identification and Ranking Table (**PIRT**) for its SOLO™ microreactor, a key technical milestone supporting the company's U.S. licensing and safety analysis program. A technical report documenting the PIRT methodology and results is scheduled for submission to the U.S. Nuclear Regulatory Commission (NRC) planned for February 2026.

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Members of the Terra Innovatum Global team and SOLO™ PIRT expert panel in "Villa Nannini", Terra Innovatum's New Headquarters (Lucca, Italy), following the completion of the PIRT, ahead of the planned US NRC submittal.



In Picture: Members of the Terra Innovatum Global team and SOLO™ PIRT expert panel in "Villa Nannini", Terra Innovatum's New Headquarters (Lucca, Italy), following the completion of the PIRT, ahead of the planned US NRC submittal.

Cesare Frepoli – Co-Founder, COO & Licensing Director stated: *"This milestone reflects our disciplined, risk-informed licensing strategy and our commitment to technical rigor from the earliest stages of design. By applying a transparent, NRC-aligned PIRT process, we are ensuring that safety-significant phenomena are identified and addressed in a manner that supports efficient, predictable regulatory engagement. Submission of the PIRT technical report to the NRC in February represents an important step in Terra Innovatum's broader U.S. licensing strategy for the SOLO™ microreactor, supporting both first-of-a-kind deployment and a scalable framework for future applications."*

Alessandro Petruzzi – Co-Founder & CEO continued: *"The PIRT process is a structured, expert-driven approach used to identify and rank the physical phenomena most important to reactor safety and system performance across normal operation, anticipated operational occurrences, and postulated accident conditions. Completion of this work strengthens the technical foundation underpinning SOLO™'s safety analysis methods, modeling assumptions, and evaluation approaches that support key licensing deliverables.*

We were especially proud to host the PIRT expert panel at Terra Innovatum's new headquarters in Lucca, Italy, marking an important milestone for both the SOLO™ program and our growing global organization. Developed through a formal expert panel process consistent with established U.S. NRC guidance and industry best practices for advanced and non-power reactor designs, the SOLO™ PIRT will directly inform downstream licensing activities, including topical reports and safety analyses supporting the Preliminary Safety Analysis Report (PSAR)."

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). For example, projections of future sales, EBITDA, Adjusted EBITDA and other metrics are forward-looking statements. 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 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. 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.

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A photo accompanying this announcement is available at https://www.globenewswire.com/NewsRoom/AttachmentNg/d1e515a1-dc64-4716-8129-241f72462830