

TERRAPOWER: BRINGING AMERICAN INGENUITY TO A GLOBAL NUCLEAR SECTOR

TerraPower, LLC is a nuclear innovation company headquartered in Bellevue, Washington. The company originated with Bill Gates and a group of like-minded visionaries who evaluated the fundamental challenges to raising living standards around the world. They recognized energy access was crucial to the health and economic well-being of communities and decided the private sector needed to act and create energy sources that would advance global development.

Now marking nearly 15 years of innovation, TerraPower continues to grow and diversify. The multidisciplinary team of more than 225 full-time professionals has made progress on advanced reactor designs, modeling interfaces and future isotope applications. Their dedication and talent help TerraPower pursue its vision to be a world leader in new nuclear technologies that bring the world sustainable, affordable and safe energy, and other high-benefit products. The company has put together an impressive aggregate of American suppliers, universities, laboratories and consultants. These partnerships yield significant breakthroughs and shape the foundation of modern supply chains that use nuclear science and technology to the benefit of humanity.

TerraPower Fast Facts

Founded: 2008

Location: Bellevue, Washington

Full-time employees: More than 225

Supply chain: 80+ contracts worldwide

Products:

Natrium™ Reactor and Integrated Energy Storage

Molten Chloride Fast Reactor

Medical Radiochemistry Applications

Innovative Industrial Applications



CREATING A CULTURE THAT INNOVATES

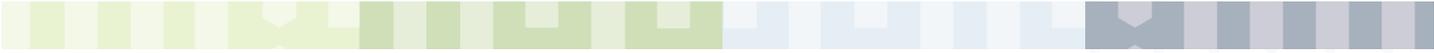
TerraPower's agile business approach leverages the world's best capabilities and expertise to design and develop nuclear science and technology. Private-sector management, flexibility, funding and efficiency enable TerraPower to accelerate its product deployment. Looking creatively at waste material in the nuclear sector and the physics of advanced designs for energy production, TerraPower has been able to expand operations in the areas of energy systems, radiochemistry and advanced modeling and simulation.

BETTER OPTIONS FOR ADVANCED ENERGY SYSTEMS

TerraPower is committed to bringing sustainable, affordable and safe energy to address global issues. The company believes it will be able to achieve this goal through the development of high-benefit products like the Natrium reactor and integrated energy storage system and the Molten Chloride Fast Reactor (MCFR) design.

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TerraPower and its technology co-developer GE Hitachi Nuclear Energy combined their decades of unparalleled design expertise and technical capabilities to develop the Sodium technology. It features a 345 MWe reactor and can be optimized for specific markets. Its innovative, gigawatt-hour-scale thermal storage has the potential to boost the system's output to 500 MWe of power for more than five and a half hours when needed. This allows for a nuclear design that follows daily electric load changes and integrates seamlessly into grids with high levels of renewables. In October 2020, the U.S. Department of Energy (DOE) awarded TerraPower funding, as part of the Advanced Reactor Demonstration Program (ARDP), to demonstrate the Sodium technology.

TerraPower's MCFR project also continues to advance. Southern Company and TerraPower are working on an Integrated Effects Test to learn how the MCFR design, a type of molten salt reactor, will scale and behave at larger, commercially relevant sizes. In December 2020, DOE selected the Molten Chloride Reactor Experiment (MCRE) proposal, with Southern Company as the Prime, to receive funding as part of the ARDP's risk-reduction pathway. MCRE is relevant to TerraPower's MCFR design.

Serving markets for electricity production as well as industrial applications, these advanced reactors will improve the options for U.S. leadership in clean energy and the deployment of next-generation technologies globally.

*By 2030, the world's population is expected to reach 8.5 billion.
With approximately 770 million people without access to electricity today,
the market for better energy options exists now.*

SEEKING SOLUTIONS FOR HARVESTING ISOTOPES

In TerraPower's radiochemistry laboratory, the team supports isotopic harvesting and distribution, as well as other radioisotope development initiatives. Opportunities to revolutionize cancer prevention and treatment options have emerged with new approaches to medical application of radioisotope technology.

Materials stored by the DOE contain extremely rare and unique isotopes that may help treat cancer and other illnesses. Studies by TerraPower validate the potential of recovering important isotopes from the DOE-managed material while accelerating its disposition. TerraPower's commitment to do work that is challenging and important to humankind led these studies. With positive results to date, TerraPower is very interested in advancing this potential medical capability.

Transformative innovation is at the heart of TerraPower's mission. Behind each of its innovations, technologies and programs, TerraPower brings together diverse strengths and experiences of talented experts. Together, multidisciplinary professionals explore new approaches to answer the world's toughest problems in energy, climate and human health.

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