



The Coming Collapse of Russia's Nuclear Exports: An Opportunity for the U.S. and its Allies

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Russia's brutal invasion of Ukraine and its unprecedented [attack](#) on an operating nuclear power complex is causing [reverberations](#) and rethinking across the global civil nuclear sector. Russia's actions have irreparably degraded its reputation and created the opportunity for responsible nations to dethrone Moscow as the world's top nuclear energy exporter.

Responding to Russia's Irresponsibility

There are four important messages about Russia's irresponsibility that democratic nations need to hammer home with potential nuclear energy importers.

First, Russia has recklessly transcended the established [international order](#) by occupying the Chernobyl nuclear complex, shelling the operating Zaporizhzhia power plant, and [attacking](#) a nuclear research center in Kharkiv. These are unprecedented violations and Russia cannot be trusted to assure effective nuclear governance around the globe as a result. It has actively undermined global nuclear security by risking the release of radiation from these facilities. And there are numerous other nuclear plants in Ukraine that could come under Russian assault.

Second, Putin's Russia has demonstrated an acute desire for client state subservience and a willingness to use energy as a political weapon. Potential nuclear customers of Russia should beware the impact on their sovereignty as there typically is a 100-year bilateral relationship that comes with nuclear reactor imports.

Third, Russia may not be able to deliver on its nuclear technology and financing as a result of the economic and energy sanctions leveled against it. These sanctions will impact Russia's access to [international capital](#) which could curtail its ability to deliver its very generous financing and support system for new nuclear plants. This attractive financing has been state supported and the most alluring feature of Russia's nuclear exports. Significantly curtailing this financing will decrease a major advantage Russia has leveraged for international nuclear market dominance.

Fourth, energy security is essential for national security and independence. This connection had fallen out of favor as nations walled off energy from security and treated it solely as a commercial concern. That policy now has failed.

The Russian attack was a cold slap of reality for European nations that are [overly reliant](#) on imports of Russian natural gas, coal, and crude oil. They are retreating from the [energy insecurity](#) this has caused and the [financing](#) it is providing for Russia's war on Ukraine.

Decreasing that energy dependency is causing countries like [Belgium](#) and even [Germany](#)

to rethink their previously planned nuclear power phaseouts. And it is prodding other European countries like [Poland](#), [Czech Republic](#), and the [U.K.](#) to accelerate their nuclear power deployment plans.

European Union nations moving forward with new nuclear plants that are engaged with Russia are now rethinking that partnership. [Finland](#) is reconsidering its joint nuclear plant project with Russia. It's president stating that it will be reviewed in light of Russia's invasion and that "security certainly will be one factor in the review." Turkey has a \$20 billion agreement with Russia to construct four reactors at [Akkuyu](#). That nation's president rejected Russia's Ukraine attack and stated that it is, "contrary to international law [and] a blow to the regional stability and peace." This position could impact future progress on the Akkuyu project.

Asia, also highly dependent on energy imports, is shifting its views on nuclear power. The conflict in Ukraine is leading Japan to consider an accelerated [reopening](#) of its shuttered nuclear reactors. And South Korea's newly elected president has [pledged](#) to "reinvigorate the nuclear energy industry by reactivating suspended atomic power plants and building new ones," including [abroad](#).

A Bigger and Better Alliance

The opposition to Russia's international aggression, rejection of its nuclear technology, and strengthening of the global energy-national security nexus, have created an important opportunity for trustworthy democratic nations to fill the void created by Russia's likely nuclear export demise.

It is increasingly clear that these responsible nations need to quickly develop a strategy to work together to take advantage of commercial nuclear opportunities. The plan needs to offer international nuclear client's long-term reliability and trust, must be robust enough to box out any potential export resurgence by Russia, and has to prevent China from replacing Russia. Any authoritarian nation nuclear export dominance poses [significant risks](#) and must be countered by a credible and trustworthy alternative.

But the framework for a new strategy is not well developed, and its future is uncertain at best. Commercial conflicts among nuclear supplier companies are hindering the creation of a coalition approach. And, key governments are not responding with the urgency and diplomacy necessary to break the stalemate. But there is a deal to be made among these supplier nations.

The creation of a *Next-Generation Nuclear Alliance* of democratic countries can collectively offer a package of technological, governance, financial, and security advantages to nations interested in existing and next generation nuclear technologies. This coalition can be anchored by the U.S. and South Korea, along with Canada, Japan, France, and the U.K. It can share supply chains and revenues on large light water reactor opportunities and promote collaboration on the development of next-generation, smaller nuclear power plants.

There are three important benefits of this collaboration:

First, it will uphold the existing international order governing nuclear operations and raise the bar for future governance innovation. This will strengthen the foundation of nuclear non-proliferation and security.

Second, there is the opportunity to collectively develop proposals for fuel cycle, governance, security, and related issues and present them as a united block to the IAEA and the international community, thereby increasing the chances of acceptance.

Third, these nations can share resources and expertise to support the IAEA in preparing newcomer nations for the responsibilities of nuclear operation including advanced reactors.

The Russian attack on Ukraine has galvanized democratic nations' support for a strong global order. The cohesion among these nations is stronger now than in recent years and, if sustained, will be a strong bulwark against future authoritarian nation military and technological aggression. Comprehensive economic-technology-security engagement is

the cutting edge of future cooperation for this alliance.

Safeguarding the Export Market

As nations evaluate the future role of nuclear energy, the international market for smaller reactors likely will begin to eclipse the large reactors of today by mid-century. Many of the nation's most well suited for the deployment of these technologies are developing economy countries in Africa, the Middle East, and South Asia. They need clean energy for their growing populations and economies. Large, gigawatt-sized reactors are not a good fit for many of these nations but smaller reactors would work. But these nations are also new to nuclear power operations. They will want and need support systems for the safe and secure operation of these reactors from partners that they can rely upon and trust.

For the most advanced of these small technologies, those that have fuel cycles not based on traditional light-water technologies, there are numerous nuclear governance advancements that will be required to be developed. Safeguards will need to be updated to prevent nuclear proliferation and new nuclear safety and security guidance is required.

The global community cannot allow Russia or China to seize control of the system for making these new rules by dominating the emerging small reactor market. As Russian exports falter it is vital that democratic nations fill the void and not allow China to climb to the top of the nuclear export market. Trading one authoritarian nuclear supplier for another won't make the world safer.

The challenge from China is a significant concern. It's Hualong nuclear power plant has recently been [approved](#) by U.K. nuclear regulators. This offers a high-standards regulator's seal of approval for the technology. And China will seek an international market for it. It also is very active in the development of small reactors and has plans to be the world's [leading nuclear operator](#) in this century. However, China's record of nuclear governance is not strong, and it will be further weighed down by its support for Russia's violation of nuclear norms in Ukraine. China [voted no](#) on an International Atomic Energy Agency resolution calling for Russia to "immediately cease all actions against, and at, the Chernobyl Nuclear Power Plant and any other nuclear facility in Ukraine."

Seizing the Opportunity

As the need for clean energy and global security converge, nuclear power increasingly will be under consideration as a reliable, zero-carbon option around the globe. But authoritarian nation control of the international nuclear market is a danger to current and future global security. Russia now has provided the lever needed to pry away its tight grip on international nuclear supply. But it cannot be handed off to China.

The question is whether the democratic nation nuclear exporters can organize themselves to actually seize the advantage in this opportunity and do it quickly. So far, the urgency seems to be missing. And that is a major mistake that needs to be corrected.

At the very least, the major democratic nation exporters should convene to discuss the rapid transformation of the international nuclear market, the opportunities and mechanisms for collaboration and profit sharing, and how the global expansion of nuclear energy can be responsibly and effectively managed. That first step can lead to a much safer world.

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