



Empowering Earth

IECA Introduction to X-energy

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About X-energy

Founded in 2009

16 years of investment and business development

Rockville, MD Headquarters

Rooted in the nuclear community with proximity to DOE and the Nuclear Regulatory Commission (NRC)

50+ Years of R&D

Our technology builds upon decades of R&D in high-temperature gas reactors

>850 Employees

Leading Generation IV nuclear reactor development

\$1.2b Federal Award (50/50 cost share)

One of two companies selected for DOE's Advanced Reactor Demonstration Program

\$1.1b Raised from Investors

One of the highest amounts of private capital raised of any advanced nuclear company

X-energy designs & develops advanced nuclear reactors and fuel



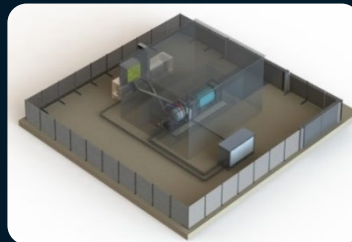
Xe-100 Small Modular Reactor (SMR)

- X-energy's flagship product is a High-Temperature Gas-cooled Reactor (HTGR) that can produce both high efficiency electricity and industrial steam
- Four or more 80 MWe reactors (320 MWe total "4-packs") are bundled to optimize economics and performance



TRISO-X Fuel Fabrication

- Our reactors use tri-structural isotropic (TRISO) coated particle fuel approved for use by the NRC
- TRISO-X developed a proprietary version with improved supply and quality control processes



XENITH Microreactor

- The 3-10 MW XENITH microreactor can generate electricity for both military and commercial applications
- Development funded by \$60M+ investment from DoD microreactor programs (Project Pele)



The Xe-100 Design Solution

- High Temperature Gas Reactor produces both thermal heat (200 MWth) at 565°C output and electricity (80 MWe)
- Online refueling through automated continuous fuel handling system means no fueling outages
- Anticipated 60-year plant life with conservative design that does not require new material development or code cases
- Designed for 4-unit deployments, up to 12 units per site
- Steam pressure and temperature designed to be compatible with commercially available components
- Can be configured to use either air-cooled or water-cooled condensers depending on customer needs

