

Savannah River National Laboratory: Catalyst for the Future

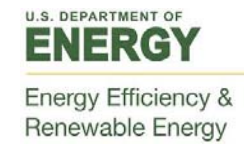
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Laboratory Director
Savannah River National Laboratory

Governor's Nuclear Advisory Council

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SRNL Exists to Support National Needs



“The value of SRNL is measured every day by the investments of its federal clients and private sector partners.”

SRNL is Critical to EM Success, and has Worldwide Reputation



Fukushima Support



Over \$5B in projected savings in past five years



Hanford Vessel Testing



Strategic Role at Portsmouth, Paducah



In National Security, Our Reach Extends Far Beyond SRS



NSA-Georgia



Tritium Expertise



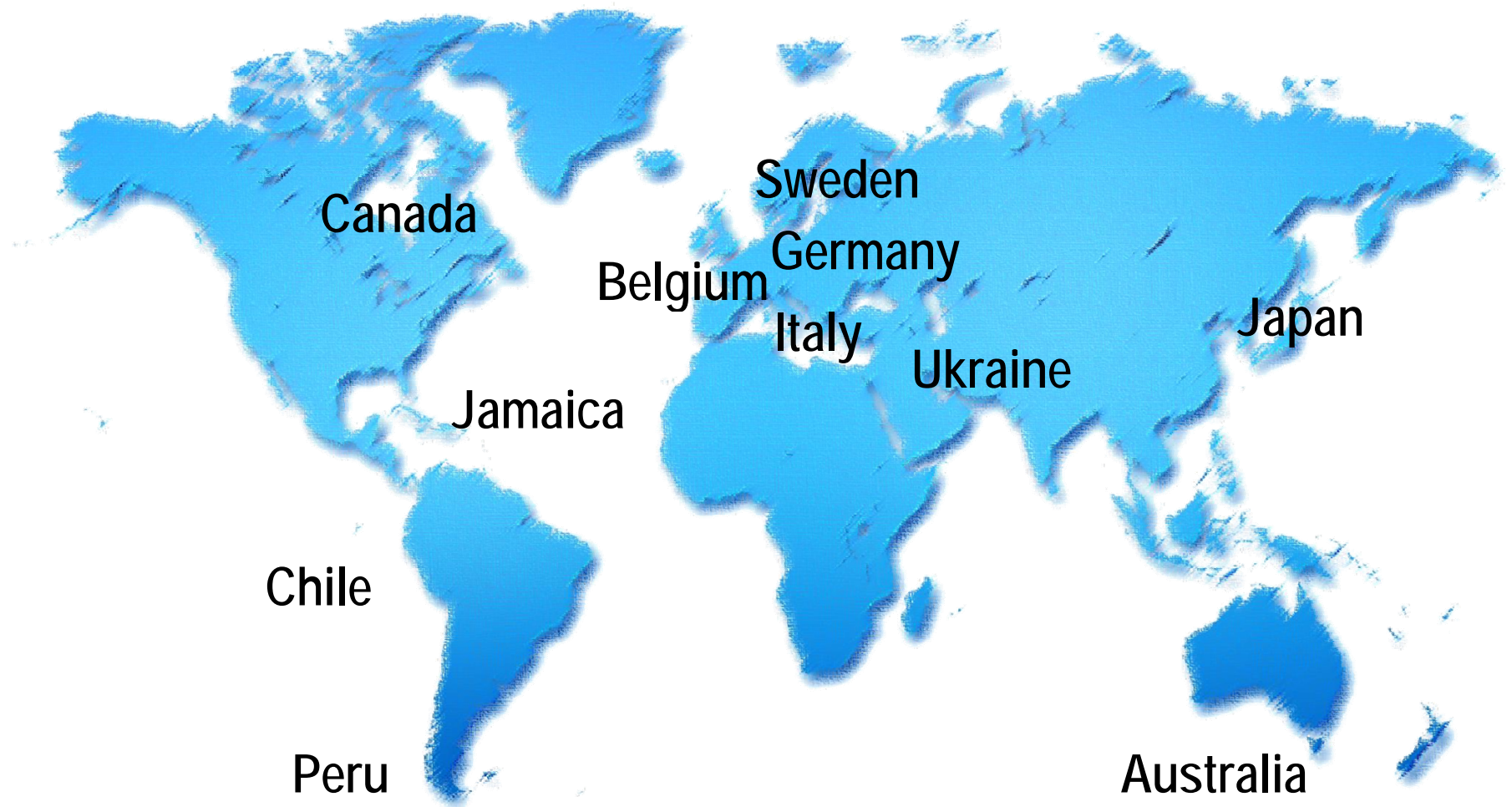
Event Signatures



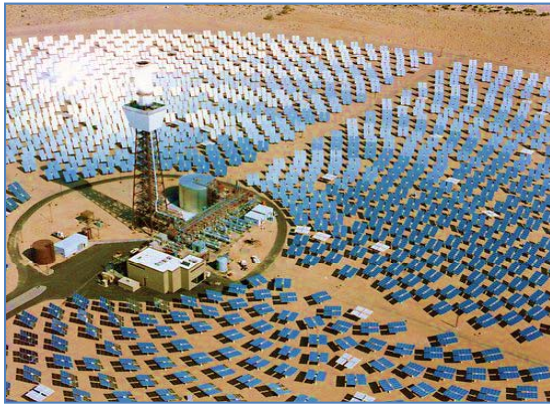
Mobile Plutonium Facility



SRNL is Essential to U.S. Non-Proliferation Objectives



SRNL is Contributing to Regional Clean Energy Initiatives



SunShot Research Initiative



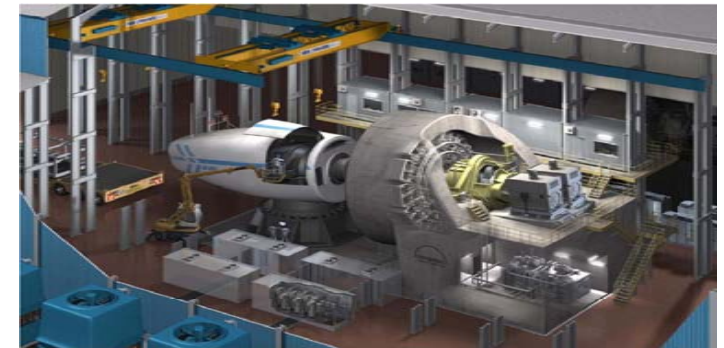
Hydrogen Research



ARPA-E Natural Gas



Nuclear Fuel Cycle



Wind Energy





Nuclear Knowledge for the Nation

enterprise.srs



NATIONAL SECURITY | CLEAN ENERGY | ENVIRONMENTAL STEWARDSHIP



Savannah River National Laboratory™
OPERATED BY SAVANNAH RIVER NUCLEAR SOLUTIONS

We put science to work.™

E•SRS Opportunities

Surplus Nuclear Materials Management

- Plutonium Oxide Processing
- Used Fuel Processing and LEU Processing
- Canadian HEU Repatriation
- Gas Cooled Reactor Pebble Bed Fuel Disposition
- Americium 241 and Pu 238 Recovery

Environmental Risk Reduction

- Deployment of the Next Generation Solvent in MCU
- Hanford WTP Full Scale Vessel Testing Program
- Fukushima Recovery Technology Deployment



E•SRS Opportunities

Next Generation Tritium Supply

- Tritium Production Using SMRs
- Advanced Tritium Processing
- Medical Isotope Production Facilities
- Natural Gas Storage Development



Global Monitoring and Securing of Nuclear Materials

- Global Threat Reduction Foreign Material Receipts
- Nuclear Forensic Analysis Center
- New Technologies to Increase He-3
- Next Generation Safeguards and Atmospheric Monitoring in H Canyon



SRNL is Catalyst for Future Missions

- National priorities will evolve and change.
- Fixed-purpose plants lack flexibility to adapt.
- National Laboratories lead change.



Cold War Production → Environmental Restoration → Nonproliferation → The Future

SRNL can expand the aperture of SRS and South Carolina.



Future Success Depends on Partnering to Meet Challenges

The Challenges

- ✓ Sustained Support for Nuclear Industry
- ✓ Infrastructure Investment vs. closure mentality

The Opportunities

- ✓ Enduring Missions
- ✓ Science and Technology Innovation in South Carolina
- ✓ Stronger University partnerships, opportunities
- ✓ Economic benefit to the region

