NANO Nuclear Energy Signs MOU with Vert2Grow Energy Solutions to Bring Sustainable Energy and Food Production to Remote Communities

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New York, N.Y., Dec. 03, 2024 (GLOBE NEWSWIRE) -- NANO Nuclear Energy Inc. (NASDAQ: NNE) ("NANO Nuclear" or "the Company"), a leading advanced nuclear energy and technology company focused on developing portable, clean energy solutions, today announced the signing of a non-binding Memorandum of Understanding (MOU) with Vert2Grow Energy Solutions Inc. (Vert2Grow). Vert2Grow utilizes vertical farming technology provided by Food Security Structures Canada (FSSC).

Under the MOU, the parties aim to explore the integration of Nano Nuclear's portable microreactor technology in development with the innovative vertical farming solutions of Vert2Grow and its technology partner FSSC to deliver sustainable power and food production capabilities to remote communities worldwide.

The MOU, which establishes an initial, two-year exploration period, seeks to address the pressing challenges faced by remote and underserved areas, where access to reliable energy and food supply is limited. By leveraging NANO Nuclear's advanced reactor systems in development and FSSC's proprietary controlled-environment agriculture technology, the collaboration will develop a comprehensive framework to deliver innovative solutions that can transform isolated communities, disaster-prone regions, and industrial sites and may eventuate in the execution of one or more definitive agreements between the parties.

Founded in 2019, FSSC specializes in pioneering vertical farming systems that are designed for scalability, operational efficiency, and resilience. With advanced automation, energy-efficient lighting, and climate control technologies, FSSC's growing system enables year-round, high-yield food production in challenging environments. Together with NANO Nuclear's portable microreactor technology, the collaboration aims to revolutionize the way remote communities sustain themselves.

"This collaboration embodies NANO Nuclear Energy's vision to deliver not just power, but transformative solutions for communities that need them most," **said James Walker, Chief Executive Officer and Head of Reactor Development of NANO Nuclear Energy.** "By combining our plans for clean, portable nuclear power with state-of-the-art vertical farming systems, we are seeking to address two of the most critical needs in remote regions: reliable energy and food security."

Project Scope

The collaboration's initial scope of work over the next several years includes:

- **Feasibility Studies**: Conducting detailed research and assessments to evaluate the integration of microreactor and vertical farming technologies, including technical compatibility, economic viability, and market demand.
- **Site Selection**: Identifying and shortlisting optimal locations for pilot projects, focusing on remote communities, disaster-prone areas, and industrial camps across sub-Saharan Africa, South America, Southeast Asia, and Northern Canada.
- **Pilot Project Implementation**: Designing and launching a potential pilot program by 2027, integrating a prototype microreactor system with a demonstration vertical farm.
- **Community Engagement and Training**: Developing outreach programs to train local personnel in operating and maintaining the integrated systems, ensuring long-term sustainability and community participation.

The collaboration also aims to scale deployment globally, tailoring systems to specific customer needs, from isolated villages to mining operations, with a target deployment timeline beginning in the early 2030s, assuming all milestones, including applicable regulatory approvals, are achieved.

Empowering Remote Communities

FSSC's vertical farming systems, combined with NANO Nuclear's clean micro nuclear energy solutions, create the potential to provide consistent access to fresh, nutritious food while reducing dependence on diesel generators and imported provisions. This integrated approach envisions delivering significant economic, social, and environmental benefits, empowering communities to thrive in previously unsustainable conditions.

"The potential of this collaboration to redefine food and energy access in remote regions is another step forward for our company," **said Jay Yu, Founder and Chairman of NANO Nuclear Energy.** "We are thrilled to partner with Vert2Grow to address critical challenges in food production and energy supply, contributing to resilient and self-sufficient communities worldwide."

“Working with NANO Nuclear Energy through our partnership in Vert2Grow Energy Solutions provides a tremendous opportunity to address one of the biggest challenges with any controlled-environment agricultural system – affordable energy,” **said Kim Parker, President & CEO of Food Security Structures Canada.** “We’ve designed our growing systems to have extremely low energy needs; however in many communities around the world, energy is incredibly expensive or may not even be available. The pairing of our systems with the energy provided through NANO Nuclear Energy’s technology could radically transform food production in remote communities, and will help us fulfill our mission of empowering communities to grow fresh, nutritious, delicious food all year round, regardless of location.”

About Vert2Grow Energy Solutions

Vert2Grow Energy Solutions, a start-up partnership between Food Security Structures Canada and Marina Point Capital Inc., is a pioneering initiative focused on providing innovative alternative energy solutions for the vertical farming industry. Food Security Structures Canada's agricultural technology provides expertise and its suite of high efficiency proprietary indoor farming products, Vert2Grow aims to address the increasing energy demands of vertical farming systems with environmentally friendly, energy-efficient technologies.

About Food Security Structures Canada

Food Security Structures Canada is proud to provide the latest in indoor agriculture technology to empower individuals and communities to grow high quality, fresh, nutritious produce in any environment regardless of the climate or time of year. FSSC provides turnkey, easy to assemble, scalable and sustainable vertical farming structures that can be implemented to help combat and protect against food insecurity. FSSC growing systems are engineered for ease of operation, maximum efficiency and low operational costs. Together they provide high yields using minimal resources for maximum results.

About NANO Nuclear Energy, Inc.

NANO Nuclear Energy Inc. (NASDAQ: NNE) is an advanced technology-driven nuclear energy company seeking to become a commercially focused, diversified, and vertically integrated company across five business lines: (i) cutting edge portable microreactor technology, (ii) nuclear fuel fabrication, (iii) nuclear fuel transportation, (iv) nuclear applications for space and (v) nuclear industry consulting services. NANO Nuclear believes it is the first portable nuclear microreactor company to be listed publicly in the U.S.

Led by a world-class nuclear engineering team, NANO Nuclear’s products in technical development are **“ZEUS”, a solid core battery reactor, and “ODIN”, a low-pressure coolant reactor**, each representing advanced developments in clean energy solutions that are portable, on-demand capable, advanced nuclear microreactors.

Advanced Fuel Transportation Inc. (AFT), a NANO Nuclear subsidiary, is led by former executives from the largest transportation company in the world aiming to build a North American transportation company that will provide commercial quantities of HALEU fuel to small modular reactors, microreactor companies, national laboratories, military, and DOE programs. Through NANO Nuclear, AFT is the exclusive licensee of a patented high-capacity HALEU fuel transportation basket developed by three major U.S. national nuclear laboratories and funded by the Department of Energy. Assuming development and commercialization, AFT is expected to form part of the only vertically integrated nuclear fuel business of its kind in North America.

HALEU Energy Fuel Inc. (HEF), a NANO Nuclear subsidiary, is focusing on the future development of a domestic source for a High-Assay, Low-Enriched Uranium (HALEU) fuel fabrication pipeline for NANO Nuclear’s own microreactors as well as the broader advanced nuclear reactor industry.

NANO Nuclear Space Inc. (NNS), a NANO Nuclear subsidiary, is exploring the potential commercial applications of NANO Nuclear’s developing micronuclear reactor technology in space. NNS is focusing on applications such as power systems for extraterrestrial projects and human sustaining environments, and potentially propulsion technology for long haul space missions. NNS’ initial focus will be on cis-lunar applications, referring to uses in the space region extending from Earth to the area surrounding the Moon's surface.

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Cautionary Note Regarding Forward Looking Statements

This news release and statements of NANO Nuclear’s in its collaborators’ management in connection with this news release or related events contain or may contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. In this context, forward-looking statements (including statements regarding NANO Nuclear’s non-binding collaboration with Vert2Grow Energy Solutions and the ability of the collaboration to achieve its desired results) mean statements related to future events, which may impact our expected future business and financial performance, and often contain words such as "expects", "anticipates", "intends", "plans", "believes", “potential”, "will", "should", "could", "would" or "may" and other words of similar meaning. These forward-looking statements are based on information available to us as of the date of this news release and represent management's current views and assumptions. Forward-looking statements are not guarantees of future performance, events or results and involve significant known and unknown risks, uncertainties and other factors, which may be beyond our control. For NANO Nuclear, particular risks and uncertainties that could cause our actual future results to differ materially from those expressed in our forward-looking statements include but are not limited to the following: (i) risks related to our U.S. Department of Energy (“DOE”) or related state nuclear fuel licensing submissions, (ii) risks related the development of new or advanced technology, including difficulties with design and testing, cost overruns, regulatory delays and the development of competitive technology, (iii) our ability to obtain contracts and funding to be able to continue operations, (iv) risks related to uncertainty regarding our ability to technologically develop and commercially deploy a competitive advanced nuclear reactor or other technology in the timelines we anticipate, if ever, (v) risks related to the impact of government regulation and policies including by the DOE and the U.S. Nuclear Regulatory Commission, including those associated with the recently enacted ADVANCE Act, and (vi) similar risks and uncertainties associated with the operating an early stage business a highly regulated and rapidly evolving

industry. Readers are cautioned not to place undue reliance on these forward-looking statements, which apply only as of the date of this news release. These factors may not constitute all factors that could cause actual results to differ from those discussed in any forward-looking statement, and NANO Nuclear therefore encourages investors to review other factors that may affect future results in its filings with the SEC, which are available for review at www.sec.gov and at https://ir.nanonuclearenergy.com/financial-information/sec-filings. Accordingly, forward-looking statements should not be relied upon as a predictor of actual results. We do not undertake to update our forward-looking statements to reflect events or circumstances that may arise after the date of this news release, except as required by law.

Source: NANO Nuclear Energy Inc.