



STRATEGIC PLAN 2025–2035

DISCUSSION DRAFT

JULY 2025

American Nuclear Society Strategic Plan 2025–2035

July 2025

Foreword

The American Nuclear Society (ANS) Board of Directors has undertaken a comprehensive strategic planning process to align the Society's direction with the realities of a rapidly changing energy and technology landscape. This process began in 2022 with a rethink of our mission and vision statements. It continued with the adoption of a set of core values that now guide ANS work. Now, it culminates with the strategic plan below.

The Nuclear Environment and the Strategic Vision for 2035

After decades of relative stagnation, nuclear is surging again. The global transition toward digital infrastructure—fueled by artificial intelligence, high-density data centers, electrification of transportation, and reshoring of advanced manufacturing—is increasing the urgency of need for reliable, clean baseload energy. Nuclear energy is ideally suited to meet these demands, given its overall energy density, reliability, and safety record.

By 2035, the future of nuclear energy technology hinges on making tangible progress in three critical areas: the demonstration and deployment of new-generation nuclear fission and fusion technologies; preservation of the existing reactor fleet via extension and modernization; and, separately from energy, the expanded use of nuclear technology to produce life-saving isotopes, power space nuclear energy and propulsion systems, and adopt advanced materials. This expansion of nuclear technology applications is essential to solving some of humanity's toughest challenges: climate change, energy poverty, cancer and other diseases, and space exploration. If we fail it, the world will no doubt find itself in a hotter, darker, less peaceful place.

The ANS Role in a Nuclear Resurgence

As the professional home for nuclear scientists, engineers, technologists, healthcare providers, skilled workers, educators, and supporters, ANS plays a critical role in building a strong, thriving workforce capable of turning today's dreams into tomorrow's realities. The Society connects professionals across sectors, disseminates cutting-edge research, educates the public, and supports the workforce pipeline. Our commitment to independence, technical rigor, and a strong professional community empowers ANS to be a trusted voice in the nuclear arena.

4 Strategic Pillars of Action

1. Enhance Technical Exchange within a More Connected Nuclear Professional Community

ANS will solidify its position as the “town square” of the nuclear community by broadening its publication and collaboration platforms and updating conference formats to give members better access to high-quality technical content.

- 1.1. ANS will reimagine its portfolio of national and topical conferences to better serve both its core membership and the larger nuclear workforce and will increase the availability of online content, such as webinars and technology briefings, to support more inclusive and timely knowledge sharing.
- 1.2. ANS, through its publications function, will continue to expand its coverage of nuclear-related news and deliver insights to not only its members but also investors, policymakers, and the broader public. The ultimate goal is for ANS to be the premier hub for technical communication in the nuclear sector and beyond.
- 1.3. ANS will leverage its publisher partnerships to support the continued growth in circulation and reputation of ANS journals. There is potential for ANS to add to its collection of technical content with the goal of providing the best, most complete technical portfolio for the nuclear community.
- 1.4. ANS will expand its portfolio of high-quality domestic and international consensus standards and promote their broad acceptance, endorsement, and use to meet the future needs of the nuclear industry

2. Enabling a Significant Expansion of the Nuclear Workforce

The nuclear industry is undergoing a significant resurgence. Organizations are working to relicense and extend the life of existing nuclear plants, restart previously decommissioned facilities, and design, develop, and build advanced reactors including both fission and fusion technologies and terrestrial and space-based applications. The underlying key to solving all these challenges is a strong, growing community of nuclear professionals. We don't just need more nuclear engineers and scientists, we need technicians, tradespeople, cyber specialists, and people in finance, law, policy, and business operations – people at every skill level. Meeting this challenge will require sustained investment in education, training, and workforce development at every level of education and career advancement. As the current workforce approaches a generational shift, ANS is uniquely positioned to lead efforts that will ensure a new generation of nuclear professionals is prepared to meet the industry's long-term needs.

- 2.1. ANS will continue to support traditional engineering and professional roles through online programs and certificate courses, in-person courses, our Certified Nuclear Professional (CNP) Program, and the professional engineering exam for nuclear engineers. We will also expand our focus by partnering with other organizations to support workforce development across a broader set of disciplines, including radiation technicians, welders, instrumentation specialists, and construction workers.

- 2.2. ANS will expand its mentoring opportunities for ANS members to build meaningful connections, give and receive career guidance, and expand their networks.
- 2.3. ANS will continue to support the needs of our core of highly skilled technical members, but we will also expand program offerings targeting nuclear professionals who do not have a technical degree.
- 2.4. ANS will support and expand student sections at U.S. universities, open to any student with an interest in applied nuclear technology. By offering scholarships and grants, and conference student programs, the Society will help support students as they begin their careers.
- 2.5. ANS will lead a national effort to improve nuclear education, both in the classroom and in informal education settings, serving as a central hub for nuclear education by supporting entities seeking guidance on training, credentials, and standards.

3. Promoting Better Understanding of Nuclear Technology and Shaping Public Dialogue

Public support for nuclear energy has grown significantly in the U.S. and around the world. Yet, lingering concerns persist—particularly within the finance and regulatory sectors of the nuclear industry—about the fragility of public acceptance of nuclear technology and its susceptibility to adverse events. This “fear of fear of nuclear” acts as a subtle yet significant drag on nuclear innovation and commercialization. ANS will leverage its position as the independent, science-based voice of the nuclear professional community to promote a more complete appreciation of nuclear technology’s benefits and a more rational understanding of its risks to the public.

- 3.1. ANS will prepare technical experts for communicating effectively, supporting media literacy, and proactively seeking opportunities to speak at public forums, schools, and civic events, and in media interviews.
- 3.2. ANS will strengthen its ability to respond to emergent nuclear events by expanding a dedicated network of trained nuclear professionals committed to providing timely, science-based information when nuclear issues are in the news.
- 3.3. ANS will maintain its position as the voice of the nuclear professional community and as an independent, trusted source for technical nuclear information.

4. Informing Policymakers to Enable Better Decisions and Stronger Policies

The nuclear resurgence we envision in this strategy requires a portfolio of federal, state, and local policies that together provide adequate support for the commercial deployment of new advanced reactors, continued research and development on advanced nuclear technologies, development and expansion of the nuclear workforce, and the advancement of non-energy nuclear technologies, including isotope production and space-based systems. ANS maintains a unique position in the policy domain. While we are not a lobbying organization, ANS has a unique role in helping to improve policymakers’ broader contextual understanding of nuclear issues and enabling them to make better, more informed policy decisions.

- 4.1. ANS will provide unbiased thought leadership on critical nuclear topics through its official position statements and engagement with decisionmakers
- 4.2. ANS will lead advocacy for federal stewardship of nuclear science, engineering and technology research, development, education, and workforce development.
- 4.3. ANS will strengthen its ability to provide a rapid response to federal, state and local policymakers when new nuclear issues arise.
- 4.4. ANS will partner with other NGOs on priority policy matters of broad interest to the nuclear community.

Conclusion

The next decade represents a turning point for nuclear energy and the American Nuclear Society. With a unified strategy and a bold vision, ANS is poised to lead the nuclear community toward a future that is cleaner, more advanced, and more secure. This strategic plan will guide our work.

Our Mission is to empower a strong, connected, and engaged professional community that cultivates nuclear science and technology for the benefit of humanity.

Our Vision is a world that unlocks the full potential of the atom to improve human lives and preserve our planet.

Core Values

1. **Excellence:** We strive for excellence in all aspects of nuclear science, technology, and engineering, setting high standards for innovation, safety, and professionalism.
2. **Transparency and Integrity:** We uphold the highest ethical standards of honesty, independence, and accountability in all our communications, interactions, and endeavors.
3. **Collaboration:** We value collaboration and teamwork, fostering partnerships across disciplines, industries, and global borders to advance nuclear knowledge and address complex challenges.
4. **Diversity and Inclusion:** We embrace diversity and inclusion, recognizing the value of varied perspectives and backgrounds. We continuously seek to create a diverse and sustainable membership by actively reaching out to individuals and communities, inviting them to participate and contribute to the advancement of nuclear science and technology.
5. **Education and Outreach:** We are committed to education and outreach, promoting public understanding of nuclear science and technology while supporting the development of the next generation of nuclear professionals.
6. **Safety and Security:** We prioritize safety and security as fundamental principles, advocating for rigorous safety standards, responsible stewardship of nuclear materials, and effective safeguards to protect people and the environment.
7. **Sustainability:** We advocate for the responsible use of nuclear technology to meet global environmental and human development objectives while minimizing impact on communities.



American Nuclear Society

askanything@ans.org

ans.org