

International Nuclear Energy Act (S. 4046)

The International Nuclear Energy Act sets a national strategic plan for the U.S. to promote engagement with ally partner nations. The bill develops a strong civil nuclear export strategy to compete against China and Russia, and establishes a domestic uranium supply and reserve that will increase American energy security.

SUMMARY

The International Nuclear Energy Act establishes an Executive Office of Nuclear Energy Policy to design and execute a comprehensive strategy for enabling nuclear energy exports, and also establishes the Nuclear Fuel Security Program to reduce and eventually eliminate reliance on nuclear fuel supplied by adversarial nations. Strategic engagement with ally nations and embarking civil nuclear nations to standardize financing, project management, licensing, and liability, as well as to promote safety, security and safeguards is necessary to lay the foundation for a successful, competitive nuclear export program.

HISTORY:

Nuclear energy has been a reliable, dispatchable, clean electricity source <u>since the 1950s</u>; roughly 440 reactors power <u>10% of global electricity</u>. The number of nuclear power plants <u>continues to grow</u> as global electricity demand increases; 53 reactors are under construction worldwide in as many as 17 countries. Not all of these countries have the capability to build nuclear power plants, so they import technology and construction expertise from foreign nations. Russia is <u>dominating the nuclear export market</u>, accounting for about 75% of the 23 exported reactor technologies under construction today. Partnerships formed from nuclear energy exports can last for a century, and it is important that the United States begins to establish these international partnerships. Since nuclear energy exports require coordination between federal agencies, the United States government must proactively develop relationships with partner nations, and create competitive financing mechanisms to offset Russia and China's growing influence.

Nuclear power plants also require a ready supply of nuclear fuel, and like other critical energy minerals, much of the mining and processing happens abroad. Despite having about 20% of operating civil nuclear reactors, the United States only mines 1% of global uranium, and has only 11% of global conversion capacity, and 7% of global enrichment capacity. These last two steps are vital in manufacturing nuclear fuel. Conversely, Russia and China have the majority of the global conversion and enrichment capacity at 45% and 60%, respectively. Even though power plants purchase fuel years in advance, the geopolitical situation in Russia and Ukraine is creating instability and uncertainty in the market. While the American Assured Fuel Supply Program historically created a small reserve, a healthy domestic supply chain for both large light water reactors and advanced reactors is necessary to ensure energy security and enable the United States to be a competitive nuclear energy exporter.

SPECIFICS:

The International Nuclear Energy Act takes a whole-of-government approach to creating a robust civil nuclear export strategy and nuclear fuel supply chain.

- Establishes the Office of the Assistant to the President and Director of Nuclear Energy Policy to coordinate civil nuclear exports strategy, develop a cohesive federal strategy for engagement with foreign governments, ensure framework agreements and trade controls are in place for key markets, establish financing relationships, promote regulatory harmonization, and enhance safeguards and security.
- Establishes a Nuclear Exports Working Group to create an interagency, 10-year civil nuclear trade strategy.
- Creates programs to facilitate international nuclear energy cooperation to develop the financing relationships, training, education, market analysis, safety, security, safeguards, and nuclear governance required for a civil nuclear program.
- Creates fast-track procedures for deemed civil nuclear exports for countries defined by the Secretary of Energy.
- Calls for two biennial summits, one focused on nuclear safety, security and safeguards, and another for civil nuclear vendors to enhance cooperative relationships between private industry and government.
- Establishes a Strategic Infrastructure Fund Working Group to determine how to best structure a fund to finance projects critical to national security.
- Expands the Export-Import Bank program on Transformational Exports to include civil nuclear facilities and related goods.
- Creates the U.S. Nuclear Fuels Security Initiative to reduce and eventually eliminate reliance on Chinese and Russian nuclear fuel.

ORIGINAL **S**PONSORS:

Sen. Joe Manchin (D-WV) Sen. James Risch (R-ID)

SUPPORT: ClearPath Action, Third Way, Nuclear Energy Institute, Good Energy Collective

Congress.gov Link: S. 4064

PRINTABLE SUMMARY:

Printable summary of S. 4064