

# **“Accelerating Deployment of Versatile Advanced Nuclear for Clean Energy Act of 2023” (ADVANCE Act)**

Preserving and expanding our nation’s use of clean and reliable nuclear energy is essential to advancing America’s energy and national security interests and achieving our environmental goals. America’s 93 operating nuclear reactors generate about 20 percent of our nation’s electricity and more than half of our carbon free energy. New nuclear reactors are also needed to provide necessary reliability and diversity to our electric infrastructure.

Russia’s ongoing war in Ukraine and China’s aggressive nuclear buildout highlight the importance of American leadership in providing energy security – at home and abroad. The international community, particularly American allies, are seeking to deploy new nuclear technologies to reduce reliance on Russian energy, and specifically Rosatom - Russia’s state-owned nuclear enterprise. Exporting American nuclear technologies will benefit the domestic industrial base and fill a vacuum that could otherwise be filled by Russia and China.

An effective and efficient nuclear safety regulator is necessary to realize the recent, strong bipartisan Congressional support for nuclear energy. Reinvigorating America’s nuclear energy sector will create jobs, strengthen our energy and national security, reduce carbon dioxide emissions, grow our economy, and strengthen strategic domestic supply chains. The ADVANCE Act will help our nation achieve these goals.

## The ADVANCE Act will:

- **Facilitate American Nuclear Leadership**
  - The bill empowers the Nuclear Regulatory Commission (NRC) to lead in international forums to develop regulations for advanced nuclear reactors.
  - The bill establishes a joint Commerce Department and Energy Department initiative to facilitate outreach to nations that are seeking to develop advanced nuclear energy programs.
- **Develop and Deploy New Nuclear Technologies**
  - The bill reduces regulatory costs for companies seeking to license advanced nuclear reactor technologies.
  - The bill creates a prize to incentivize the successful deployment of next-generation nuclear reactor technologies.
  - The bill requires the NRC to develop a pathway to enable the timely licensing of nuclear facilities at brownfield sites.
- **Preserve Existing Nuclear Energy**
  - The bill modernizes outdated rules that restrict international investment.
  - The bill extends a long-established, indemnification policy necessary to enable the continued operation of today’s reactors and give certainty for capital investments in building new reactors.
- **Strengthen America’s Nuclear Fuel Cycle and Supply Chain Infrastructure**
  - The bill directs the NRC to establish an initiative to enhance preparedness to qualify and license advanced nuclear fuels.
  - The bill identifies modern manufacturing techniques to build nuclear reactors better, faster, cheaper, and smarter.
- **Authorize funds for Environmental Cleanup Programs**
  - The bill authorizes funding to assist in cleaning up legacy abandoned mining sites on Tribal lands.
- **Improve Commission Efficiency**
  - The bill provides the NRC Chair the tools to hire and retain highly-specialized staff and exceptionally well-qualified individuals to successfully and safely review and approve advanced nuclear reactor licenses. This is essential with the NRC staff under attrition pressure due to an aging workforce.
  - The bill requires the NRC to periodically review and assess performance metrics and milestone schedules to ensure licensing can be completed on an efficient schedule.