



NANO

Nuclear Energy Inc.



Creating the Next Generation of Advanced Nuclear Fuels
and Developing Smaller, Cheaper and Safer Portable
Clean Energy Solutions



About Us

NANO Nuclear Energy Inc. is an early-stage advanced nuclear energy technology company developing smaller, cheaper, and safer clean energy solutions.

Our development strategy is focused on four business lines, including:

- Nuclear Microreactors
- Nuclear Fuel Fabrication
- Nuclear Fuel Transportation
- Nuclear Consultation Services



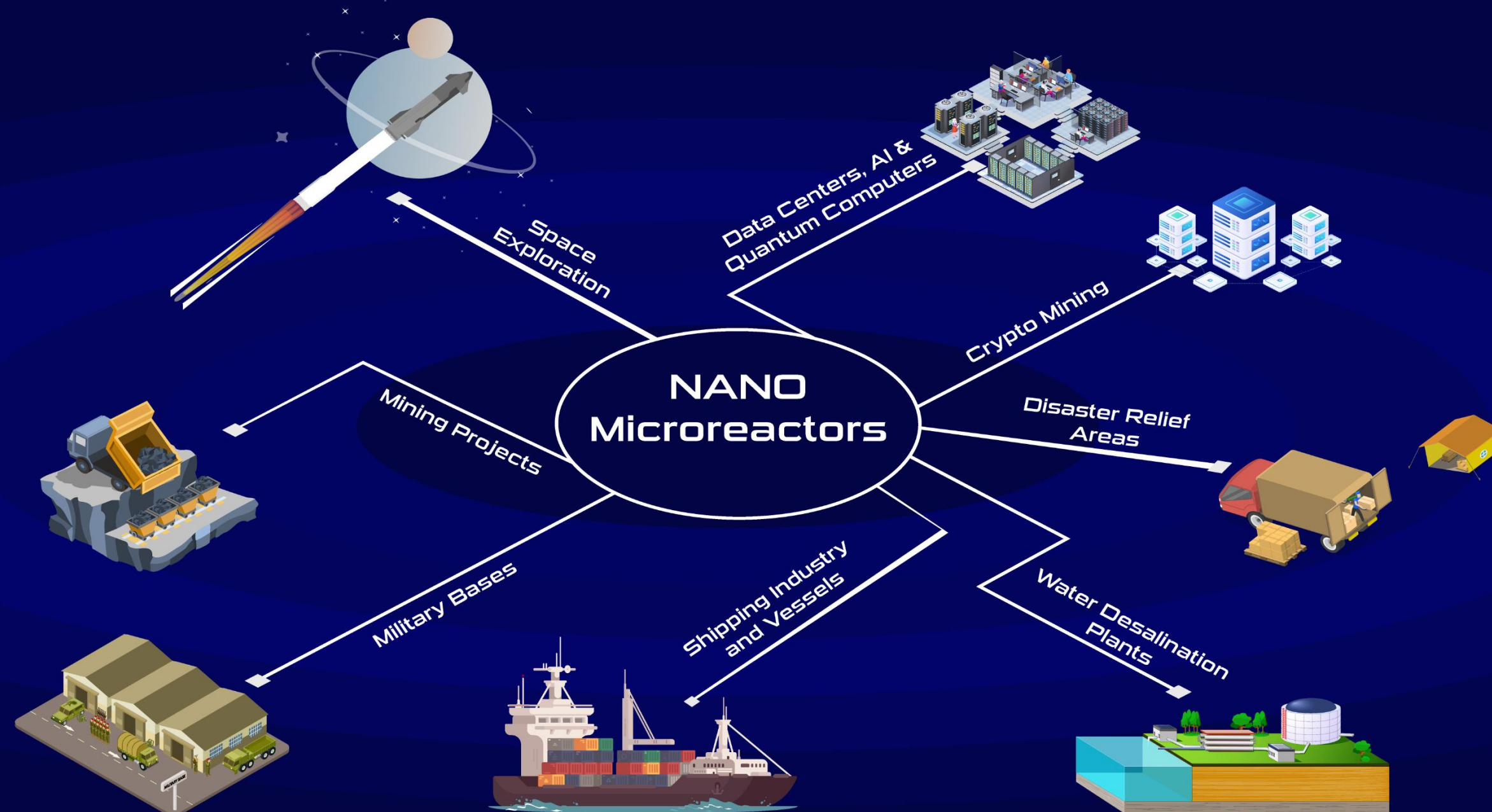


Our mission is to become a commercially focused, diversified and vertically integrated technology-driven nuclear energy company that will capture market share in the very large and growing nuclear energy sector, initially in the U.S. but ultimately in international markets.

Investment Thesis

NANO's objective and vision is to be a commercial and domestic energy supply leader within the U.S. nuclear industry, and to advance U.S. domestic and foreign policy and national security priorities.

Robust Business Development Pipeline For Our Cutting Edge Microreactors:



Microreactors

Nuclear is getting smaller... and it's opening up some big opportunities for the industry.

Imagine enough power to support over 1,000 homes per NANO Nuclear reactor for up to 20 years.

Nuclear microreactors can address various environmental and energy challenges through their innovative design and capabilities, such as:

- Electricity Emissions
- Industrial Sector Emissions
- Transportation Emissions
- Water Scarcity
- Energy Access to Remote Locations
- Space Exploration
- Data Centers
- Emergency Responses



- Factory fabricated
- Transportable



- Seamlessly integrable with renewables within microgrids

*Artist rendition of a prototype design.
May not represent eventual design of revolutionary NANO reactors.

Our Proprietary Reactor Design

Introducing ZEUS – A Solid Core Battery Reactor

ZEUS is a solid core reactor made of Beryllium Oxide (BeO) moderator blocks with Uranium Dioxide (UO₂) pellets enriched up to 20%. Heat is transferred from the fuel to the secondary loop purely through conduction. The core is sealed in a vessel (it only needs to support its weight). Thermal continuity between the core and the vessel is obtained with a liquid metal bond. On March 27, 2024 we filed an application for a U.S. Provisional patent for ZEUS as a solid core nuclear reactor.



ZEUS is being developed by leading world-class experts in their field:



Professor Peter Hosemann –
Head of Nuclear Reactor Design and Materials



James Walker BEng, MSc, CEng, CPhys, PEng –
CEO and Head of Nuclear Reactor Development

Our Proprietary Reactor Design

Introducing ODIN – A Low Pressure Coolant Reactor

ODIN will be a Low-Pressure Coolant Reactor, which uses relatively simple uranium and zirconium HALEU hydride fuel with up to 20% enrichment. The pellets will be encased in cylindrical fuel pins with metal cladding. These designs mirror the most common fuel types in conventional fuel design within existing reactors, providing a large experience database to help minimize the required development and testing program schedule and costs.



ODIN is being developed by leading world class experts in their field:



Professor Ian Farnan, NANO Nuclear Energy's Lead of Nuclear Fuel Cycle, Radiation and Materials



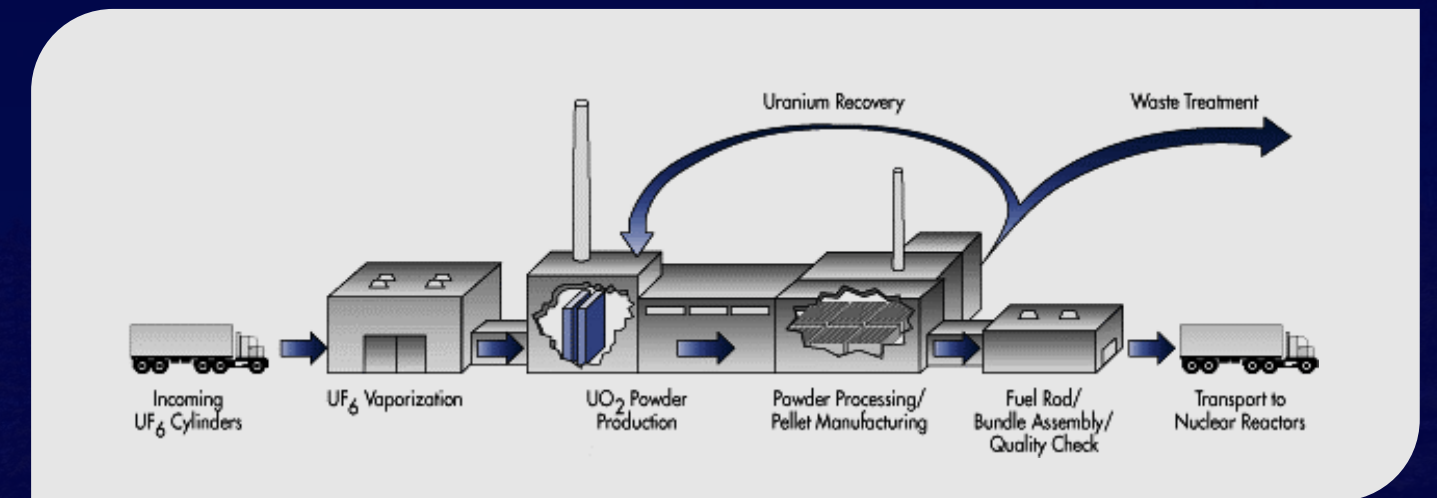
Professor Eugene Shwageraus, NANO Nuclear Energy's Lead of Nuclear Reactor Engineering

HALEU Fuel Fabrication Facility

- High-Assay Low-Enriched Uranium (HALEU) addresses challenges in fueling portable Advanced Nuclear Micro Reactors.
- NANO Nuclear plans to establish a nuclear fuel fabrication facility serving advanced reactor companies, its own projects, the U.S. industry, National Laboratories, and the Department of Energy (DOE).
- The Company plans to construct a fuel fabrication facility in cooperation and close to the Idaho National Laboratory (INL) site.
- The facility will concentrate on producing diverse fuel forms required by U.S. industry and customers, utilizing enriched feedstock.
- Integration with INL will enhance capabilities, such as fuel characterization.

NANO Nuclear Energy – A Member of the D.O.E.’s HALEU Consortium

- Selected as a member of the U.S. Department of Energy's HALEU Consortium.
- The Consortium forms an integral component of the HALEU Availability Program and was established on December 7th, 2022, via the Energy Act of 2020.
- Aims to spur demand for additional HALEU production and private investment in the nation’s nuclear fuel supply infrastructure, ultimately removing the federal government’s initial role as a supplier



Fuel Transportation

Advanced Fuel Transportation Inc. (AFT)

- Secured exclusive licensing rights for a patent of a high-capacity HALEU fuel transport basket and cask technology (Patent No: US 11,699,534 B2)
- The technology is developed by the U.S. Government, three National Nuclear Laboratories and funded by the Department of Energy.
- AFT intends to manufacture a licensed, high-capacity HALEU transportation system for North America.
- Led by former executives from the largest transportation company and the Department of Energy/National Laboratories
- Aims to establish a North American transportation firm with patented technologies developed by ORNL, INL, and PNNL.
- Aims to transport HALEU fuel in commercial quantities to SMR and Microreactor firms, national labs, the military, and DOE programs.



***ADVANCED FUEL
TRANSPORTATION INC.***



Memorandum of Understanding - Centrus Energy Corp. (NYSE: LEU)

- HALEU Energy Fuel Inc. signed an MOU with Centrus Energy Corp., a NYSE-listed company.
 - Centrus Energy is an established supplier of nuclear fuel/services to the nuclear power industry.
 - Since 1998, Centrus has supplied utilities with fuel for over 1,750 reactor years.
 - The fuel provided is the coal equivalent of 7 billion tons.

The areas of potential collaboration between the two parties are:

1. Centrus providing HALEU to HALEU Energy, as needed, to support HALEU Energy's research, development, and commercialization efforts, for fuel qualification, for NANO Nuclear's initial test reactor cores and its commercial variant reactors.
2. Verifying the compatibility of HALEU Energy's engineering and technical needs, and Centrus' technical and manufacturing capabilities to satisfy those engineering and technical needs.
3. Centrus providing engineering and/or advanced manufacturing services to HALEU Energy.
4. Centrus providing consulting services to HALEU Energy in the areas of fabrication, deconversion, regulatory and licensing, and transportation.



Joint Venture with the Cambridge Nuclear Energy Centre

Nuclear Career Development Program

- NANO will benefit from having a First Right of Refusal to hire students from the direct Pool of Cambridge Graduates
- NANO will benefit from directly funded Undergraduate, Graduate and Postdoctoral students to work on designated projects. Students gain real world working experience and knowledge.
- Massive nuclear skills shortage in the USA, UK and globally already widely felt
- Takes many years to develop undergrads → early career researchers

Cambridge value proposition:

- Comprehensive training at all levels, backed by existing programmes
- Undergraduate teaching and projects, shared across departments
- Nuclear Energy masters course, 11 cohorts, >150 graduates so far
 - Covers engineering, policy, business → Nuclear Leaders of Tomorrow
 - Close ties with industry, projects, visits, internships
- Centre for Doctoral Training (CDT)
 - Experimental, computational, theoretical research at PhD level across disciplines
- Main challenge: retaining key personnel at senior post-doc level (this proposal)
 - Provide environment for researchers to take key leadership position in industry



**Cambridge
Nuclear
Energy
Centre**

Meet Our Senior Leadership Team And Executive Directors



Jay Yu - Founder, Executive Chairman and President

Mr. Yu is a serial entrepreneur and has over 16 years of capital markets experience on wall street. He is a private investor in a multitude of companies and has advised a magnitude of private and public company executives with corporate advisory services such as capital funding, mergers & acquisitions, structured financing, IPO listings, and other business development services geared at taking these companies to the next level. He is a self taught and private self investor, and his relentless passion for international business has helped him develop key, strategic and valuable relationships throughout the world. Mr. Yu leads the corporate structuring, capital financings, executive level recruitment, governmental relationships and international brand growth of NANO Nuclear Energy Inc. In 2021, Mr. Yu was honored as one of The Outstanding 50 Asian Americans in Business.

James Walker - BEng, MSc, CEng, CPhys, Peng - CEO, Head of Nuclear Reactor Development and Board Member

Mr. Walker is a Nuclear Physicist and was the project lead and manager for constructing the new Rolls-Royce Nuclear Chemical Plant; he was the UK Subject Matter Expert for the UK Nuclear Material Recovery Capabilities, and was the technical project manager for constructing the UK reactor core manufacturing facilities. Mr. Walker was also seconded to Rolls Royce where he modeled configurations of RR's Zero-Power reactor to inform confidence limits for the UK's successor submarine's mechanical design, and worked for the Rolls-Royce Nuclear Thermal Hydraulics Engineering team investigating reactor channel thermal performance to inform new reactor designs and support the safety case for reactors in current class submarines.



World Class Nuclear Engineering and Technical Team



Berkeley
UNIVERSITY OF CALIFORNIA
Nuclear Engineering



Professor Peter Hosemann - Head of Nuclear Reactor Design and Materials
Professor and Department Chair of Nuclear Engineering Department in UC Berkeley.



**UNIVERSITY OF
CAMBRIDGE**



Professor Ian Farnan - Lead of Nuclear Fuel Cycle, Radiation and Materials
Chair of Cambridge Nuclear Energy Centre, Professor of Earth & Nuclear Materials part of Department of Earth Sciences.



**UNIVERSITY OF
CAMBRIDGE**



Professor Eugene Shwageraus - Lead of Nuclear Reactor Engineering
Professor of Nuclear Energy Systems Engineering at the University of Cambridge Engineering Department, Dr. Shwageraus was the Head of Nuclear Engineering Department at Ben-Gurion University, Israel and Visiting Associate Professor at the Nuclear Science and Engineering Department at MIT.



**UNIVERSITY OF
ILLINOIS** Argonne
URBANA-CHAMPAIGN NATIONAL LABORATORY



OAK RIDGE
National Laboratory



Jeffrey L. Binder Ph.D. - Head of Nuclear Laboratory and Technologies
Dr. Binder has had over a 30-year career in applied energy technology as a former National Laboratory Leader and scientific contributor.

Board Of Executive Advisors



**Retired 4-Star General and Former Supreme Allied Commander Wesley K. Clark, KBE –
Chairman of Executive Advisory Board for Military and Defense**



**Chief U.S. Negotiator during the North Korean nuclear crisis of 1994 Robert Gallucci , Ph.D. –
Chairman of the Executive Advisory Board for Nuclear Policy**



**Former Attorney General and Governor of New York Andrew M. Cuomo –
Executive Advisory Board Member**



**Mark Nichols –
Executive Advisor for Military, Defense and Policy**



**Lassina Zerbo, Ph.D. –
Chairman of the Executive Advisory Board for Africa**



**Michelle Amante-Harstine –
Senior Strategic Advisor to the Executive Advisory Board for U.S. Energy Initiatives**



**David Huckeba –
Chairman of the Executive Advisory Board for USA**

Meet Our Management and Staff



Winston Chow – MBA, MPA – Chief Policy Officer (CPO)

Mr. Chow has served as Senior Advisor to the U.S. Department of Energy on East Asia, where he implemented two US-China Agreements on clean energy between Presidents Barack Obama and Hu Jintao.



Tom Cuce – President of Advanced Fuel Transportation Inc.

Tom Cuce, former UPS President of Global Transportation has over 25 years of driving transformative supply chain solutions and profitability through strategic planning and process optimization across the global logistics and package delivery industry.



Jaisun Garcha – MBA, CPA, CGA – Chief Financial Officer

Jaisun Garcha has 20 years of experience in financial management, corporate governance, and risk management in both public and private companies, including high-growth and start-up stage organizations.



Wayne Hao, MBA – VP of Corporate Development

Wayne Hao is a seasoned international executive with over 20 years of global experience in entrepreneurship, corporate growth, and business development.