FIRST

FOUNDATIONAL INFRASTRUCTURE FOR RESPONSIBLE USE OF SMR TECHNOLOGY

Harnessing the power of innovation and teaming with the nuclear industry to deploy advanced nuclear energy technologies worldwide under the highest nuclear security, safety, and nonproliferation standards.

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What is the Need?

- Rising global interest in nuclear energy—specifically versatile, affordable, safe small modular reactors (SMRs)—must be met by suppliers who uphold highest nuclear security, safety, nonproliferation standards.
- SMR deploying countries require knowledge, workforce development, project preparation support to incorporate safe, secure, proliferation-resistant SMRs into their energy mix.
- Strong demand is challenged by limited resources. Yet SMR deploying countries are moving forward now.

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FIRST Program Vision

- Through technical nuclear energy training and long-term relationship building, FIRST works together with contributing partners to deliver timely, flexible, world-class **SMR-centric training and technical collaboration worldwide.**
- Needed to galvanize and empower **current and potential nuclear energy countries** to make responsible and timely reactor deployment decisions that
  - meet growing energy needs,
  - advance shared energy and economic security priorities, and
  - prioritize from the outset the **highest nuclear security, safety, nonproliferation standards.**

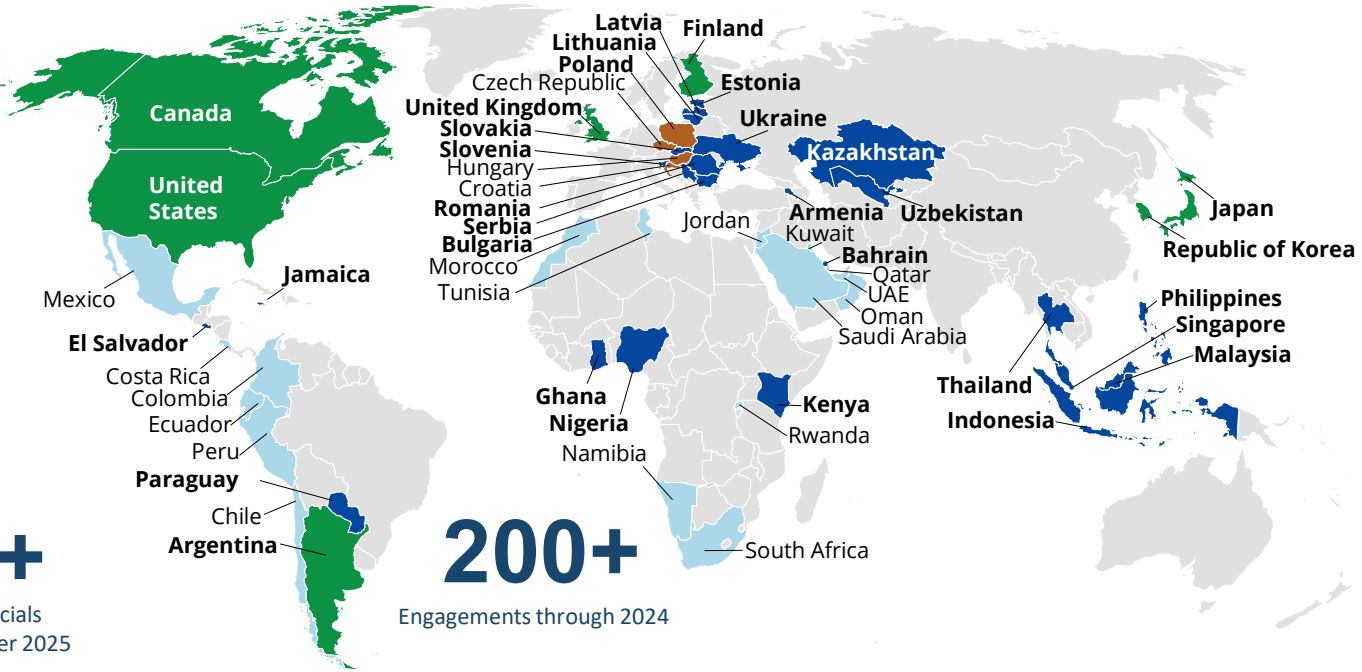
How FIRST Works

- Piloted in 2019, engages 55+ countries in 5 continents, led by State Department with $100M+ in funding announced to date.
- Partnership of equals across U.S. Government, nuclear industry, national laboratories, and academia, facilitated by State Department, with U.S. and foreign funding.
- **Emphasizes SMRs and other advanced reactor designs** that are of increasing relevance and interest to meet diverse energy needs.
- Focuses on **countries seriously considering SMR** options: both nuclear energy newcomers and current nuclear energy producing states.
- Complements **IAEA Nuclear Energy Infrastructure Milestones Approach**.
- Focus on prioritizing highest nuclear security, safety, nonproliferation standards from the outset as key decisional criteria for reactor deployment.

FIRST at a Glance (February 2026)

FIRST Nuclear Security and Energy Cooperation with Global Impact

- Bilateral Partners (publicly announced)
- Regional Partners
- Contributing Partners
- SPRING Partners



$100M
FIRST funding received by October 2025

3750+
Nuclear experts and officials Engaged through September 2025

200+
Engagements through 2024

Supported by the U.S. Department of State

FIRST Tiers of Engagement

Tier 1: Political Engagements
Government-to-Government Consultations

↓

Tier 2: Technical Engagements
Training Workshops, Webinars, Visits & Technical Tours

↓

Tier 3: Targeted Topics
Expert-Level Support On Specific Priority Issues

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FIRST SMR Core Training Topics

1 - Nuclear as Part of Energy Mix

2 - Stakeholder Engagement

3 - Workforce Development

4 - Siting & Early Works

5 - Nuclear Safety & Licensing

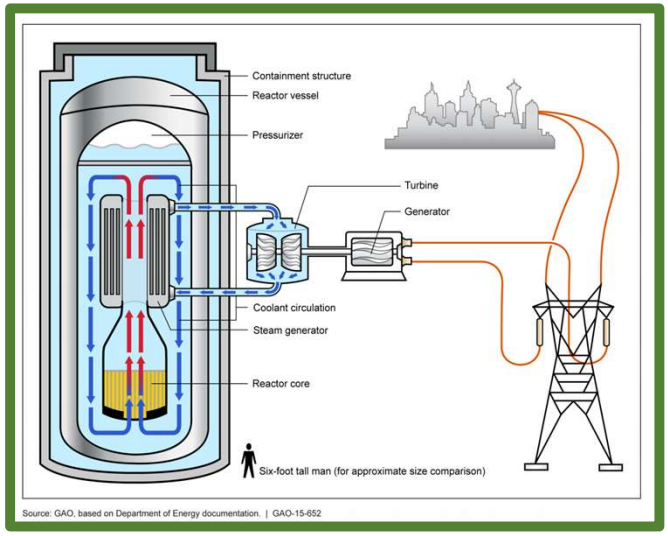
6 - Nuclear Security

7 - Nuclear Nonproliferation

8 - Technology Selection

9 - Financing & Localization

10 - Spent Fuel and Waste Management



Topics for training, workshops, webinars, other activities are chosen based on interests and priorities of the SMR deploying country.
Additional topics not listed may be proposed.

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Two Thrusts of FIRST Engagement

Nuclear Energy & Nonproliferation SMR Training Workshops, Webinars, Site Visits, Technical Tours

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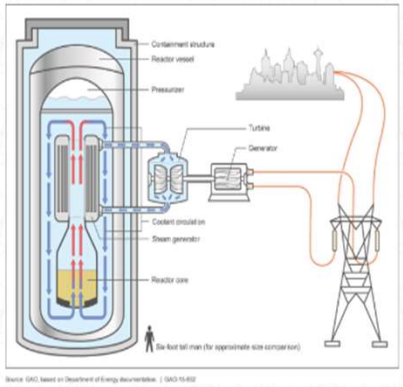
Nuclear Expediting the Energy Transition (NEXT) Advanced Project Preparation Tools for Countries Closer to SMR Deployment

1. Nuclear as Part of the Energy Mix
2. Stakeholder Engagement for Success
3. Workforce Development
4. SMR Siting and Early Works
5. Nuclear Safety and Licensing Approaches for SMRs



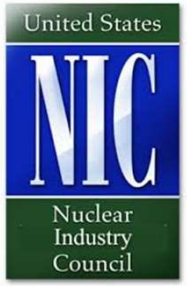
6. Technology Selection
7. SMR Financing and Localization (with an emphasis on supporting local supply chains and jobs)
8. Nuclear Security
9. Nuclear Nonproliferation
10. Spent Fuel Management

- SMR Pan Regional Interest Nuclear Group (SPRING) for Fleet Deployment (teams with SMR vendors to expedite multiple deployments in Eastern/Central Europe)
- Steel Manufacturing from SMR Roadmap Positions SMRs for Deployment to Power Steel Manufacturing in Eastern Europe
- Project Phoenix (positions SMRs to replace retired thermal power plants in Slovakia, Estonia, Poland, Bulgaria)
- SMR Control Room Simulators and Regional Training Hubs to Support Deployment

Engagements led by U.S. Partners (illustrative list)

U.S. Government

U.S. Nuclear Industry and Other Private Sector Partners



Universities & Academic Institutions

Unique SMR Facilities at National Laboratories






FIRST Contributing Partners and Areas of Emphasis

- **Argentina** primary focus on Latin America (ex. Latin America FIRST conference in Buenos Aires June 2-4, 2026).
- **Canada** focus on Latin America, Central/East Asia, and Eastern Europe
- **Finland** primary focus on Europe to date
- **Japan** has **worldwide focus, including** Japan FIRST study tours and Japan-led workshops.
- **Republic of Korea** focus on Southeast Asia, Africa, Latin America.
- **United Kingdom** focus on Southeast Asia.

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Some FIRST Program Impacts Since 2019 Launch

- **Slovakia** co-funds feasibility study through Project Phoenix that validates SMRs as option for Slovakia's energy future.
- **Ukraine** Steel from SMRs project teams with U.S. steel manufacturer and SMR vendor to draft roadmap for SMR deployment to power steel manufacturing sector in Ukraine.
- **Romania** nuclear engineering program doubles number of graduate students after installation of NuScale SMR simulator to train future nuclear workforce on secure and safe SMR technology.
- 2 key parliamentarians on **Estonia** FIRST study tour reverse from opposition to support for SMR deployment.
- Financial and in-kind contributions to FIRST by **ROK, U.K.,** and **Canada** committed for 2025; **Japan** launches self-funded FIRST study tours; **Argentina** and **Finland** join as FIRST contributing partners.

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New Directions for FIRST

- **New FIRST beneficiary partners** in 2025-6: El Salvador, Malaysia, Croatia, Hungary, Paraguay.
- **New FIRST contributing partners** expand program's geographic reach in 2025: Argentina and Finland.
- **Increased emphasis on Latin America/Caribbean and Southeast Asia**. Continued growth in Eastern Europe.
- Launch of regional **SMR control room simulator and training hub projects** in Central Asia, Philippines, and the Baltics; ribbon-cutting in sub-Saharan Africa.
- **Nuclear welding certification program** launched for Ghana.
- **Contributing partner-led** study tours and workshops (thank you, Japan!)

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