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NUCLEAR POWER:

International Revival, Energy Security,
and Tech Integration

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Executive Summary

Nuclear energy stands at a crucial moment in Europe and globally, marked by contrasting national policies, technological breakthroughs, and strategic imperatives. From Germany's controversial phase-out to the emergence of Small Modular Reactors (SMRs) and the growing intersection with artificial intelligence, several critical factors are driving nuclear energy's resurgence as a cornerstone of sustainable energy solutions:

1. Nuclear withdrawal affected the German economy: Germany's nuclear phase-out, rooted in historical anti-nuclear sentiment and accelerated after the Fukushima accident, has led to energy shortages and reliance on fossil fuels. The economic and social costs highlight the success of the *Energiewende* policy and lead to questions about Germany's readiness for the transition from nuclear production.

2. Despite Germany's decision, Europe is experiencing a nuclear revival. In contrast to Germany, several European countries are reviving atomic energy to address energy security and climate goals. Nations like France, Poland, and Sweden are investing in new reactors, including plans for SMRs, reflecting a broader European commitment to nuclear as a strategic energy source.

3. Balancing energy independence and global competition: The energy crisis exacerbated by the Russian invasion of Ukraine has highlighted nuclear energy's role in reducing dependence on imported fossil fuels. But the goal of energy security is not the only reason for the nuclear revival: other reasons include the concurrence of the nuclear initiative of global superpowers such as China—which is experiencing a crucial development of its nuclear strategy—and the need to find energy sources that can permit the transition from fossil fuels in a time of energetic crisis.

4. Small reactors, big ambitions: SMRs are gaining traction as a safer, cost-effective alternative to traditional reactors. The recent agreements between Tech giants and SMR industries show the interest in that technology. In Europe, Central and Eastern countries are leading the research in SMRs, with Poland and Romania advancing SMR projects and the Czech Republic, Slovenia, and Bulgaria trying to reach agreements in that direction. At the EU level, some initiatives on SMRs emphasize their potential in promoting energy transition and achieving climate targets and the institutions' commitment to their usage.

5. Powering the AI revolution: The growing energy demands of AI development have spurred tech companies to consider nuclear power. Nuclear energy's stability and scalability make it an attractive option for powering data centers. Collaborations between AI and nuclear research are accelerating advancements in energy technologies, including fusion reactors.

6. Global momentum for nuclear energy: International agreements, such as commitments made during COP28 and European Commission statements of interest, underline the global consensus on expanding nuclear capacity to address climate goals. These findings highlight the key role nuclear energy, especially innovative solutions like SMRs, plays in addressing Europe's energy security, climate change, and technological advancement needs.

Recommendations:

1. Promote SMRs as a strategic solution: While China is pushing SMRs as a strategic asset in its renewed nuclear energy strategy, it would be helpful to continue in the direction assumed by the European Institution in the last few years in the research and development of SMR strategies.

2. Invest in education and workforce development: As France is doing, supporting initiatives to train and retain a skilled workforce for nuclear energy projects should be helpful. In that sense, it should be helpful to promote academic and vocational programs that align with the future needs of the nuclear sector, especially for AI related to nuclear production, SMRs, and fusion technology.

3. Correlate nuclear production, innovation, and prosperity: Advocate for increased research and development funding (possibly through agreements with the private sector) for next-generation nuclear technologies, including fusion and AI applications in energy systems. Support international collaborations (with Western countries advanced in atomic research and development and with tech companies) to ensure Europe remains competitive in the global nuclear energy landscape.

Conclusion:

The resurgence of nuclear energy represents a major shift in the global energy landscape, particularly as nations navigate the complex challenges of energy security, climate change, and technological advancement. This transformation is marked by the emergence of innovative solutions like SMRs and the growing synergy between nuclear power and artificial intelligence. While Germany's experience highlights potential challenges in nuclear phase-out, the broader European and global momentum toward nuclear energy adoption suggests a promising path forward. Success in this transition will require coordinated action across policy, education, and technology sectors, with particular emphasis on developing next-generation nuclear solutions and fostering international collaboration. As the world moves toward a more sustainable energy future, nuclear power's role as a reliable, clean energy source appears increasingly central to achieving both environmental and economic objectives.

Introduction

The role of nuclear energy in Europe has been a subject of heated debate and strategic importance for decades. As countries face complex challenges such as energy security, needing to find solutions to the energetic and climate issues, and geopolitical pressures from energy sources exporters – namely Russia – the revival of nuclear energy is emerging as a potential cornerstone of the Western and European’s energy transition.

This briefing paper explores the major dynamics shaping the nuclear energy landscape, from Germany’s nuclear phase-out and its consequences to the broader revival of nuclear power across Europe and beyond and its possible reasons.

Germany’s withdrawal from nuclear energy, driven by historical anti-nuclear sentiment and amplified after the Fukushima accident, has sparked economic and environmental challenges. In contrast, other European nations are actively investing in nuclear energy or re-opening the debate on nuclear energy, with an eye to innovative technologies like Small Modular Reactors (SMRs) to meet energy security needs and decarbonization goals. These decisions are further influenced by global developments, such as China’s rapid expansion in nuclear technology and the energy crisis triggered by Russia’s invasion of Ukraine.

The paper also delves into the intersection of nuclear energy with emerging technologies like artificial intelligence (AI), highlighting the growing synergy between these fields in addressing global energy demands. Through an analysis of current policies, technological advancements, and geopolitical trends, this document provides a comprehensive overview of the opportunities and challenges associated with nuclear energy in our days and with an eye to the next decade.

Germany’s nuclear exit and economic consequences

Germany’s decision to phase out nuclear power has been a complex political journey spanning several decades. Ironically, this decision culminated in a complete withdrawal when nuclear energy’s resurgence is becoming [increasingly evident](#) and, in most cases, inevitable. This shift has profoundly affected the German economy, triggering a rapid energy and economic crisis.

It is essential to examine the [historical context](#) to understand the current situation. Anti-nuclear sentiment in Germany is not recent; protests against nuclear power plants began as early as the 1970s and 1980s. However, it was only after the Chernobyl disaster in 1986 that the political discourse shifted. At that time, voices outside the Green Party began to emphasize that nuclear energy was a transitional solution rather than a long-term one. This shift in thinking explains why the last nuclear plants in Germany were built in the late 1980s, including the Brokdorf Nuclear Power Plant, which began operations in 1986, followed by the second block of the Neckarwestheim plant.

The official phase-out began in 2002 with an agreement between the red-green coalition government under Gerhard Schröder and the nuclear industry

The official phase-out began in 2002 with an agreement between the nuclear industry and the red-green coalition government under Gerhard Schröder—who would later spark controversy by assuming board positions at Russian energy companies. The aim was to allegedly reconcile economic interests with environmental concerns by gradually shutting down nuclear plants. The amended Atomic Energy Act ([Atomgesetz](#)) established a framework for phasing out commercial nuclear power, setting an energy output limit for each plant corresponding to an average operational lifetime of 32 years. New atomic plants were banned altogether.

However, the phase-out [accelerated](#) in 2011 following the Fukushima accident in Japan. Chancellor Angela Merkel’s government made the controversial decision to shut down eight plants immediately, with the remaining plants scheduled for decommissioning by 2022—fourteen fewer than originally planned.

This decision was in line with Germany’s broader *Energiewende* policy, which seek to shift away from nuclear power in favor of low-carbon energy sources. The majority of the population has supported this policy. A recent [poll](#) conducted as part of academic research shows that fewer than one-quarter of Germans are willing to

accept nuclear energy as part of the country's future energy mix. Despite initial resistance from the nuclear industry, public support and the expansion of renewable energy allowed the government to proceed with its phase-out without significant opposition. Ultimately, the growth of the Green Party and the formation of the Ampelkoalition, the coalition government led by Social Democrat Chancellor Olaf Scholz, sealed Germany's commitment to complete the withdrawal from nuclear energy production.

Yet, this commitment to renewable energy and nuclear disarmament has come at a significant cost. Once the powerhouse of Europe's economy, Germany now faces the specter of recession. The economic damage caused by the COVID-19 pandemic was followed by the geopolitical fallout from Russia's invasion of Ukraine. As a major supplier of cheap natural gas, Russia's role as an energy [provider](#) to Germany came to a halt due to Western sanctions, significantly disrupting the country's energy supply.

Although German energy prices have recently fallen, the economic scars of the energy crisis remain. In addition to Germany's overreliance on Russian gas during its rapid industrialization, the country's energy policy—characterized by its resistance to nuclear energy and slow transition to green alternatives—has contributed significantly to the ongoing energy crisis.

This can be added to the social and personal costs of the nuclear phase-out. In 2019, while three plants were still operative, [research](#) published by the National Bureau of Economic Research proceedings showed relevant data in that direction. Considering the increase of the pollution caused by the increased fossil fuels production and the marginal costs for the maintenance of the fossil fuels plants, S. Jarvis, O. Deschenes, and A. Jha concluded that:

“Overall, we estimate that the social cost of the phase-out to German producers and consumers is \$12 billion per year (2017 USD). The vast majority of these costs fall on consumers. Specifically, over 70 percent of the cost of the nuclear phase-out is due to the increased mortality risk from local air pollution exposure due to producing electricity by burning fossil fuels rather than utilizing nuclear sources. (p. 6) [...] this implies a cumulative cost of the phase-out of \$250 billion over 2011-2032. ”

More recently, in 2021, the German Federal Accounting Office warned about the risks of the *Energiewende* as planned by the German government:

“The Bundesrechnungshof warns that the energy transition, in its current form, threatens the German economy and overburdens the financial capacity of electricity-consuming companies and households.”

Currently, three-quarters of the German domestic electricity consumption is [fossil fuel driven](#), with oil [providing](#) about 35 percent, coal 20 percent, and gas nearly 24 percent. Suppose it is true that, in the last few years, Germany has reached significant levels in the goal of transitioning to renewable energy sources. In that case, it is also true and clear that it is living in a problematic phase regarding costs. In addition to the data above, we should consider that the average household electricity price passed from 0.3006 euros/kWh in December 2020 to the current 0.3951 euros/kWh (with a maximum cost in June 2023, 0.4215 euros/kWh).

In conclusion, we should ask ourselves if Germany was – and still is – ready to end its nuclear energy production and if the energetic crisis subsequently leads to the phase-off is only a temporary “assessment” or if we can see, due to the situation above, a comeback of nuclear energy. The question appears legitimate as the [debate](#) is still unsurprisingly active: recently, the main opposition party's leader, Friederich Merz (CDU), defined the shutting down of the last nuclear reactor as “a dark day for Germany”, and the party platform is apparently promoting the reconnection to the grid of the old plants.

The new wave of European nuclear power

Nonetheless, Germany's case seems isolated. While Berlin struggles with the problem of the energetic supply after the phase-off of its nuclear plants, other countries are moving in the opposite direction.

On October 25, 2024, an Italian political-civic committee (formed by the centrist party Azione and some organizations such as Fondazione Luigi Einaudi and Associazione Italiana Nucleare) started a [petition](#) to reinstate nuclear production in the domestic energy mix - production, which ended in 2011 as the result of a referendum. In only 4 days, the petition reached the 50,000 certified signatures necessary for the submission to the Parliament, with a review expected in early 2025. On the other hand, the Italian government seems reactive to the “sentiment” shown by this petition: in December, Minister to the Environment and Energy Transition Gilberto Pichetto Fratin [announced](#) the willingness of Meloni’s executive to discuss a new law on nuclear energy already in January 2025. [Back in October](#), Pichetto Fratin announced the creation of a ministerial task force and the release of a more detailed technical plan focused on the creation of smaller modular plants and a national location for nuclear waste.

In France, the signals of a nuclear revival are even more evident: in 2022, President Emmanuel Macron [announced](#) the plan to create fourteen new plants before 2050, to be added to 56 already operational reactors. In the same year, the French President committed to investing \$1.42 billion and hiring 10,000 workers in the nuclear power sector before the end of the decade. As we will see in a further step, French institutions widely consider nuclear power a [strategic asset](#) in the path of energetic transition. It can be functional for industrial and technological [innovation](#).

Several European countries are showing strong signals of nuclear energy revival. [Sweden](#) has reversed its 1980 non-binding referendum decision and plans to open two power plants in the Varo peninsula. [Czechia](#) aims to expand its nuclear capacity by adding four new reactors to its existing six, which currently supply more than 30 percent of the country’s domestic energy mix. [Poland](#) has reached a significant milestone by approving the construction of its first nuclear plant, scheduled to open in Choczewo by 2035. In the [Netherlands](#), the Schoof government has reinforced its commitment to nuclear energy by pledging an additional 10 billion euros to the sector, which is already considered a key pillar of the country’s energy mix.

Multiple drivers of the nuclear revival

Multiple factors are driving the overall favorable moment for nuclear energy production in Europe. One of them, the answer to the energetic crisis caused by the precarious geopolitical situation, was already discussed in the previous paragraphs.

In the previous paragraphs, we have already discussed the European goal of energetic security, which is made inevitable by the geopolitical landscape that obliges the continent not to rely on imported fossil fuels. Focusing on the consequences of the Russian invasion of Ukraine, we can easily remember that one of the [immediate concerns](#) was about the physical availability of fossil fuels due to growing fears that Russia would manipulate supply and prices to coerce political concessions and retaliate against Western economic sanctions.

While Russia’s dominance in fossil fuel exports is well documented—as the world’s largest exporter of natural gas, the second-largest oil exporter, and the third—largest coal exporter, its significant role in global nuclear power development has received less attention. Beyond fossil fuels, Russia’s nuclear industry has established itself as a crucial partner for numerous countries worldwide. According to Rosatom’s [statement](#), the major Russian electricity company is currently involved in constructing or implementing 39 nuclear plants in the world, in BRICS (namely China, India, Egypt) and non-BRICS (Bangladesh, Hungary, Turkey) countries. Before the Russian invasion of Ukraine, the same agency [claimed](#) that 54 countries partnered with it in the energy supplies sector.

In that sense, the European Union (EU) had to face this new situation. Some answers came. To quote the [most recent one](#), in June 2024, in the context of the [Euratom Research and Training Programme \(2021-2025\)](#) funds, SAVE Innovation Action granted to a project led by the nuclear power company Framatome (France and Germany) and gathering 17 partners from seven EU Member States as well as Ukraine, aiming to contribute to a swift and secure development and deployment of a European fuel solution for the so-called water-water energetic reactor (VVER).

These were originally developed in the Soviet Union and rely on Russian fuel. [Announcing](#) that project, Iliana Ivanova, then-European Commissioner to Innovation and Research, outlined that:

"[...]The Euratom Research and Training Programme is providing crucial support to our industry in the quest for reliable alternative fuel for reactors in EU Member States and Ukraine that until now needed fuel from Russia to operate."

On the other hand, one last aspect can be understood as a major reason for the nuclear revival in Europe and the Western world, and itself is a signal of nuclear revival—we should not forget that the phenomenon appears to be global—the massive investment of other geopolitical superpowers in that strategic sector.

China *in primis* has an ambitious program of nuclear expansion before 2030 to become the first country in the world for domestic atomic energy production: [according](#) to Stephen Ezell from the Information and Technology Foundation (ITIF), China's government plans to build 6 to 8 nuclear plants each year for the foreseeable future, decisively reinforcing a strategy that dates back at least to 2011, as the continuation of the basis given by National Development and Reform Commission's (NDRC's) Tenth Economic Plan for the years 2001-2005.

Specifically, China has 29 reactors under construction in 14 different plants and 56 already working reactors, all of them located on the eastern coast of the Republic, from the Liaoning province in the north to the Hainan province in the south, the industrial part historically related to nuclear production.

The aforementioned new reactors could add 54 152 MW(e) to 30 764 MW(e) capacity. However, coal remains China's largest electricity generation source, and, up to now, nuclear energy supplies only up to 5 percent of the country's power generation - even if we can expect clear growth before the end of the decade. Moreover, China is faster than any other country in the research and development of fourth-generation nuclear and economic SMRs, for a comparative advantage quantified 10-15 years ahead of the USA regarding nuclear innovation. As Jacopo Buongiorno, a professor of nuclear science and engineering at the Massachusetts Institute of Technology (MIT), [noted](#), "China is the de facto world leader in nuclear technology."

However, we cannot think that energy security, the at-

tempt to cut ties with the Russian energy supplies, and the rampant Chinese business are the sole reasons for this moment of nuclear revival. Solar and wind also have low impacts and do not lead to the production of hard-to-manage waste, but they cannot guarantee a stable supply throughout the day. This is why many experts, including the [International Energy Agency](#), have long pointed to nuclear power as an inevitable production method for the almost total reduction of fossil fuel consumption to produce electricity. We can recognize among leading issues the decarbonization goals settled by the EU and infra-state agreements and conferences such as Ministers of Energy's [G7](#) of April 2024 and COP28 held in Dubai in 2023.

Particularly about this aspect, it is worth mentioning that the aforementioned COP28 conference reached a critical agreement on the intention to triple nuclear capacity by 2050 to complete the transition from fossil fuels. In the [final declaration](#), COP28 leaders agreed on a commitment.

[...] to work together to advance a global aspirational goal of tripling nuclear energy capacity from 2020 by 2050, recognizing the different domestic circumstances of each Participant [...] to take domestic actions to ensure nuclear power plants are operated responsibly and in line with the highest standards of safety, sustainability, security, and non-proliferation, and that fuel waste is responsibly managed for the long term; [...] supporting responsible nations looking to explore new civil nuclear deployment under the highest standards of safety, sustainability, security, and non-proliferation [...]

The approach to consider nuclear energy as part of the solutions to address the climate issue is based on a broad scientific consensus. This is meeting some successes in pursuing a more green policy: leading by example, France generates over 70% of its electricity from nuclear power – the largest atomic share of any country globally – and its electricity sector emissions are one-sixth of the European average. As the World Nuclear Association [claims](#), "in around 15 years, nuclear power went from playing a minor role in the French electricity system to producing the majority of its electricity, showing that nuclear energy can be expanded at the speed required to combat climate change effectively."

The rise of modular nuclear

[Small Modular Reactors \(SMRs\)](#) are playing a pivotal role in the revival of nuclear energy. They are a safer, more flexible, and cost-effective alternative to traditional large-scale reactors. They offer a promising solution for clean and reliable energy generation. SMRs are designed to generate 300 megawatts or less and eventually be connected to other modules to boost overall output.

In recent times—I would dare say decisively in 2024 – SMR technologies have become “drivers” of the nuclear revival in Europe and the world.

According to a December 2024 [Science Business](#) article, Central Europe has emerged as the European hub for new nuclear technologies. Several landmark developments highlight this trend across the region.

[Poland](#) has approved an ambitious plan for its Lubiatowo plant, including constructing six SMRs. The country has also agreed to build a traditional reactor using Westinghouse technology and is exploring a potential project with South Korean suppliers.

[Romania](#) made significant progress in July 2024 by signing an agreement with the US Department of Energy Fluor Corporation. This partnership focuses on constructing a flagship Small Modular Reactor using NuScale technology, with deployment targeted for 2029.

After evaluating seven potential technology suppliers, the [Czech Republic](#) has formed a strategic partnership with UK firm Rolls-Royce SMR. The country has identified 45 potential SMR sites, though deployment is not expected until after 2030.

Science Business also [reports](#) that Slovenia has incorporated SMR development into its spatial development strategy 2050, which includes plans for a second nuclear site. Meanwhile, Bulgaria has initiated preliminary discussions with the US Trade and Development Agency regarding SMR implementation at the Kozloduy nuclear power plant site.

Of course, the trend toward SMRs is not only a European fact but also relevant globally. According to the [Enterdata](#) elaboration of International Atomic

Energy Agency (IAEA) statistics, over 80 SMR technology designs are currently under development in 18 countries: 22 in the US, 17 in Russia, 10 in China, 5 in Japan and Canada, etc. (according to one other [paper](#), the projects for construction of those reactors are more than 100) in a scenario where only 2 SMRs are currently operating, and four new ones are already [under construction](#) (2 in Russia, 1 in China, 1 in Argentina).

Before analyzing the reason for the success of SMRs in recent times, it is essential to focus on the definition of SMRs itself. According to the [International Atomic Energy Agency \(IAEA\)](#), a Small Nuclear Reactor can be defined in the following terms:

- » Small: physically a fraction of the size of a conventional nuclear power reactor.
- » Modular: making it possible for systems and components to be factory-assembled and transported as a unit to a location for installation.
- » Reactors: harnessing nuclear fission to generate heat to produce energy.

The [European Commission](#) defines SMRs as “small nuclear reactors with a maximum output of 300 Megawatt electric (MWe) and can produce 7.2 million kWh per day. By comparison, large-size nuclear power plants have an output of over 1,000 MWe and can produce 24 million kWh daily. SMRs can vary from around 20 megawatts of electricity (MWe) to 300 MWe. Depending on the technology, they can use a range of possible coolants, including light water, liquid metal, or molten salt.”

The European Commission’s website lists some advantages of their usage: “As they are smaller in size, power output and capacity, they need less space and less cooling water, but offer greater flexibility for site selection than large nuclear plants. [...] They are modular and can be produced in series, allowing production cost efficiency through economies of scale. [...] They are adapted to supply electricity and can supply heat for industrial applications, district heating, and hydrogen production.”

[Support](#) for SMEs has long been an established policy of the EU and the individual member states. In early 2024, then-European Commissioner Kadri Simson [announced](#) the launch of the European Industrial Alliance on Small Modular Reactors, aiming to reach

the target of the construction of the first European site by the early '30s. That follows the [report](#) adopted by the European Parliament on December 6, 2023, recognizing their potential role in promoting energy transition in Europe. It called for several actions to strengthen the nuclear supply chain and strive for the first deployment of SMRs in Europe by the early 2030s.

Some concerns about the usage of SMRs are justified. Specifically, the significant potential [issue](#) is the lack of qualified personnel for expanding nuclear-related activities. Projects need many highly skilled and highly paid workers, which can be beneficial for job creation and income for communities near nuclear plants. This can explain policies to train professionals in atomic production, such as the plan announced in 2022 by French President Emmanuel Macron.

Nuclear power meets Silicon Valley

Starting in the autumn of 2024, Western media outlets began to discuss the interest shown toward nuclear energy projects by some relevant tech companies, such as [Google](#), [Meta](#), [Microsoft](#), and [Amazon](#).

The explosive growth of artificial intelligence is driving unprecedented energy [demands](#), primarily due to the power-intensive needs of data centers and AI model training. Industry projections indicate a dramatic surge in energy consumption: data center usage is expected to double by 2026, with overall AI-related energy needs [projected](#) to grow between 30 percent and 166 percent by 2030. This escalating demand for reliable power recently led Google [to partner](#) with Kairos Power in October 2024, securing SMR technology to support the company's anticipated tripling of energy consumption by the end of the decade.

Nuclear energy presents itself – and is intended by major companies involved in this process – as a strategic resource or, at least, a good compromise to fulfill these energy needs due to its capability for large-scale, dependable, and eco-friendly power generation. In this context, technology companies increasingly see nuclear power as a [good compromise](#) to accommodate growing AI-related demand without sacrificing

commitments to sustainability. Nuclear plants produce [few emissions](#) and can operate at full capacity most of the time, consequently offering stable electricity supplies.

David Victor, professor of innovation and public policy at the School of Global Policy and Strategy at UC San Diego, [explained](#) that “nuclear energy is specifically useful for data centers because it gives a source of energy that is clean 24 hours per day, differently from wind or solar energy. Also, the large scale of nuclear plants makes them attractive: the work of a single AI data center can ask for a gigawatt (Gw), which can be supplied by thousands of solar panels or a single nuclear plant.”

We should remember that AI and nuclear research and development can be highly correlated, as shown by the [AI for Fusion](#) project. Artificial Intelligence is being used in nuclear fusion research to accelerate the development of practical solutions for fusion energy and improve existing technology in a clear acceleration of fusion R&D by providing a platform for collaboration and creativity among stakeholders. Moreover, as [CNN](#) reports, companies such as Tokamak Energy and Commonwealth Fusion Systems are using artificial intelligence to build small, inexpensive fusion reactors and to promote improvements in crucial components such as high-temperature superconductors.

This cooperative effort between AI and fusion research paves the way for a future with widely available clean, sustainable, and efficient energy solutions.

Conclusion: A Strategic Energy Evolution

Nuclear energy is at a transformative moment, particularly in Europe, where technological innovation, geopolitical imperatives, and environmental necessities are redefining its role.

The contrast between Germany's nuclear phase-out and the broader European embrace of atomic power illustrates the sector's complex challenges and opportunities. While Germany grapples with its decision's economic and environmental consequences, other European nations are actively advancing nuclear projects, mainly through innovative technologies like SMRs. This divergence highlights how nuclear energy has evolved from a controversial energy source to a strategic asset in addressing both climate goals and energy security concerns.

The emergence of new technologies, particularly the convergence of nuclear power with artificial intelligence, represents a promising frontier. As tech companies increasingly turn to nuclear energy to power their data centers and AI operations, we are witnessing the formation of powerful synergies between traditional energy production and cutting-edge technology. This partnership addresses immediate energy needs and accelerates innovations in both sectors, particularly in areas like fusion research and reactor efficiency.

Looking ahead, the success of nuclear energy's revival will depend on several critical factors: the continued development and deployment of SMR technology, the cultivation of a skilled workforce, and the maintenance of strong international collaboration. The broad support demonstrated at COP28, with its commitment to triple nuclear capacity by 2050, suggests growing global recognition of nuclear power's role in achieving climate objectives.

The decisions made today to support nuclear innovation, workforce development, and international cooperation will shape not only Europe's energy landscape but also its economic and technological competitiveness in the decades to come.

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Is an Italian researcher who recently completed his M.A. in European History, with a thesis focusing on Jewish communities in Bohemia before the Hussite wars. He served as an intern at We Are Innovation during the last quarter of 2024, contributing to the organization's research and policy initiatives. In parallel to his professional development, Marmonti has been actively involved in various liberty-oriented movements. He joined Students For Liberty in 2022 and became the organization's National Coordinator for Italy in June 2024, where he works to expand the network while maintaining its core principles and professional standards. His commitment to advancing liberty and fostering positive social change has made him an emerging voice in European policy discussions.



Beatriz Santos

Is the Chief Communications Officer (CCO) at We Are Innovation. She is based in Lisbon, Portugal. Beatriz started publishing articles through her University newspaper and eventually moved to national and international reach outlets, including the well-known Portuguese outlets NOVO and Observador. Her professional career includes international communications experience with the ATREVIA agency and the European Parliament. She also has two published books and is an essential part of the Students For Liberty organization in Portugal. With a focus on positive change and global cooperation, Beatriz actively seeks partnerships across the globe to promote innovative initiatives.

WE ARE INNOVATION

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