

# SAIHEAT Introduces HEATNUC: An Open-Source Small Modular Reactor (SMR) Solution for Al Computing Centers

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Innovative Technology Delivers Cost-Effective, Stable, and Sustainable Power Tailored to Meet the Growing Demands of Al Infrastructure

SINGAPORE, Nov. 11, 2024 (GLOBE NEWSWIRE) -- SAIHEAT Limited (f/k/a SAI.TECH Global Corporation) ("SAIHEAT" or the "Company") (NASDAQ: SAIH, SAITW), is pleased to announce the integration of HEATNUC, an advanced Small Modular Reactor (SMR) system dedicated to power AI computing centers. Designed as a stable, high-capacity energy source, HEATNUC addresses the unique power needs of AI-driven infrastructure, providing a solution that traditional renewable and fossil-fuel-based energy sources cannot match.

HEATNUC brings together inherent safety, simplified system design, and minimized on-shift manpower requirements, making it an ideal solution for Al centers that demand steady, high-density, clean power. The reactor's modular, integrated design enables rapid deployment, leveraging nuclear power's consistent output alongside innovative technology to lower both the time and cost required for licensing and V&V. Through closed-loop recycling of waste heat from nuclear and Al computing, HEATNUC enhances energy efficiency and supports deployment in remote, harsh environments, from deserts to arctic regions.

SAIHEAT has crafted HEATNUC to be highly cost-effective, reliable, and sustainable, meeting the long-term power needs of AI computing centers with ease. This comprehensive solution includes a SMR-based base-load energy source, an AI campus microgrid, and an intelligent energy management system, all designed to enable zero-carbon, intelligent operations for AI facilities.

#### Key Advantages of HEATNUC for Al Computing Centers

- Environmental Compliance: Zero emissions, zero pollution, and full carbon-neutral operations.
- Efficient Construction: Prefabricated, modular, and plug-and-play design allows easy installation and decommissioning.
- Low-Operational Demands: With intelligent monitoring and diagnostic systems, HEATNUC operates efficiently with minimal staffing needs, enhancing safety through proactive accident prevention.
- Sustainable Energy Recycling: HEATNUC harnesses nuclear energy, combined with recovered waste heat and storage solutions, to maximize energy utilization.
- **Cost Reduction**: Shortened verification and licensing periods, reduced construction cycles, and minimized operational costs contribute to significant savings.
- Open Source: SAIHEAT aims to connect SMR technology with the computing sector by providing open-source designs
  and resources to reduce the total cost of electricity for data centers while promoting the widespread adoption of clean
  energy solutions.

HEATNUC's deployment will empower AI computing centers worldwide to meet increasing energy demands sustainably. Its compatibility with remote and challenging environments makes it viable in all regions outside extreme natural disaster zones, such as earthquake or tsunami-prone areas. This technology promises to revolutionize AI energy strategies, supporting global zero-carbon and intelligent energy goals.

## **About HEATNUC**

HEATNUC is the power module of SAIHEAT dedicated to developing Gen. III+ PWR and Gen. IV SFR and HTGR for AI centers energy solution. Equipped with self-driven accident prevention mechanisms and an intelligent defence-in-depth safety approach, HEATNUC's design outperforms conventional SMR models. The reactor's proprietary decay heat-driven passive safety system reduces the probability of reactor degradation events by an order of magnitude, making it one of the safest SMR options available. HEATNUC positions SAIHEAT at the forefront of AI-supportive infrastructure.

#### **About SAIHEAT**

SAIHEAT Limited (Nasdaq: SAIH) delivers integrated energy services for next-generation data centers. Its thermal module, HEATWIT, offers data center liquid cooling system and solutions for computing heat recycling. The power module, HEATNUC, focuses on global power resource development and modular nuclear power joint development.

Formerly known as SAI.TECH Global Corporation, SAIHEAT became a publicly traded company on the Nasdaq Stock Market (NASDAQ) through a merger with TradeUP Global Corporation in May 2022. For more information on SAIHEAT, please visit https://www.saiheat.com

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