

**Terra Innovatum Makes Global Debut Interviewing at NYSE to Introduce SOLO™: The World's First Micro Modular Nuclear Reactor Set for Commercial Launch by 2028**

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**NEW YORK, NY / ACCESSWIRE / December 11, 2024 /** As global energy needs surge, driven by population growth, technological advancements, and the urgent transition to cleaner energy sources to combat climate change, Terra Innovatum emerges as a pioneer in addressing these challenges. Founded in 2018, the Italian company boasts decades of consolidated international experience in nuclear design, R&D, safety, manufacturing, and unprecedented knowhow in licensing; having worked on three different nuclear power plants licensing processes. Leveraging this unparalleled expertise, Terra Innovatum is revolutionizing the micro reactor sector by introducing, during interviews at New York Stock Exchange (NYSE), SOLO -the world's first micro-modular nuclear reactor, commercially available by 2028.



The story of human progress is a story of energy. From rural communities to modern societies, energy has driven human advancement. Yet, emerging economies face inequitable access, remaining underserved, while developed nations grapple with soaring demands. With the global population projected to reach 9.8 billion by 2050, energy needs are set to rise 50% in 25 years demanding urgent sustainable solutions.

While all energy sources play a critical role in the transition to Net-Zero, options like carbon capture and renewables such as solar currently account for only 3% (c.a.) of the global energy production. These solutions, while vital, fall short of generating the capacity needed to meet rising global demands. Nuclear power, by its very physics, offers a robust, carbon-free alternative capable of aligning with modern society's growing and urgent energy needs. "SOLO provides a highly scalable energy platform, designed for mass production like any commodity, poised to transform the energy market. Our reactor ensures embedded safety by design features, waste decommissioning planning, consistent, reliable, and large-scale power without the limitations of intermittent renewables, giving an unparalleled, cost-effective solution for low-carbon electricity generation for more than 50 years, thanks its core-swap options. SOLO's innovation is crucial for meeting future global energy demands while supporting sustainable development goals." comments Alessandro Petrucci, Co-Founder & CEO of Terra Innovatum.



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The SOLO micro-modular nuclear reactor redefines energy solutions with its self-sufficient design, eliminating dependence on outdated power grids that, in many regions, suffer from poor maintenance and require substantial public investment to modernize. SOLO's advanced safety features will be built following IAEA international safeguards guidelines and bolstered by 24/7 integrated monitoring, ensuring secure and reliable operations. Its self-standing and modular design is adaptable to any circumstance or topography enabling seamless deployment across diverse global communities, ultimately meeting various types of energy needs. Beyond powering communities, SOLO will revolutionize fields such as the medical and health ones, especially the oncology sector through radioisotope production, support energy-intensive water desalination processes, and accelerate progress toward the United Nations' 2030 Agenda for Sustainable Development. By addressing critical challenges like poverty, limited access to education and healthcare, and the need for sustainable industries and climate action, SOLO is poised to empower communities and foster a more equitable, sustainable future.

*"Our micro reactor's architecture is designed for today's needs and operations while keeping in mind future development and use-cases. SOLO is built from readily available commercial off-the-shelf components (COTS) with proven licensing path to enable immediate deployment to the marketplace. This product strategy minimizes supply-chain risks and provides final cost certainty. Our micro reactor also provides the only platform able to transition from current to future fuel products and supply, as SOLO will work with different fuel taking benefit of LEU+ and HALEU."* Intervened Marco Cherubini, Co-Founder, CTO & SOLO Product Director of Terra Innovatum. SOLO's modularity is key not only to provide the world with maximum distributed energy access, but to scale the power capacity harnessing the full potential of nuclear technology.

*"Each reactor generates 1 MWe of energy, a deliberate design choice to ensure safety by preventing core-melt scenarios typically associated with significantly higher thermal outputs. This energy level allows our reactor to cool efficiently and sustainably through natural convection, complementing multiple shutdown systems that exceed industry standard requirements. Additionally, due to the reactor's non-water-based design, hydrogen or steam explosions are physically impossible, further enhancing its safety profile."* continued Cesare Frepoli, Co-Founder, COO & Director of Licensing and Regulatory Affairs of Terra Innovatum. As SOLO's safety by design is a key differentiator, its modularity unlocks exceptional scalability and power optimization. With its minimal land footprint and emergency zone reduced to operational boundary, SOLO reactors have the potential to transform urban landscapes, meeting municipal electricity needs. At the same time, when deployed in series in remote locations and within 1km radius (approximately half a mile), they can achieve power outputs up to 1 GWe-perfectly aligned with the increasing energy demands driven by big data, data centers, and the rapid growth of AI technologies.

*"The nuclear energy market has surged over the past six months, with nuclear ETFs now surpassing the combined assets of all other energy funds. High-profile endorsements further validate this trend: Bill Gates announced plans to invest \$1 billion in nuclear energy, Amazon committed \$500 million to SMRs, and Sam Altman entered the same space-not to consider the favor of the current US administration in power. This momentum reflects a global energy demand and positions micro reactors as a critical solution, particularly for powering AI-driven advancements and energy-intensive data centers. Terra Innovatum has invested millions internally to finalize the SOLO reactor, embedding safety and security solutions in the design, while discussions with external capital sources and strategic public-private partnerships are underway to secure both short and long-term financing. The USNRC has been briefed on our action plan, with formal engagement slated for beginning 2025. As artificial intelligence is reshaping modern society, SOLO will drive its evolution, delivering the energy needed to power technological progress and human flourishing-with commercial availability set for 2028."* announced in conclusion Giordano Morichi, Partner, Chief Business Development Officer & Investor Relations of Terra Innovatum.

As the world anticipates the dawn of a new year, Terra Innovatum, is poised to revolutionize the global energy landscape today. By harnessing innovation and cutting-edge advancements in nuclear micro reactor technology, validated fuel systems, and an established supply chain, the company is set to introduce SOLO to the global market within four years-marking a revolutionary leap forward into a sustainable energy future.

#### About Terra Innovatum & SOLO™:

Terra Innovatum (TINN) is a pioneering force in the energy sector, dedicated to delivering innovative and sustainable power solutions. As the parent company of SOLO™, TINN leverages 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, TINN combines extensive expertise in nuclear industry design, manufacturing, and installation licensing to offer disruptive and immediate solutions. Committed to propelling technological advancements, Terra Innovatum and SOLO™ are dedicated to fostering prosperity and sustainability for humankind.

SOLO (2028), the world's only commercially deployable Micro Modular Nuclear Reactor to this day, is set to be available globally within the next four years. Conceptualized in 2018 and engineered over five 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 (COTS) components, SOLO's proven licensing path 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 the only platform ready to transition to future fuel supplies.

W: <https://www.x-solo.com/>

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