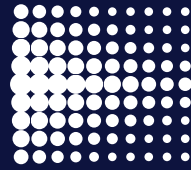


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A Global Strategy for Nuclear Energy Expansion



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Executive Summary

Nuclear energy can help address the pressing global need for reliable, affordable heat and power to fuel economic growth, while also delivering progress on climate commitments and energy security. But the world has not moved with sufficient conviction to achieve the full promise of nuclear energy—that would require a tenfold increase in annual deployment compared to current levels.

The Nuclear Scaling Initiative (NSI) is a collaborative effort of Clean Air Task Force (CATF), the EFI Foundation (EFIF), and the Nuclear Threat Initiative (NTI) to build a new nuclear energy ecosystem that can quickly and economically scale to more than 50 gigawatts (GW) of safe and secure nuclear energy per year by the 2030s. The team's plan for revolutionizing how nuclear energy is constructed, financed, and regulated will advance climate goals, spark economic development, expand energy access, and ensure that nuclear technology is used for only peaceful purposes.

Over the next two years, NSI will embark on the first phase of this work in Central and Eastern Europe (CEE) and the United States with an approach that emphasizes aggregated demand; multistakeholder risk-sharing; cohesive action by policymakers, the private sector, and civil society; accelerated deployment timelines; integrated supply chains; and strong nonproliferation and security practices. NSI plans to broaden its scope to support the expansion of nuclear energy in other regions, including Africa, the Middle East, South America, and Southeast Asia, in later phases.



What Is at Stake

Nuclear energy has the potential to not only meet surging energy demand, but also bolster energy security, climate efforts, and economic development. COP28, the 2023 meeting of the United Nations' annual climate conference, marked a turning point for global nuclear energy ambition: 25 countries committed to tripling nuclear energy capacity worldwide by midcentury. This goal has since been reaffirmed, with six new countries and numerous industrial entities and financial institutions joining the pledge at COP29 in 2024.

Tripling global nuclear energy will require adding approximately 1,200 GW of new capacity. Development on this scale would be unprecedented—akin to building more than 50 new large light-water reactors every year for two decades. Although the challenge is daunting, it is also an at least \$6 trillion opportunity to innovate, collaborate, and advance nuclear technology, financing models, and policy frameworks for efficient, cost-effective deployment.

For countries with existing commercial reactors, strong long-term price signals, a resilient supply chain, an experienced workforce, and implementation of mechanisms to support large capital investments can accelerate progress on new builds. For countries embarking on nuclear energy for the first time, expanded financial support, institutional capacity, and regulatory frameworks will be key to success.

Recent nuclear energy projects in Europe and the United States have suffered delays and cost overruns, but lessons from these experiences are

informing more effective project management and financing approaches. Elsewhere, nuclear energy deployment is advancing at a rapid pace: China is set to bring 10 large reactors online by the end of 2026, and India and Russia also are expanding their programs.¹

A coordinated effort among established and emerging nuclear countries, along with industry partnerships, and the development of cost-effective, replicable reactor designs can accelerate progress and unlock the full potential of nuclear energy as a sustainable energy source. The wind, solar, and natural gas fired electricity generation industries have already demonstrated that repeatedly constructing standardized technologies results in cost reductions over time. In 2023, global solar PV projects achieved an average cost 86 percent lower than 2010 levels, and global onshore wind projects experienced a 49 percent cost reduction from 2010 levels.² Between 1991–1997, the investment price (dollar per kilowatt) for combined cycle gas turbines decreased

by 25 percent for each doubling of installed capacity, in part attributed to the shift towards standardization.³

Many countries, including China, Japan, the Republic of Korea, and the United Arab Emirates (UAE), have shown the same can be true for nuclear reactors. Between 1989 and 2008, the Republic of Korea built 12 reactors of its first domestic design, with the final project cost (in real terms) 50 percent below that of Korea's first reactor built in 1971.⁴ The UAE's recent project to develop the Barakah Nuclear Energy Plant, with four units on the same site, saw a more than 50 percent cost reduction between Unit 1 and Unit 4.⁵

Strengthening regulatory and institutional frameworks and prioritizing safety and security also will ensure that nuclear energy is reliable and scalable. Fortunately, many next-generation reactor technologies prioritize strong nonproliferation practices. Scaling nuclear energy must align with nonproliferation commitments so that new reactors and fuel cycles do not create new stockpiles of weapons-usable materials.

The ambition for nuclear energy is high, and while challenges exist, so do solutions. By fostering collaboration between governments, industry, and international institutions, the world can take consequential steps toward scaling nuclear energy efficiently, economically, and responsibly.

NONPROLIFERATION: AN ESSENTIAL COMPONENT OF SCALING NUCLEAR ENERGY

As nuclear energy capacity expands to meet rising energy demands and climate goals, strong nonproliferation measures must be integrated from the outset to ensure that energy security does not compromise global security. Nonproliferation is not only compatible with scaling nuclear energy, it is key to maintaining the trust of local and international stakeholders and sustaining the growth of the nuclear energy industry.

Prioritizing reactors with proliferation-resistant fuel cycles and safeguards by design is crucial to ensuring that nuclear energy expansion reinforces nonproliferation objectives and does not create new risks. A once-through fuel cycle is ideal, as it simplifies spent nuclear fuel management by allowing for direct disposal without the expense, complexity, or security concerns that come from multiple waste streams.

By promoting international collaboration on effective safeguards standards, transparent fuel cycle management, robust regulatory frameworks, and embedding nonproliferation principles into the fabric of nuclear energy expansion, the global community can pave the way to a safe, secure, and prosperous nuclear energy future.

Why NSI

NSI is well equipped to lead this transformative effort; it combines the expertise, credibility, and proven track records of its founding organizations: CATF, EFIF, and NTI. Together, these organizations bring unparalleled capabilities in nuclear technology, policy, security, and finance, along with strong public and private sector experience and deep geopolitical insight.

CATF is advancing critical policies and technologies to combat climate change around the world. Its advocacy has unlocked billions of dollars in support for zero-carbon energy and reshaped the landscape of nuclear regulation in the United States and Europe. With teams across the United States, Europe, Africa, and the Middle East, CATF combines global reach with local impact, ensuring durable solutions for nuclear energy and other critical components of a net-zero emissions, high-energy planet at an affordable cost.

EFIF, a nonpartisan think tank, is renowned for its pragmatic and innovative approaches to promoting clean energy and industrial decarbonization. EFIF has shaped landmark U.S. federal initiatives, developed financing mechanisms for nuclear scale-up, and delivered solutions that bridge policy and practice to accelerate the energy transition.

NTI is a nonpartisan global security organization, bringing more than two decades of leadership in addressing nonproliferation and global nuclear security challenges. NTI pioneered the

establishment of the International Atomic Energy Agency (IAEA) Low Enriched Uranium Fuel Bank and has spearheaded systemic nuclear security improvements worldwide. With a steadfast commitment to nonproliferation, NTI seeks to ensure nuclear technologies are used exclusively for peaceful purposes.

Since 2023, NSI has united these organizations under a shared vision of a secure and sustainable energy future. This collaboration has already delivered the *Global Playbook for Nuclear Energy Development in Embarking Countries: Six Dimensions for Success*;⁶ introduced novel nuclear finance proposals; and driven high-level convenings across CEE and the United States to integrate nuclear energy into policymaker and corporate development strategies.

NSI is a trusted partner for governments, industry, investors, and communities in overcoming the challenges of nuclear energy scale-up. All funding for the initiative comes from philanthropic sources, allowing for independent action that is not beholden to any corporation or special interest.



Objectives and Strategy

NSI is organized to achieve five key outcomes in service of the rapid expansion of economic, safe, and secure nuclear energy.

1

FORMING DURABLE DEMAND SIGNALS

Combating the severe cost overruns and elongated timelines that currently plague many nuclear energy projects will require aggregating demand and breaking free from a pattern of one-off, first-of-a-kind (FOAK) projects. NSI will bring together demand-side stakeholders to form a series of buyers clubs. Each buyers club will likely comprise a regional coalition of project sponsors to generate durable demand for nuclear energy, supported by public-private risk-sharing mechanisms.

traditional GW-scale reactors, small modular reactors (SMRs), and micro modular reactors (MMRs) that may share common pieces of a global supply chain and workforce. The orderbooks will achieve cost efficiencies through learning-by-doing, supply chain readiness, regulatory consistency, and by taking advantage of a knowledgeable talent pool. This framework would address economic feasibility, risk sharing, licensing, financing, and supply chain policy issues.

2

ASSEMBLING ORDERBOOKS

As the buyers clubs coalesce, NSI will work with each to secure firm commitments to build multiple units of a particular design, known as orderbooks. We anticipate creating multiple orderbooks—organized around regional deployment clusters—that each pursue a limited number of technologies. These could include

3

INFORMING TECHNOLOGY SELECTION

To build orderbooks around common technologies, project sponsors will need to select reactor designs from a crowded marketplace. NSI will create tools that analyze reactor types against criteria including deployment timescale, regulatory maturity, and supply chain readiness. Crucially, the tool also will examine reactors' compatibility with strong nonproliferation and security standards.

4


ADVOCATING FOR COHESIVE AND EFFICIENT REGULATORY FRAMEWORKS

NSI will collaborate with regulators and competent authorities worldwide to develop coherent licensing frameworks, share technical information, and expedite review processes without compromising safety. The focus of regulatory engagement will be on facilitating orderbooks for new builds, including multiple reactors of the same design at a single site and across different geographic locations.

5

ENABLING A VIBRANT NUCLEAR ENERGY DELIVERY ECOSYSTEM

NSI will work with public and private sector stakeholders to facilitate the development of a skilled workforce across the nuclear value chain; enable a reliable supply chain (especially for fuel); and apply lessons learned from successful nuclear and other infrastructure projects to ensure that projects are financed, constructed, and delivered efficiently.



Driving Toward the Next Phase of Nuclear Energy Expansion in the United States and Central and Eastern Europe

The United States and Central and Eastern Europe (CEE) have ambitious goals for large-scale nuclear energy deployment, driven by shared imperatives: rising electricity demand, energy security needs, economic competitiveness, and climate commitments. Both regions also benefit from decades of experience in nuclear energy. However, deployment challenges remain, some of which are unique to each region (e.g., regulatory frameworks, market structures, competing energy resources, etc.). Successful deployment and leadership in these regions will establish a precedent for global expansion.

UNITED STATES

Demand for electricity is surging in the United States, with near-term electricity demand forecasts predicting a sharp increase 2.8 to 8.2 percent by 2029.⁷ The U.S. government sees energy-intensive technologies like datacenters for artificial intelligence, battery manufacturing, and advanced chip fabrication as critical to the country's economic growth.^{8,9} Electrification of transportation and heating in buildings and growth in air conditioning requirements across the country add to that demand. The U.S. nuclear reactor fleet remains a cornerstone of the nation's

energy portfolio, generating approximately 20 percent of all electricity and more than half of the nation's carbon-free power. But the fleet is aging, and many reactors are approaching the end of their licensing periods. Even with the necessary uprating (the act of increasing the licensed power level) and license extensions to the existing fleet, the country needs new nuclear reactors.

Bipartisan support and executive actions emphasize the urgency of the situation and the ambition that exists for harnessing nuclear

energy's potential.^{10, 11, 12} Achieving this vision will require a combination of proven large-scale projects, like replicating the recently completed Vogtle units in Georgia, and building next-generation technologies, including SMRs.

A number of states, including those shown on the map below, are already undertaking initiatives and partnerships to advance nuclear energy, bolstered by favorable state policies, existing nuclear capabilities, and surging energy demand.¹³

Washington: Amazon is investing \$334 million in a partnership with Energy Northwest to develop SMRs, targeting 320 megawatts (MW) for its operations¹⁴—supported by \$25 million in the state's 2024 budget for the utility.¹⁵

Virginia: Amazon and Dominion Energy announced a collaboration to build an SMR in the state.

Tennessee: The Tennessee Valley Authority (TVA) and Ontario Power Generation are collaborating on SMR development, focusing on design, licensing, construction, and operation.

Wyoming: The state's industrial siting council issued the first state permit ever for a commercial-scale SMR, paving the way for a former coal plant to be redeveloped into a nuclear power plant.¹⁶

Texas: The governor's office established the Texas Advanced Nuclear Reactor Working Group to position the state as a leader in advanced nuclear energy through legislative, structural, and financial initiatives.

South Carolina: State senators have filed a bill encouraging nuclear energy development at the Santee Cooper site, specifically referencing the successful deployment of AP1000s in Georgia and internationally as clear indicators of derisking construction, operation, and workforce.¹⁷

Deployment Challenges in the United States

The growing interest in nuclear energy across the United States underscores the need for coordinated efforts among utilities, private developers, large load customers, regulators, policymakers, and local communities to overcome the barriers facing new builds.

Business Model Viability

The cost overruns at Georgia's Vogtle Units 3 and 4 have raised significant concerns among regulators, lenders, and investors about the reliability of capital cost estimates for new nuclear builds. There is apprehension particularly about designs that have yet to be deployed commercially, such as SMRs, microreactors, and non-light-water technologies. Although funding plans now require substantial reserves to mitigate risks, the uncertainty around unforeseen, extraordinary overruns hinders orderbook formation, as utility commissions and capital providers prioritize predictability. Existing tools, such as technology-neutral investment tax credits and low-cost debt, may not be adequate on their own to attract the level of private capital needed. This challenge is exacerbated in competitive wholesale electricity markets, which fail to adequately value capacity.

Licensing and Regulatory Delays

New nuclear builds require an efficient, stable, and flexible regulatory environment that adheres to the Nuclear Regulatory Commission's (NRC) safety standards. However, inefficiencies have arisen as the NRC adapts to increased demand for the review of new technologies. As a result, SMR and MMR developers face inefficient reviews that can undermine modularity, standardization, and cost reductions critical to success, creating investment uncertainty among prospective project sponsors.

Workforce, Supply Chain, and Fuel Availability

Workforce shortages, fragmented supply chains, and uncertainty about fuel availability—specifically for low-enriched uranium (LEU) and high-assay low-enriched uranium (HALEU)—pose significant

challenges to scaling the nuclear industry. The existing reactor fleet helps sustain workforce and supply chains through license extensions and updates, but without new projects, this foundational infrastructure will dissipate. LEU is a globally traded commodity with substantial, inelastic international demand, making it difficult to align nuclear expansion with the long lead times required for supply chain growth. Many Gen IV reactor designs depend on HALEU, yet a commercial-scale supply chain outside of Russia has yet to emerge.

NSI's Path Forward in the United States

To meet future energy needs, shore up economic growth targets, and enhance energy security, the United States must pursue a multi-faceted strategy for new nuclear builds that addresses existing barriers and leverages emerging opportunities.

Aggregating Demand, Derisking Mechanisms, and Devising Revenue Models

Overcoming business model challenges requires innovative approaches such as demand aggregation and hybrid revenue models that blend public and private investment. Federal-state-private risk-sharing mechanisms, including cost-overrun backstops, price stabilization contracts, and advanced purchase agreements, can de-risk investments and incentivize private sector participation. Exploring build-own-operate models through entities like the TVA could help position the United States as a leader in advanced nuclear deployment. This could also be accomplished through a build-transfer-operate model for FOAK orderbooks through federal instrumentalities such as the Power Marketing Administrations.

Addressing Policy and Regulatory Barriers

Streamlining permitting processes to compress timelines while maintaining world-class quality, modernizing regulations to accommodate advanced reactor designs, and expanding incentives for nuclear deployment are essential for efficient deployment. Robust federal leadership will be important to align state and regional

efforts and ensure consistent support for nuclear innovation across the country.

Building on Domestic Capabilities and Expanding International Collaboration

The United States can grow its domestic nuclear energy workforce through piecemeal license extensions and power uprates to existing facilities, but that alone will be insufficient. It will be critical to foster new construction that leverages the hard-earned project management experience from recently completed builds such as Vogtle and capitalize on international partnerships with allies experienced in nuclear construction, regulation, and fuel supply production.

Emphasizing Nonproliferation Principles

As the United States scales its nuclear energy capabilities, nonproliferation must remain a core principle, for the sake of global security and the long-term health and economic viability of nuclear energy. Reactor designs and fuel cycle options must keep weapons-usable nuclear materials out of the supply chain. Advanced reactor designs that prioritize safety, security, and nonproliferation can serve as models for global adoption.

CENTRAL AND EASTERN EUROPE WITHIN THE EUROPEAN UNION

Nuclear energy's ability to generate clean, firm electricity has gained renewed attention from the European Union (EU) and its member states, as the region's electricity grid faces three interrelated challenges:

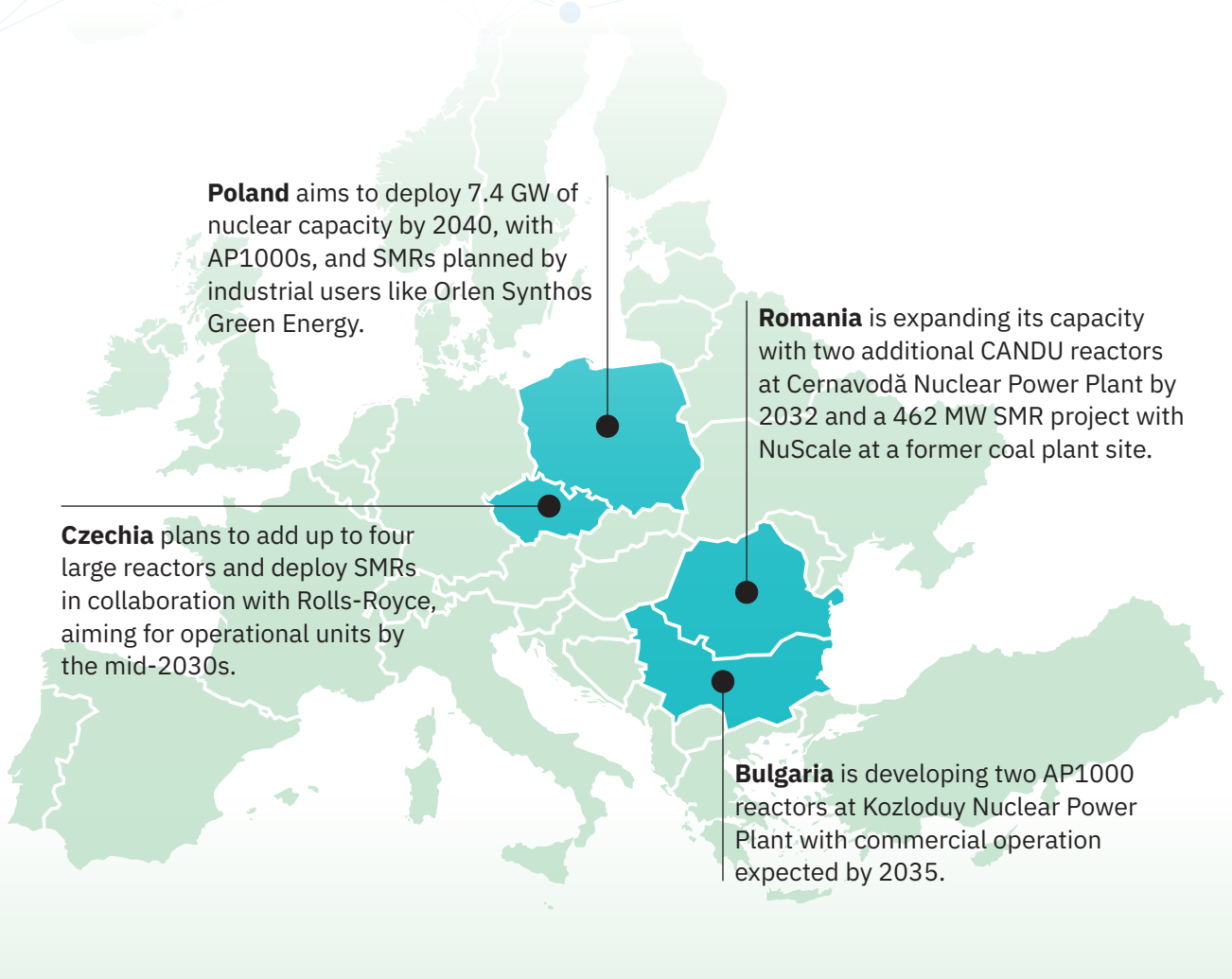
1. The EU must decarbonize its grid to address climate change while maintaining affordability and energy reliability for its citizens.
2. Decarbonizing requires the EU to accelerate the deployment of clean technologies amid energy security and industrial competitiveness challenges.
3. A significant portion of existing clean firm energy capacity is aging and will need replacement before 2050.

These challenges are compounded by intensifying international industrial competition, underscoring the need for a diverse portfolio of energy sources.

The EU's approach is to set bloc-wide decarbonization goals and regulatory frameworks without dictating member states' energy mixes. By EU law, member states retain the right to choose their own energy sources, including nuclear energy, as long as those sources are aligned with EU-wide objectives such as decarbonization, energy security, and market integration.

The European nuclear energy industry supports around 1 million jobs and contributes €94 billion directly to the economy and €357.4 billion indirectly. Across 12 EU member states (six within CEE), 100 nuclear reactors currently account for 97 GW capacity, meeting about a quarter of the EU's electricity demand.¹⁸ The EU has also created an Industrial Alliance for SMRs to accelerate commercialization by the 2030s and establish domestic supply chains.

CEE has demonstrated its ability to adapt and innovate despite aging infrastructure, fiscal constraints, and the geopolitical fallout of war in Ukraine. The region accounts for 17 percent of EU electricity demand and is helping drive progress toward the EU's midcentury climate neutrality goal. Nuclear energy is already a cornerstone of electricity generation in many CEE countries, including Bulgaria (44%), Czechia (36%), Hungary (46%), Romania (18%), Slovakia (54%), and Slovenia (37%).¹⁹ Still, many CEE countries, including those shown on the map, are looking to expand their nuclear capacity to meet decarbonization goals, enhance energy independence and security, and drive economic growth.



Deployment Challenges in CEE

CEE countries have demonstrated their interest in leading nuclear energy expansion on a regional and global level. By overcoming the following challenges, their potential for continued growth would be unleashed.

Absence of Market Incentives

Current electricity markets do not incentivize large, capital-intensive projects, as short-term returns are favored over long-term benefits. The markets also undervalue the reliability and flexibility of dispatchable electricity generators, which makes it difficult for new nuclear energy projects to move forward without government support or other incentives.

Low Confidence in the Ability to Deliver Major Infrastructure Projects on Time and on Budget

Timeline delays and cost overruns because of poor project management, skill atrophy, and workforce shortages have plagued recent new nuclear projects in Finland, France, and outside the EU in the United Kingdom. Those issues have deterred investment in nuclear energy, but the increasingly urgent need for progress on energy security; affordable, reliable electricity to sustain industrial competitiveness; and decarbonization amid growing electricity demand has shifted perceptions on the benefit of pursuing nuclear. As countries embark on new nuclear projects, this challenge becomes all the more important to address.

Workforce, Supply Chain, and Fuel Availability

The industry is grappling with the implications of workforce shortages, fragmented supply chains, and fuel availability. Workforce shortages further hinder construction progress, with an aging labor pool and insufficient training programs to attract younger workers. Both supply chain fragmentation and reliance on single suppliers for critical components exacerbate delays and costs. Fuel supply is another concern, as 85 percent of uranium comes from just six countries and 30 percent of enriched uranium comes from Russia,²⁰ leaving some CEE countries dependent on Russia, despite efforts to diversify.

Inefficient Licensing and Regulation

Reactor licensing and regulation is a national affair; each technology undergoes independent safety and security reviews by a country's national nuclear regulatory body before it can be deployed there. The regulatory differences between EU member states force project developers and technology vendors to devote limited resources to duplicative regulatory processes in each country, leading to significant design differences. This is a significant barrier to standardized fleet deployment across the EU bloc.

Limited EU Support

EU-level support for nuclear energy projects remains limited. The European Investment Bank has primarily funded safety upgrades rather than new builds. Additionally, EU state aid rules limit member states' options for supporting national nuclear energy projects. Although state aid rules were loosened in 2023 for some clean technologies, nuclear energy was not on the list but will be reconsidered in 2025.

Construction Risk

Contracts for Difference (CfDs) are a helpful mechanism for supporting low-carbon electricity generation. In 2024, the European Commission approved Czechia's plans for CfD-backed nuclear development at Dukovany, providing stable revenues and a subsidized state loan. Although

CfDs can mitigate revenue risks, they do not cover construction risks, which remain a significant barrier to private investment. This has led some countries, such as the United Kingdom, to adopt Regulated Asset Base models, which share construction risks between investors and the public.

NSI's Path Forward in CEE

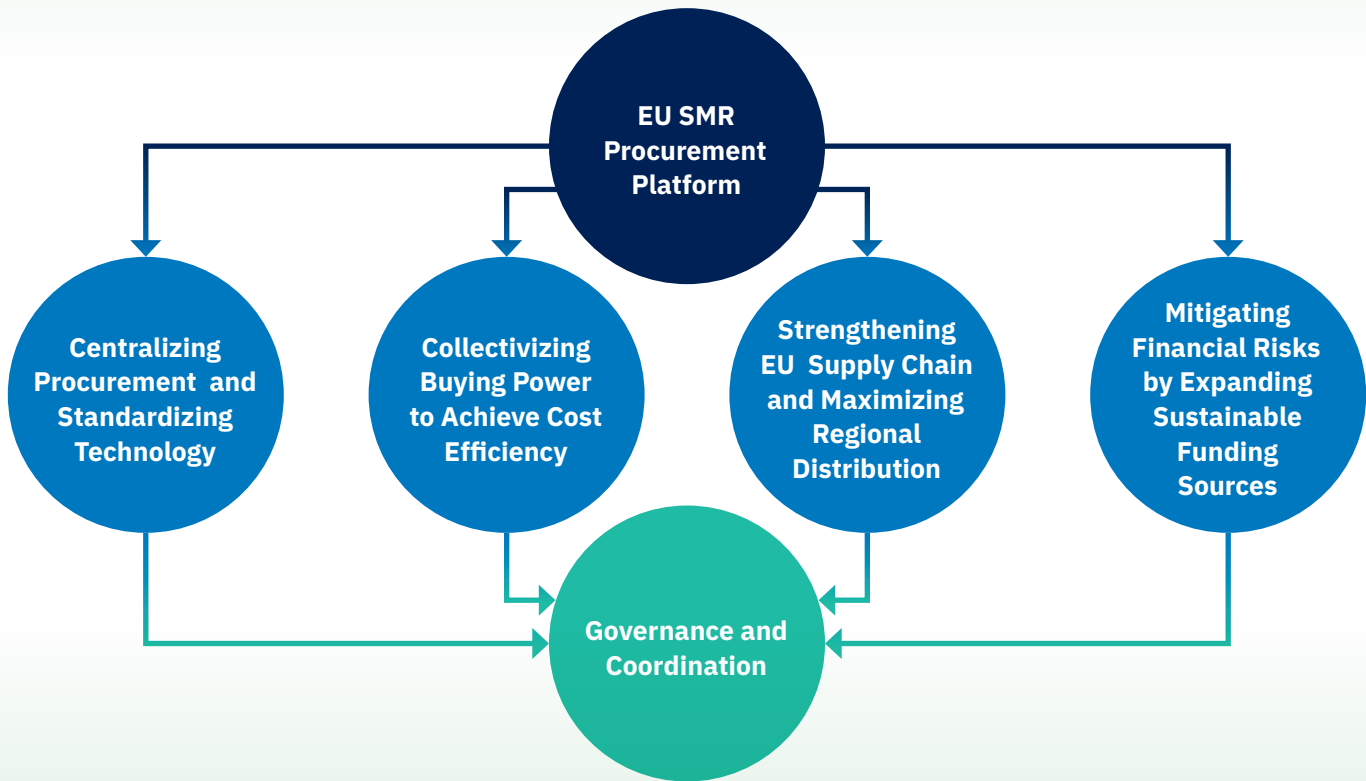
CEE and the wider EU need a comprehensive strategy to ensure industrial competitiveness and energy security.

Fostering Alignment on Technology Choices

The nuclear energy sector currently has more than 100 designs in development, many of which are "paper reactors," or underdeveloped concepts with limited prospects. European countries are also interested in championing domestic supply chains for nuclear technologies to avoid relying solely on imported technologies. The market needs to consolidate around the most promising technologies to ensure efficient allocation of development funds. After a honed group of promising reactor designs emerges, regional reactor orderbooks, each for one reactor design, could drive investment in supply chains that boosts economic growth on a regional level, and Europe's contribution to nuclear energy projects worldwide. Coordinating member states' nuclear expansion plans around orderbooks for a small number of standardized reactor designs would unlock construction efficiencies and cost savings, such as those achieved by solar and wind technologies.

The EU could facilitate this process by establishing a suite of tools that foster collaboration and alignment among member states. A joint procurement platform, as visualized by Figure 1, would centralize member states' efforts and leverage their collective buying power to commission multiple reactors under umbrella contracts. By coordinating orders across regions, coalitions, or public-private consortia, the platform could accelerate reactor deployment and reduce costs.

Figure 1: A joint procurement platform in the EU could accelerate reactor deployment and reduce costs



Striving for a Cohesive European Nuclear Regulatory Framework

Efficient technology transfer across European borders requires a coordinated regulatory framework. Collaboration among national nuclear regulators, as seen in the joint safety review of the NUWARD SMR reactor design by Czech, Finnish, and French regulators, provides a model for greater cohesion. Cohesive regulatory approaches would streamline approval processes and accelerate the cross-border deployment of standardized reactor designs.

Sharing Risks Through Public-Private Partnerships

To attract private investment, EU and CEE countries must adopt politically durable and innovative financial models and risk-sharing mechanisms. Demand aggregation and hybrid

revenue models that blend public and private investment can address business model challenges. Mechanisms such as cost-overrun backstops, price stabilization contracts, and advanced purchase agreements can de-risk projects and incentivize private sector participation. Learning from past experiences and adapting successful models will be critical to overcoming financing hurdles.

Emphasizing Nonproliferation Principles

Europe must expand its nuclear capacity with nonproliferation as a guiding principle. Advanced reactor designs that prioritize safety, security, and nonproliferation should be at the forefront of technology selection and deployment. These designs can serve as global benchmarks, reinforcing the peaceful use of nuclear energy while ensuring Europe’s leadership in responsible nuclear innovation.



NSI's 2025–2026 Work Plan

Over the next two years, NSI will initiate its plan to cultivate a new nuclear ecosystem capable of deploying reactors at scale in CEE, the United States, and beyond. In this first phase of work, NSI will focus on addressing the specific challenges in CEE and the United States in collaboration with the full commercial nuclear energy value chain, stakeholders, and governments to drive complementary progress.

Facilitate the formation of at least one buyers club

- Host annual forums with collaborators to assess progress, foster partnerships, and set actionable goals
- Work with first-mover and fast-follower project sponsors to promote alignment on goals and incubate collaborations with durable foundations
- Advocate for new policies that catalyze investment in new-build projects
- Build trust in nuclear energy by engaging diverse audiences with transparent, relatable messaging

Collaboratively activate the formation of at least one large, pooled demand orderbook for nuclear plants

- Promote financial risk-sharing among private parties within buyers clubs and governments to reduce first-mover disadvantages
- Support emerging orderbook formation activities in the United States
- Identify the economic, regulatory, and policy conditions required for scaling and ensure market demand for new projects
- Establish regional coalitions of utilities, large off-takers, governments, and private developers to drive durable demand for nuclear energy

- Design deal-level public-private risk-sharing mechanisms to give motivated investors the confidence they need to say “yes”
- Produce a tool to inform the selection of reactor technologies, both for demand-side customers and reactor development funders
- Facilitate agreement on a small number of reactor technologies that can most effectively form the basis of future orderbooks
- Rate reactor technologies against criteria such as deployment timeline, supply chain readiness, and regulatory maturity, and nonproliferation credentials
- Place a special focus on nonproliferation and nuclear security to steer the future of nuclear energy toward technologies that do not use weapons-usable materials

Create a roadmap for a coherent and efficient regulatory framework

- Advocate for the harmonization of regulatory and other policies across international borders, especially in Europe, to create a truly global industry
- Outline pathways for technical information sharing to support streamlined licensing and approval processes that reduce duplication and accelerate deployment
- Enable policies and regulations that actively support the deployment of orderbooks of new builds, like batching new build approval processes instead of project-by-project assessments
- Promote international consistency, working with organizations such as the IAEA, Nuclear Energy Agency, and World Nuclear Association

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The Nuclear Scaling Initiative is a collaborative effort of Clean Air Task Force, the EFI Foundation, and the Nuclear Threat Initiative to build a new nuclear energy ecosystem that can quickly and economically scale to 50+ gigawatts of safe and secure nuclear energy globally per year by the 2030s. NSI's plan for revolutionizing how nuclear energy is constructed, financed, and regulated will advance climate goals, spark economic development, expand energy access, and ensure that nuclear technology is used for only peaceful purposes.

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