GLOBAL NUCLEAR ENERGY ECONOMIC SUMMIT

NUCLEAR SUMMIT WORKSHOP.
EXECUTIVE SUMMARY REPORT.

This summary presents the combined results from the Nuclear Summit Workshop, organized in partnership with the State of Indiana and Purdue University College of Engineering, with support from the Institute for Energy Innovation, on November 6, 2025. The event brought together over 200 participants representing multiple stakeholders from across the nuclear ecosystem, including researchers and academics, industry leaders, government officials (state and national), local communities, and supply chain representatives.

The workshop was structured around four simultaneous working groups:

1. R&D Collaboration
2. Infrastructure and Components
3. Investment Environment
4. Workforce Development

Each group identified two key challenges, followed by the co-creation of opportunities and potential projects designed to address them.

This report summarizes the most relevant insights and findings from all four groups. The results have been clustered and synthesized for clarity and to highlight areas of common opportunity and alignment.

This report has been created by the Strategic Doing Institute, for Purdue´s College of Engineering. All the information is based on the results from the workshop.

WHAT SUCCESS LOOKS LIKE IN 5 YEARS?

1. Workforce and Education Pipeline
A strong, coordinated education-to-employment system that connects high schools, trade programs, and universities to meet nuclear industry workforce demands.

What we would like to see in 5 years:

- Integration of high schools and trade schools into nuclear pathways.
- Growth in welders, electricians, and STEM-trained technicians.
- Re-skilling and upskilling programs aligned with construction and operation timelines.
- K–12 integration, stackable credentials, and associate degrees (Ivy Tech–Purdue partnerships).
- Dedicated energy workforce programs and "Nuclear Ready Communities."
- Workforce retention and wage growth above state average.

2. Statewide Coordination and Ecosystem Governance
Indiana adopts a coordinated, cross-sector strategy to position itself as a national hub for nuclear innovation, aligning policies, funding, and institutional capacity.

What we would like to see in 5 years:

- State-level task force linking government, academia, and private industry.
- Coordination with military, workforce, and policy agencies.
- Integration of supply chain, manufacturing, and R&D efforts.
- Clear statewide roadmap with measurable metrics and timelines.
- Collaborative policy design and funding mechanisms.
- Strategic focus on leveraging Indiana's industrial legacy and strengths.

3. Innovation, R&D, and Technology Development
A robust research and innovation environment that enables reactor readiness, advanced designs, and U.S. leadership in nuclear science and clean energy.

What we would like to see in 5 years:

- Reactor designs ready for licensing within 5 years.
- Establishment of test and demo reactors in Indiana.
- SMR design and technology validation underway by 2030.
- Increased R&D funding and collaboration with national labs and universities.
- The U.S. regains global leadership in nuclear technology.
- Research roadmap focused on cost reduction, modular fabrication, and digital design.

4. Community Engagement and Public Support
Communities understand, support, and benefit from nuclear development, seeing it as a pathway to prosperity and quality of life.

What we would like to see in 5 years:

- "Nuclear Ready Communities" emphasizing participation and collaboration.
- Public education campaigns improving perception of nuclear energy.

- Community buy-in through inclusion, equity, and economic mobility.
- Nuclear seen as safe, reliable, and affordable for local families.
- Increased quality of life and social acceptance across Indiana.

5. Industry, Infrastructure, and Investment
Indiana becomes the nation's hub for nuclear energy deployment — with thriving industries, modern infrastructure, and strong capital access.

What we would like to see in 5 years:
- Multiple SMR projects under construction or licensed.
- Public-private partnerships and new financing mechanisms.
- Access to capital, permitting clarity, and policy stability.
- Indiana emerges as a hub for nuclear manufacturing and supply chain.
- Investments in infrastructure, data centers, and clean energy plants.
- Indiana as the national model for integrated project delivery.

6. Measurable Success and National Leadership
A clear definition of success built around metrics, milestones, and Indiana's leadership in nuclear workforce, innovation, and energy resilience.

What we would like to see in 5 years::
- Defined indicators: workforce credentials, construction readiness, public support.
- Training timelines aligned with workforce demand.
- Smart metrics to measure progress and accountability.
- Indiana recognized as the #1 U.S. state in nuclear development, education, and innovation.
- Prosperous communities and a thriving economy driven by nuclear growth.

Main IDEAS – High Impact / High Feasibility

Ideas are ranked from most voted to least voted, during the live session in the workshop. Only High Impact / High Feasibility ideas are presented here. During the workshop, participants created a large pool of ideas and then categorized in low-high impact and feasibility. The full list of ideas and projects proposed is not available in this executive summary.

1. Site Utilization and Incentives

- Utilize existing sites to reduce redevelopment costs and minimize public pushback.
- Provide government incentives to repurpose brownfields and abandoned sites for nuclear projects.

2. Education and Awareness

- Add nuclear education and trade skills to high school dual-credit programs to increase visibility of the profession and expand access before college.
- Launch a public education campaign that includes:
    - Plant tours and industry site visits.
    - Outreach from the Governor's office.
    - Social media and grassroots advocacy.
    - Virtual reality tours.
    - K–12 nuclear literacy and STEM engagement.

3. Community Transition and Support

- Support communities transitioning from coal to nuclear through model ordinances, zoning, education, reskilling, extension services, trust-building, social needs assessments, and secondary system capacity (e.g., water infrastructure).
- Develop long-term Power Purchase Agreements (PPAs) between developers and off takers to provide financial stability and reduce risk.
- Simplify regulatory processes at both the state and federal levels.

4. Innovation and Development

- Incentivize existing innovation labs to focus on developing manufacturing capacity and nuclear supply chains.
- Create a development roadmap for local communities and developers, starting with a public relations campaign under "Pure Nuclear for Indiana."
- Streamline the permitting process for standardized, licensed nuclear technologies.

5. Collaboration and Education Programs

- Foster collaboration between Purdue Engineering, Purdue Polytechnic, Ivy Tech, and trade unions to:
    - Define credential needs for each job category.
    - Establish associate degrees in nuclear technology.
    - Create stackable and transferable credentials.
- Expand the Purdue SMR study to include Indiana-based manufacturing capabilities.

- Develop standardized construction requirements independent of specific SMR designs.
- Establish a joint Ivy Tech–Purdue–industry task force to co-design credential programs informed by workforce data.
- Convene industry and government representatives to discuss current and future nuclear supply chain opportunities.

6. Regulatory and Industry Alignment

- Promote OEM–regulatory harmony to align standards, improve communication, and streamline certification processes.

7. Community and Stakeholder Engagement

- Conduct Community-Based "Workouts" — forums where industry and local leaders collaborate on solutions.
    - Step 1: Level-set discussions and objectives.
    - Step 2: Develop actionable playbooks and shared implementation tools.

8. Manufacturing and Knowledge Transfer

- Expand the SMR Feasibility Study to incorporate the entire supply chain.
- Support Knowledge Transfer and Training to ensure workforce development matches manufacturing demand and technological needs.