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GLOBAL

ENERGY FOR THE FUTURE

BUHLMANN & LISEGA: PROJECTS AND IDEAS

> REASSESSING NUCLEAR POWER WITH SMR > LISEGA AT THE IDEEN EXPO > FOUNDATION SOLIDARITÄT UKRAINE

Content

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EDITORIAL

Energy Hunger

Dear readers,

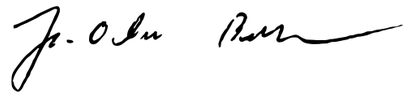
Artificial intelligence (AI) is not just a smart chatbot, but a massive infrastructure issue. The foundation needed to power AI is energy. But how can the rapidly rising demand be met in the future?

Leading research institutions unanimously predict that energy demand will at least double by 2030. In its baseline scenario, the International Energy Agency (IEA) forecasts that global electricity consumption by data centers could reach 945 TWh by 2030 and rise further to 1,200 TWh by 2035.

Small Modular Reactors (SMRs) are therefore a topic of discussion not only among major tech companies in the U.S., but also in China and Russia, where these smaller, modular, mass-produced nuclear power plants are already being developed or tested. As a supplier to the energy industry and an established provider in the nuclear sector, this is also an exciting field for the BUHLMANN Group. You'll find an overview of the current status and developments in the SMR sector—along with other interesting articles on BUHLMANN projects—in this magazine.

I hope you enjoy reading!

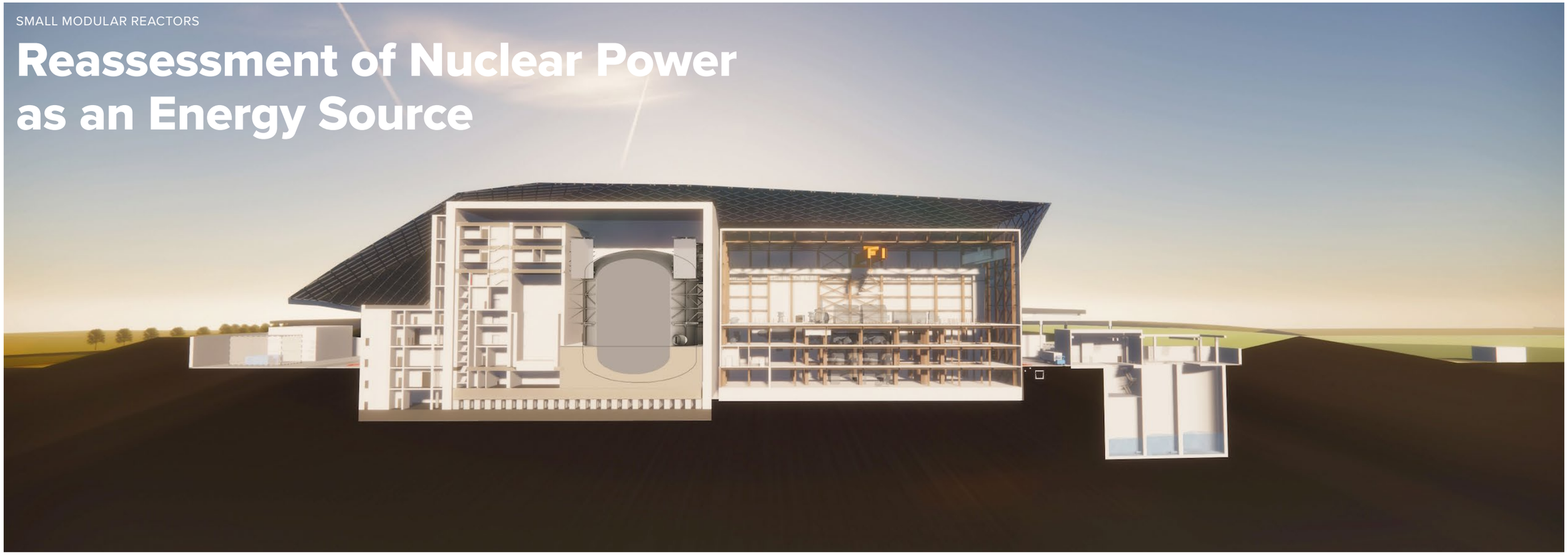
Sincerely,



Jan-Oliver Buhlmann

SMALL MODULAR REACTORS

Reassessment of Nuclear Power as an Energy Source



Rolls-Royce SMR: A three-element pressurized water SMR (470 MWe), which is strongly supported by the British government as part of its nuclear strategy.

Driven by the exponentially rising electricity demand from AI data centers, the ongoing automation and digitization of industry, and pressing global climate goals, nuclear energy is on the rise in many parts of the world.

In addition to the continued operation and construction of traditional gigawatt-class reactors, Small Modular Reactors (SMRs) are increasingly becoming the focus of governments and technology companies. Thanks to their modular design, they promise faster construction, more flexible applications—such as direct electricity and heat supply for industry or hyperscale data centers—as well as improved safety features.

SMR: Nuclear Power on a Mass-Production Scale

The concept and development of SMRs date back to the 1950s. They were originally researched to make nuclear power viable as a propulsion technology for military submarines.

Today, the term refers to small nuclear power plants with an electrical output typically of up to 300 megawatts, which are mass-produced and assembled on site. “Small” therefore does not necessarily refer only to the space required, but also to the power output. The exact size varies depending on the design and power output, but in general, they are designed to occupy an area roughly the size of two soccer fields, or approximately 10,000 square meters.

Which Countries are Working on SMRs?

According to the International Atomic Energy Agency (IAEA), more than 30 countries worldwide are working on over 80 SMR projects. The spectrum ranges from countries that have already completed pilot plants connected to the power grid to nations that are laying the legal groundwork for future use.

1. Countries with SMRs Already in Operation

To date, only two countries have successfully connected commercially viable SMRs to the power grid and are actively operating them:

- **China:** Has the HTR-PM modular high-temperature reactor connected to the grid. In addition, the Linglong One model is in the testing phase.
- **Russia:** Has been operating the Akademik Lomonosov floating nuclear power plant in the Arctic city of Pevek since 2020, as well as land-based reactors of the RITM series.

2. Western Pioneers in Development

Several Western industrialized nations are investing heavily in their own reactor designs to bring them to production-ready status:

- **U.S.:** Supports numerous private developers, such as NuScale, Holtec, and Oklo. The U.S. government is also promoting SMR initiatives in Europe to establish itself as a technology partner there.
- **United Kingdom:** Relying on the national consortium centered around Rolls-Royce SMR to build its first mini-nuclear power plants by the early 2030s, for example at the Wylfa site.
- **Canada:** Intensive work is underway at the Darlington site to build the first commercial SMR model.
- **France:** Through the state-owned company EDF, France is developing its own Nuward concept and plans to build a larger fleet by 2050.

3. European Countries Preparing to Enter the Market

In Europe, the European Commission has launched an SMR strategy aimed at bringing the first plants online starting in the 2030s. Among the most active countries are:

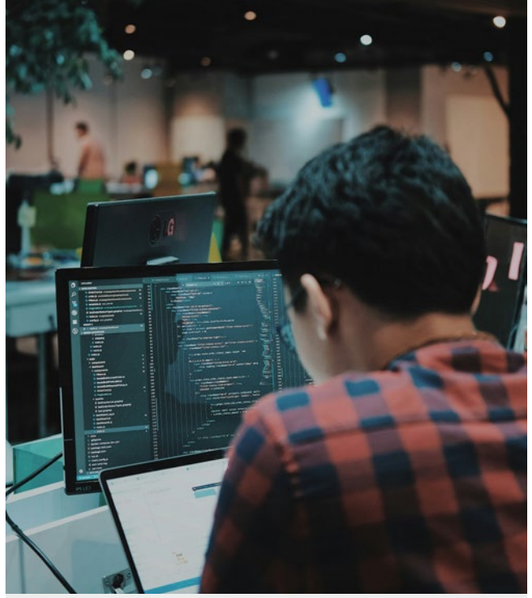
- **Poland:** Has very ambitious plans to replace old coal-fired power plants on a massive scale with SMR modules in order to continue utilizing the existing grid infrastructure.
- **Czech Republic, Romania, and Sweden:** Have signed official letters of intent or are evaluating sites for American or British SMR models.

Germany plays a special role: Following the nuclear phase-out, no new reactors are being developed or built here. Nevertheless, German research institutes and testing organizations such as TÜV Süd are participating in European safety analyses and material testing for SMRs abroad.

SMR Facts and Figures

Small Modular Reactors (SMRs) will be one of the fastest-growing technology categories in the energy sector by 2026. They typically have an electrical output of less than 300 megawatts (MW) (compared to 1,000–1,600 MW for large reactors) and can be prefabricated in series in factories.

» continued on page 6



Reasons/Advantages of SMRs

- **Decentralized integration with industry and data centers:** Major tech companies such as Google, Microsoft, and Amazon are investing directly or indirectly in SMRs to operate their AI data centers independently of volatile power grids and in a carbon-neutral manner.
- **Lower financial risk:** The investment costs, which are far lower than those of large-scale projects, make SMRs attractive even for smaller countries such as Estonia or for energy utilities.
- **District heating applications:** Reactors such as the Finnish LDR-50 operate at low temperatures and can be directly integrated into existing urban district heating networks to replace coal- and gas-fired heating plants.

Key Technology Players and Models (2026)

- **GE Hitachi (BWRX-300):** 300 MWe water-cooled SMR. It is considered in the West to be the most advanced SMR project for commercial power generation. Major projects are currently underway in Canada and Poland.
- **CNNC (Linglong One/ACP100):** China's leading SMR model. The world's first land-based commercial SMR of this type, located on Hainan Island, is in the final stages of commissioning.
- **Rosatom (RITM-200/Shelf-M):** Russia is successfully deploying SMRs on icebreakers, floating power plants such as the "Akademik Lomonosov," and now also on land in remote mining regions.
- **TerraPower (Natrium):** Backed by Bill Gates. A sodium-cooled fast reactor with integrated liquid-salt energy storage, designed to work optimally with fluctuating renewable energy sources.
- **Rolls-Royce SMR:** A three-element pressurized water SMR (470 MWe). It is heavily funded by the British government as part of its nuclear strategy.

The BUHLMANN Group has also already received inquiries regarding potential supply services.

"Both our colleagues at Lisega and we at BUHLMANN are in close contact with Rolls-Royce regarding the SMR projects in the Czech Republic, Sweden, and the UK. These projects are currently the most promising initiatives, and the focus is now shifting to material procurement. Following the BUHLMANN Group's successful pre-qualification with Rolls-Royce, numerous team meetings, and visits to the customer in England, we are now tasked with developing strategies to ensure a reliable supply of materials."

Jan Paul Godhoff, Director der International Projects Division bei BUHLMANN

Radioactive Waste

More than 30 countries worldwide operate nuclear power plants. A summary in table form can be found on the graphics page at the back of this issue. Regardless of whether the reactors are still in operation or have been decommissioned, as in Germany, one question remains: Where and how should the highly radioactive waste be disposed of?

Final Repositories

The search for final repositories worldwide focuses on geologically stable sites where nuclear waste can be contained for at least one million years. Three types of rock are suitable for this purpose: clay, granite, and salt. Each type of rock has advantages and disadvantages. Clay effectively contains contaminants but is a poor conductor of heat. Granite is solid but can develop cracks. Salt, on the other hand, seals cracks on its own and conducts heat well, but it is water-soluble.

No true final repository for highly radioactive nuclear waste is currently in operation anywhere in the world, but Finland is the furthest along: On the island of Olkiluoto, Onkalo—the first deep geological repository for spent fuel rods—is under construction. Construction began 22 years ago, in 2004. Starting in late 2026—according to the plan—the first waste is to be stored 420 meters deep in granite.

In Forsmark, Sweden, spent fuel rods are to be permanently sealed at a depth of about 500 meters in copper-steel containers surrounded by clay. Unlike in Finland, the waste is not intended to be retrievable.

France is also relying on clay rock and is planning its final repository near Bure in Lorraine. The first radioactive waste is scheduled to be stored there starting in 2035, initially as part of a test phase. A decision on whether and how to proceed after that is to be made by 2050 at the latest.

In Switzerland, the documentation for a final repository near Stadel, close to the German border, was submitted in 2022. However, a referendum to decide for or against the project is not scheduled until 2029.

Canada is in the planning stages for a final repository in Ontario. Construction could begin in the mid-2030s. In the U.S., the Waste Isolation Pilot Plant (WIPP) in New Mexico serves as a deep geological repository, but it is intended solely for military waste.

Other Solutions

In Germany, approximately 1,750 Castor containers are stored in 16 interim storage facilities, mostly right next to decommissioned nuclear power plants. The facilities were originally approved for 40 years, but these terms are set to expire soon—in Gorleben, for example, as early as 2034. At that point, safety must be reassessed according to the current state of the art.

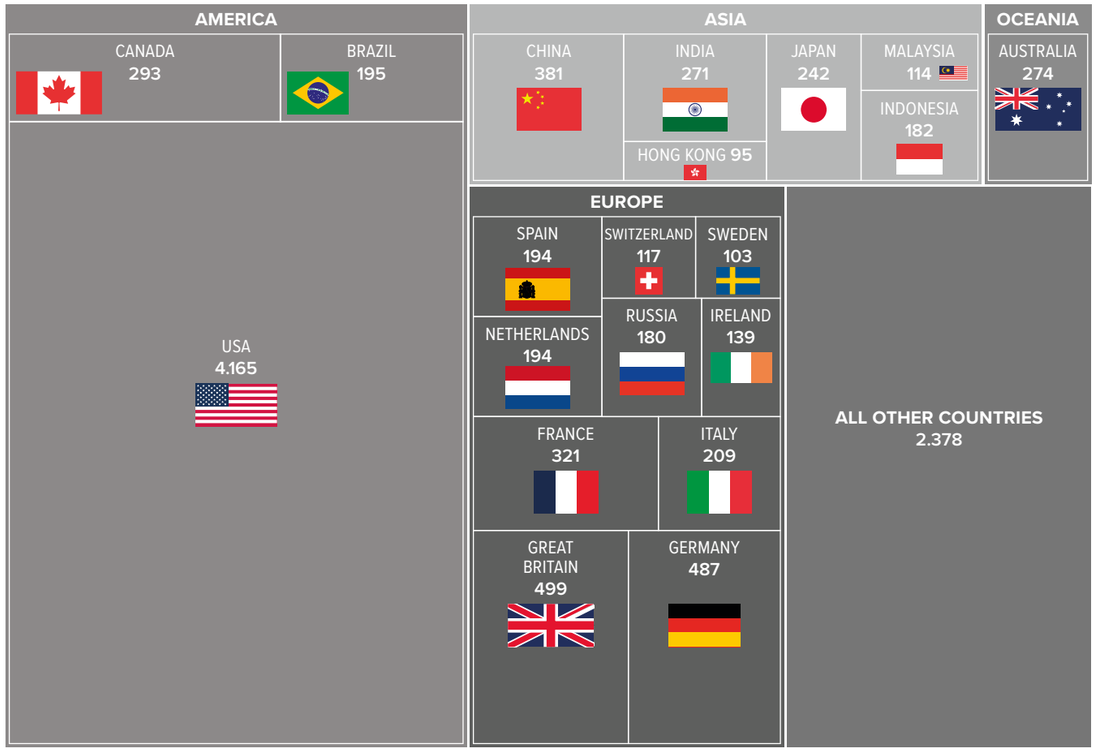
Many ideas have been discussed, but so far, none has replaced a final repository: The idea of launching nuclear waste into space has been ruled out due to the enormous costs and the risk of a rocket launch failure. Technically challenging but not yet ready for practical application is so-called transmutation: the conversion of radioactive materials through proton bombardment. However, this process also produces residual waste, and no practical technology exists yet.

Cross-border disposal solutions are also discussed time and again. Under EU law, the export of nuclear waste is generally permitted if two countries reach a contractual agreement. Germany, however, prohibits this by law. Finland, on the other hand, is more open to the idea; even Greenpeace Finland does not categorically reject cross-border storage facilities. Ultimately, deep geological disposal within one's own country remains the only viable solution to date.

Texts: Gabriele Wiesenhavern

Source: mining-report.de/Internationale Endlagerprojekte im Vergleich/Comparison of International Final Disposal Projects

Data Centers Worldwide in 2025



Rising Energy Consumption

Not only is the use of AI growing, but investment in data centers has also nearly doubled since 2022. This boom is increasingly sparking discussions about how much this will drive up electricity demand and how that demand can be met. Data centers already account for about 1.5 percent of global energy demand. That amounts to about 415 terawatt-hours in 2024—roughly as much as all of Austria consumed in 2024.

Globally, the energy appetite of digital infrastructure is also growing rapidly. Since 2017, data center electricity consumption has been rising by about 12 percent annually—more than four times as fast as global electricity consumption overall. And there is no end in sight to this trend: By 2030, demand could more than double to about 945 terawatt-hours. That is slightly more than Japan's current electricity consumption.

It is not clear how much of this is attributable to AI and how much to services such as streaming. Data center operators do not have comprehensive data on the proportion of different types of workloads. However, it is estimated that about a quarter of data centers' electricity demand is attributable to AI servers. Energy experts predict that this share will rise sharply by 2030. The electricity demand of AI servers is expected to increase by up to 30 percent, while the electricity consumption of conventional servers is projected to grow at nine percent per year.

Power Consumption Per Query

A conventional Google search consumes approximately 0.3 Wh. An AI query (ChatGPT) requires 2.9 Wh—nearly ten times as much—equivalent to 30 minutes of LED lighting instead of 3 minutes.

Global Data Center Energy Demand

Global data center electricity demand is projected to double by 2030 to approximately 945 TWh. In Europe, it is expected to triple, accounting for 5% of total electricity demand. U.S. corporations such as Google are planning to purchase small modular reactors (SMRs).

Climate Goals

According to Greenpeace, AI centers will require eleven times more electricity in 2030 than in 2023. The share of AI hardware in data center consumption is rising rapidly from 14% (2023) to 47% (2030).

Source: United Nations University: The Environmental Cost of AI, Statista 2025

MEDICAL AID IN PETRODOLYNSKE

Practice Opens

Concrete, action-oriented aid with a clear impact: With the opening of the new medical clinic in Petrodolynske at the end of June, basic medical care is now ensured. New accessible facilities and modern equipment now make it possible to provide care to approximately 4,000 Ukrainians. At the same time, the project illustrates how cooperation among foundations, the business community, political leaders, and the church in Bremen—along with reliable contacts in the Odessa region—can lead to the rapid implementation of such a project.

Ronald Speidel, member of the board of trustees of the Solidarity Ukraine Foundation (SSU): "During our first trip to Odesa in October 2024, we decided to help here. And now that we've carried out the project and the clinic has opened, I have to say: The work was worth it." He was particularly moved by the gratitude of the local population and the medical staff. "When older people who speak neither German nor English come up to you and express their joy, it makes you very happy," said Speidel. The clinic was made possible largely by the Solidarity Ukraine Foundation.

The President of the Bremen City Parliament, Antje Grotheer, and Pastor Andreas Hamburg of the Bremen Evangelical Church, were also present at the opening of the medical practice. Petrodolynske is located between Odesa and the border with the Republic of Moldova and has taken in numerous internally displaced persons since the start of Russia's war of aggression. More than 300 guests from politics, government, the church, and civil society, as well as numerous residents, attended the official handover ceremony. At the same time, the delegation used the trip to visit other successfully implemented projects supported by Bremen and to strengthen cooperation with local partners. "It was important to me to travel to Odessa again—on the one hand, to get a sense of the current situation on the ground, and on the other, to show the people there that Bremen stands in solidarity with them. It was impressive to see how and to what extent they are being helped in very concrete ways with Bremen's support. I can only thank the Solidarity Ukraine Foundation and the Bremen Evangelical Church for their tremendous commitment," said State Parliament President Antje Grotheer following the trip.

From a Dilapidated Clinic to a Modern Healthcare Solution

The project originated from the aforementioned visit by the same Bremen delegation to Petrodolynske in 2024. During that visit, it became clear that the existing medical clinic was no longer structurally sound enough to serve as a reliable foundation for local medical care. Damage to the floor, wide cracks in the exterior walls, and other significant defects made it clear that action was needed. "Even on the return trip to Bremen, it was clear to us that we could and must provide concrete help here. Together with our local partners, we found a viable solution: a new medical practice built from shipping containers that could be constructed quickly and will be usable for the long term," explains Ronald Speidel.

Bremen Network Enables Rapid Implementation

The new accessible clinic features two treatment rooms, a vaccination room, a reception area, a waiting room, and restroom facilities. The container modules were financed by the Solidarity Ukraine Foundation, supported by the two Bremen-based companies BUHLMANN Group and HANSA FLEX AG. The equipment also came from Bremen: Through the Bremen Medical Association, medical supplies, devices, and furniture were collected from various medical practices in Bremen. Transportation was handled via the regular aid shipments organized by BUHLMANN. In the Odessa region, the project relied on established church connections and close cooperation with local partners. "The new clinic is a Bremen community project in the best sense of the word," says Ronald Speidel. "The key factor was that the specific needs in Ukraine very quickly gave rise to a network capable of taking action. Funding, equipment, transportation, and local contacts all worked together seamlessly. As a result, the idea conceived in 2024 was able to become a fully operational clinic within a short period of time."

Text: Gabriele Wiesenhavern

Stiftung SOLIDARITÄT UKRAINE

More about the foundation and current projects:
www.stiftung-solidaritaet-ukraine.de

Swift implementation from a mere idea to a finished medical center

VITALIY MYKHAYLYK FROM THE NGO BREMEN-UKRAINE-HELP

The Fair Distributor

To ensure that the relief supplies from the Solidarity Ukraine Foundation reach where they are needed, logistics must be organized—with the help of a trusted network, says Vitaliy Mykhaylyk during a visit to BUHLMANN in Bremen. He explains how he ensures needs-based distribution through the NGO Bremen-Ukraine-Help (BUH), which was founded by BUHLMANN.

GLOBAL // Vitaliy, how do you know who needs what?
Vitaliy Mykhaylyk // *We receive requests through our contacts in the region—for example, from nursing homes, children's homes, schools, or charitable organizations with which we collaborate in the Odesa Oblast. These are people we know well or who have been referred to us by trusted individuals. I then check to see if we have what's needed in our warehouse. If not, I contact our partner in Germany—the Solidarity Ukraine Foundation—and ask if it's possible to procure the requested relief supplies. Conversely, I'm informed about what the trucks are carrying, so I can organize the distribution with precision.*

What happens when a truck arrives?
There are two possibilities: Either the truck delivers the relief supplies directly to where they're needed. For example, we recently furnished a school with furniture. The items were delivered there without going through the warehouse in Odessa. Or, if we receive equipment for a doctor's office—a dental chair or medical devices, for example—the driver delivers it directly to the site. The second option is to bring the goods to the warehouse in Odessa and then distribute them as needed. That's how we often handle clothing, medications, food, and so on. Since the warehouse is only about 200 square meters, it can only hold about two truckloads. That's why distribution has to happen quickly.

You're certainly not alone—who helps you?
We have a network of volunteers who pitch in with unloading and working in the warehouse. Those in need pick up the goods from the warehouse. We've set up an accounting department to ensure everything runs smoothly, is properly documented, and is approved by the authorities. This allows us to accurately document the receipt and distribution of donations. Nothing happens under the table. BUHLMANN covers the costs for the warehouse, accounting, and administration.

You describe it so matter-of-factly, even though there's a war going on and drones are flying overhead. Aren't you always afraid? Or has the war become part of everyday life?
No, but we have to keep going. There's no alternative, after all. And we can help. Recently, we equipped a bunker with school furniture so that children can continue their education despite the war and be prepared for the future. The many volunteers are also doing this to counter the circumstances we've had to endure for the past four years. That's another way to "fight."

Speaking of fighting—have you been exempted from military service?
Yes, because of my job, I was able to apply for an exemption from military service, which is valid until further notice.

Overall, it has decreased. Maybe that's normal—there are many wars and emergencies in the world. Many people depend on aid. But the Solidarity Ukraine Foundation remains a great partner—with an incredible volume of donations.

Questions by Gabriele Wiesenhavern

PSYCHOLOGICAL REHABILITATION

Back to Life

Vitaliy Mykhaylyk is organizing another project that is also financially supported by the Solidarity Ukraine Foundation: psychological rehabilitation for veterans and their families in the Carpathians.

Nestled in this beautiful mountain landscape is Villa Richka, which can accommodate around 40 participants. Here, a safe environment has been created where participants can process traumatic experiences from combat deployment with the help of psychological professionals through various forms of therapy. A holistic approach that also closely involves family members is key to this process.

The goal is to process wartime experiences and to address and cope with potential post-traumatic stress. The program aims to strengthen psychological resilience and stabilize participants' psycho-emotional state. As part of this holistic approach, the spouses and children of service members are closely involved in the process, as they play a crucial role in the reintegration of service members into everyday life. Another key aspect of the rehabilitation program is equipping participants with self-help skills and providing them with a positive outlook for the future.

The program, which serves a total of 40 people, costs approx. 10,000 euros. However, the Ukrainian government currently does not cover the costs of rehabilitation. This program is important in enabling people in Ukraine to participate in the reconstruction of their country—not only in their daily lives during the war but also after it ends. In the best-case scenario, it helps restore family cohesion and enables those affected to return to work.

Text: Gabriele Wiesenhavern

Impressions from workshops and activities for families

About
Vitaliy Mykhaylyk (43) is from the city of Odessa. He spent several years in Germany and studied social work at the Evangelical University of Applied Sciences in Dresden until 2011. He lives in Odessa with his wife and two daughters. Since 2014, he has been working for the social welfare organization of St. Paul's Parish, which specializes in providing psychosocial support to the elderly, war veterans, and people living with AIDS. Since 2023, he has been the director of the NGO Bremen-Ukraine-Help (BUH), founded by BUHLMANN, and oversees the distribution of relief supplies and targeted donations from the Solidarity Ukraine Foundation.

Stiftung
SOLIDARITÄT UKRAINE

For more information about the foundation and ways to donate, please visit the foundation's website *www.stiftung-solidaritaet-ukraine.de*

We need:
- Monetary donations
- In-kind donations, such as: office furniture, school furniture, tools, forklifts, small delivery vans

NEW IN THE BUHLMANN-FAMILY

Welcome, Tube Developments!

Aerial view of the office and warehouse buildings in Kilsyth

Tube Developments was founded in 1965 and is located in Kilsyth, in the greater Glasgow region. Kilsyth lies in Scotland's Central Belt, a network of small to medium-sized towns that serve as commuter areas for the country's largest city. Director George Brown discusses the company and what it means to become part of the BUHLMANN Group.

GLOBAL // George Brown, you are Director of Tube Developments. How long have you been in the company?
George Brown // *I joined Tube Developments in 1985 as a junior member of the sales team. After a short period living overseas from 1991 to 1993, I returned to the company and have been here ever since. I was appointed Sales Director in 2011.*

Tube Developments is situated in the greater Glasgow region. Tell us about the history of the company, please.
Tube Developments was founded in Glasgow in the 1960s, originally supplying process pipe to the thriving shipbuilding industry, as well as to local refineries and other industrial customers. By the late 1970s and early 1980s, the UK offshore fabrication sector was experiencing rapid growth, and TDL expanded its product portfolio to include structural tubulars to meet the demands of this developing market.

In the early 1990s, we turned our attention to the export market, seeking new customers around the world. Over the past 35 years, we have steadily grown our international business, which now represents a significant proportion of our annual turnover.

What is the primary focus of your business now?
Today, our customer base includes oil companies, EPC contractors, offshore fabrication yards and other major industrial clients across the Middle East, Southeast Asia, Europe, the USA and even China. We are recognised worldwide for our comprehensive stock range of seamless process pipe, high-yield offshore structural tubulars and very high-yield X-grade line pipe. Our reputation for quality, reliability and customer service is one of our greatest strengths, and we are proud to have supplied materials for some of the industry's most prestigious projects.

Perfect Match: BUHLMANN & Tube Developments

Founded in 1965, the company is a leading distributor of high-grade steel pipe products for renowned customers and end users in the oil and gas, energy, and construction. With Tube Developments, the BUHLMANN Group expands the existing product portfolio to include X-Grades, and with the company's Saudi Aramco certification, BUHLMANN strengthens their presence in the Gulf region.

With its extensive product range, 11,055 m^2 of warehouse space, and considerable national and international experience, Tube Developments is an excellent fit for the BUHLMANN Group's corporate profile.

› www.tubedev.com

Did you know the BUHLMANN Group prior to negotiations for the merger? And how did your team react to the news?
We have long been aware of the BUHLMANN Group's excellent reputation, and we are delighted to have become part of the BUHLMANN family!

What are you and your team bringing into the BUHLMANN Group – and what do expect from the merger?
Many of our 32 employees have been with TDL for more than 20 years, bringing a wealth of experience and expertise to the business. We are confident that our product range, market knowledge, and established customer relationships will add further value to the BUHLMANN Group. At the same time, we are excited about the opportunities, resources and long-term prospects that being part of such a strong international organisation will bring.

Thank you for the interview!

Questions by Gabriele Wiesenhavern

Sales Director George Brown

Calenberg Ingenieure and the B.munich

Vibrations, noise, structural stress: Calenberg technics minimize disruptive factors caused for example by trams and subways.

B.munich was completed in 2025 right next to Munich Central Station: a modern building complex featuring state-of-the-art energy efficiency that will define Munich's future Central Business District. The experts at Calenberg Ingenieure faced the challenge of controlling the vibrations caused by multiple subway and streetcar lines.

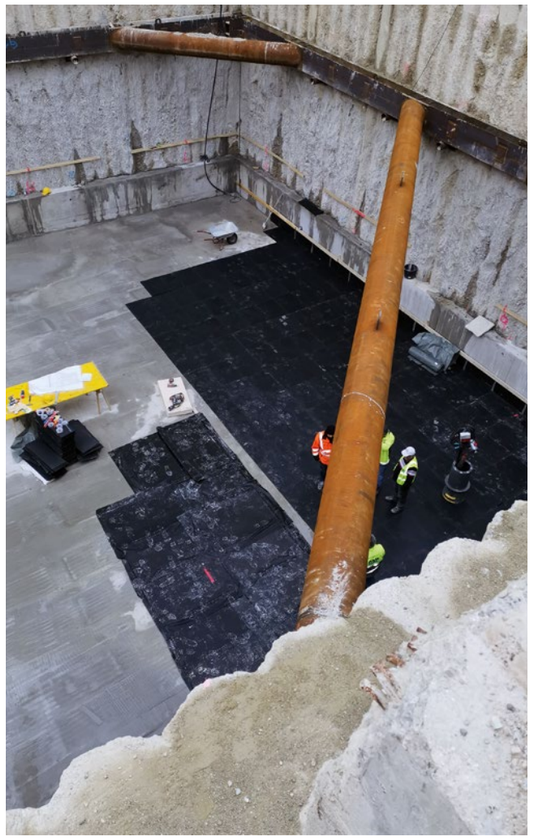
The mixed-use building complex comprises seven above-ground floors and two basement levels. It houses retail and dining establishments, as well as modern office spaces and a rooftop terrace.

The striking design of the new building features transparent facades and a tranquil inner courtyard with terraces on various levels. The building project was constructed in accordance with the highest ESG and sustainability standards and has been awarded the DGNB Gold Certificate.

The challenge of the construction project lay in the location of the site and the associated vibration issues: The U1 and U2 subway lines run parallel to Schillerstraße beneath the building, while the U4 and U5 lines run beneath Bayerstraße. The new building was constructed on a significantly deeper foundation, bringing it much closer to the subway tunnels. Several tram lines also run along Bayerstraße.

"After evaluating the on-site measurements, it quickly became clear that protective measures for the building would be necessary. Based on the measurement results and structural dynamic building models, an elastic foundation system was designed for the building to protect it from vibrations and structure-borne sound waves—or, in other words, noise emissions," explains Project Engineer Dr. Rong Le. "Calenberg was commissioned to implement this solution," explains Dr. Le.

Installation of Elastomer Bearings Cisador



Calenberg products—including several Cisador models and Cimax—were installed over the entire surface of the foundation slab, with the selection based on load requirements. Cisador and Cimax are suitable for underground use in areas with high groundwater levels. "Cimax deserves special mention here: Due to limited space on the construction site, the two crane foundations had to be installed inside the building. This means that during the first construction phase, the two foundations must support the cranes, and later, the erected structural elements. The load to be supported thus varies significantly," explains Dr. Le. And this poses a challenge for the mat beneath it, which must achieve the same effective vibration protection despite the changed load. "Our Cimax mat, however, has the advantageous property of maintaining a virtually unchanged tuning frequency across a wide load range."

Products from the Cisador series and Ciflex R25 were used in certain areas of the exterior basement wall. The service life and full functionality of the elastomeric bearings used correspond to those of the structure itself.

The 50-person Calenberg team has a track record of delivering numerous renowned national and international flagship projects involving vibration protection for buildings with its dynamic elastomeric bearings. Examples of completed projects include the Hangzhou Grand Theatre, the Lenbach Gärten urban district in Munich, the Masaryk Center multifunctional complex in Prague, the hotel district at Düsseldorf Central Station, the "Fragment" residential complex in Prague, the Olympic Stadium in Berlin, the "Regensburger Viertel" residential district in Nuremberg and the "Pandion Fünf Freunde" residential district in Cologne, the Tafelhof Palais commercial complex in Nuremberg, and the Welfengarten residential district in Munich, to name just a few.

"In this business segment, we focus on and implement solutions for the vibration-isolated installation of buildings. Where low-frequency tuning frequencies are required—most often in the context of vibration-isolated installation of machinery and equipment—the product portfolio of the VICODA brand from LISEGA SE comes into play. In this segment, it is also possible to combine both product lines, depending on the specific application," says Marketing Manager Kirsten Krämer.

Text: Kirsten Krämer and Dr. Rong Le

Calenberg's other business areas include the following:

- **Static component support:** reinforced and unreinforced bearings, plain bearings
- **Railway technology:** Ciprotec sub-ballast mats made of bonded rubber fibers, products for mass-spring systems, elastic interlayers and plates made of EPDM, and specialty products
- **Environmental protection:** OIL-EX absorption mat
- **Noise protection:** Cisilent mobile or stationary noise barriers
- **Thermal separation** with Kerncompact bearings and Cibitherm

This broad product portfolio makes it possible to implement customer-specific solutions for virtually any application.

STEM SUBJECTS AND THE NEXT GENERATION OF SKILLED WORKERS

LISEGA at the IdeenExpo

The LISEGA team around Friedemann Brandt had plenty of hands-on activities for the young visitors to try out (photos on the right).

The IdeenExpo is Europe's largest youth event for technology and the natural sciences. Every two years, the exhibition halls in Hanover are transformed into an interactive space dedicated to STEM subjects—that is, science, technology, engineering, and math. Companies, universities, and research institutions present these topics in a playful and hands-on way—with interactive exhibits, workshops, stage shows, and live experiments. This year, LISEGA was also there with its own booth.

The goal of the IdeenExpo is to spark enthusiasm for STEM and to support career and academic planning. The target audience consists of students, teachers, and parents. "This year, from June 20 to 28, LISEGA was represented with its own booth. Over the course of nine days, technologies related to pipe support systems were presented—in a practical, understandable, and hands-on way," said Friedemann Brandt, a trainer at LISEGA in Zeven. "A mix of trainers and apprentices explained the technology and provided authentic insights into everyday life as an apprentice." The LISEGA booth combined clear technical demonstrations with playful elements to spark interest and start conversations. Seven new apprentices will begin their training at LISEGA's Zeven location in August.

It remains to be seen whether the trade show appearance will attract new apprentices, according to Brandt. "But the exchange with other exhibitors and universities is also interesting and helpful: For example, how can we reach young people, and what opportunities are available after the apprenticeship?" And the fact that the booth made an impression is also evident from the applications for internships. "I know of an internship application from someone in Hanover who visited our booth at the IdeenExpo. I think the expo is helping LISEGA become better known among students in the region, since schools from the Zeven area were also in Hannover." It's also important that this is an attractive event for the company's own apprentices, one that fosters team building among themselves and with their trainers.

Over the nine days, several LISEGA teams were in Hanover, and all apprentices had the opportunity to go along, according to Brandt. "There were always four to five apprentices and two instructors at the booth. Before the fair, everyone was briefed on their tasks. This ensured that questions could be answered at any time and that everyone could be guided through all the attractions." What Friedemann Brandt particularly enjoyed: "I think it's great that young people come to the booth and ask, 'What can I do here? What can I try out?'" And LISEGA had plenty to offer.

Constant Hanger Model

Visitors were able to see firsthand how a constant-tension hanger works using a model and observe how loads are kept constant despite changes in the length of the pipe system.

Knowledge Quiz

An entertaining quiz provided plenty of conversation topics, allowing visitors to answer questions about technology, materials, and training content. Guests were surprised by the versatility of the pipe support systems.

Popcorn Machine

A particular crowd-pleaser was the popcorn machine built by the trainees themselves, which filled LISEGA cups with popcorn and Maoam crackers.

A tabletop milling machine, used to produce shopping cart tokens featuring the LISEGA logo, provided insights into machining technology. A 3D printer produced 3D puzzles—which were also available to take home.

This year's IdeenExpo in Hanover once again demonstrated how exciting technology and the natural sciences can be when presented in an engaging way. Special thanks go to everyone involved for their support and dedication. See you at the next IdeenExpo in two years!

Setting sails for the future

Apprenticeship Programs at LISEGA

- Industrial Mechanic (m/f/d) for Mechanical and Plant Engineering
- Machining Technician (m/f/d) for Milling or Turning Technology
- Process Technician (m/f/d) for Coating Technology
- IT Specialist (m/f/d) for Application Development, Data and Process Analysis, or System Integration
- Industrial Business Administrators (m/f/d)
- Warehouse Logistics Specialist (m/f/d)
- Electronics Technician (m/f/d) for Automation Technology
- Materials Tester (m/f/d)
- Dual degree program following prior apprenticeship at LISEGA

@lisegagroup/shorts, our apprentice Lennart explains why he enjoys his apprenticeship at LISEGA so much and lists all the career paths. *www.youtube.com/@lisegagroup/shorts*

Apprenticeship Programs at BUHLMANN RFS

- Warehouse Technician
- Warehouse Logistics Specialist
- Office Management Specialist
- Wholesale and Foreign Trade Management Specialist
- IT Specialist – System Integration
- Marketing Communications Specialist
- Cook
- Dual Degree Program

INTERESTED?

Further information about training at BUHLMANN
buhlmann-group.com/karriere

Texts: Corinna Kieslich, Anita Arens, Regina Eichler

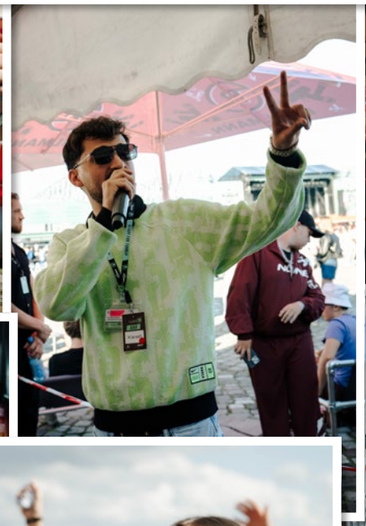
GERMAN RAP FESTIVAL

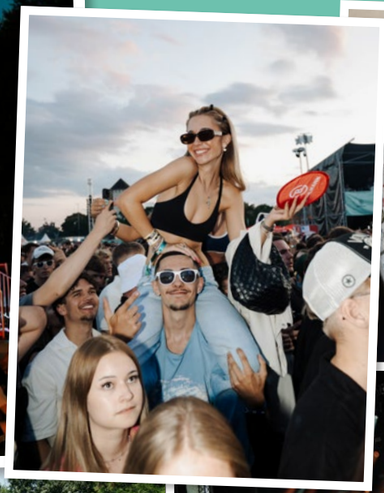
BUHLMANN at the TURNUP BRMN

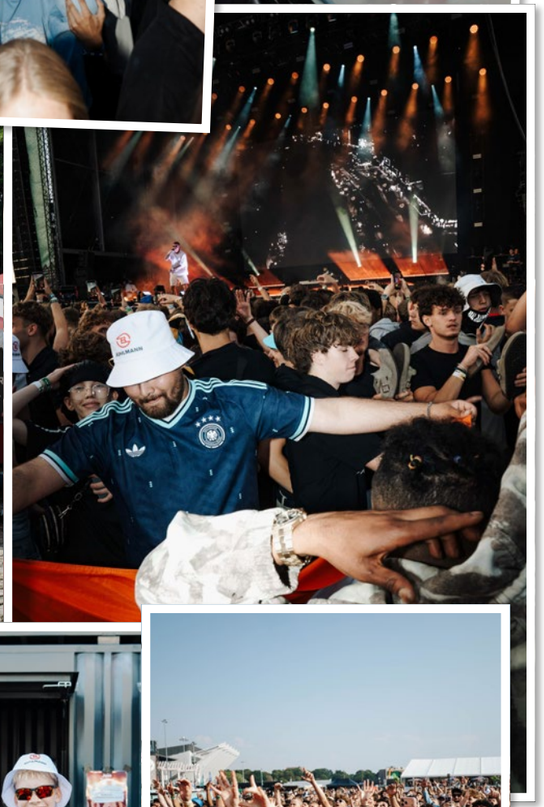
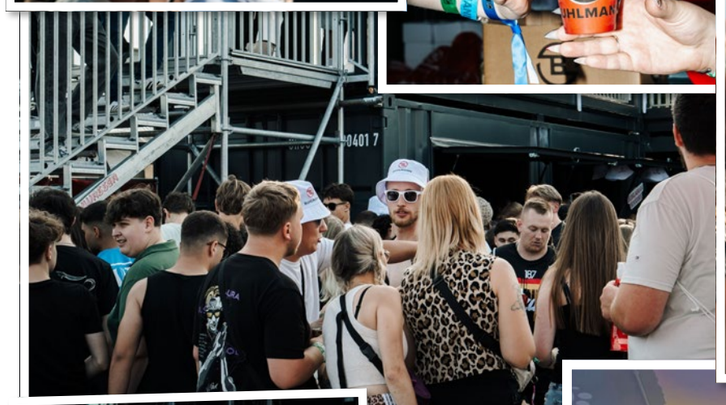
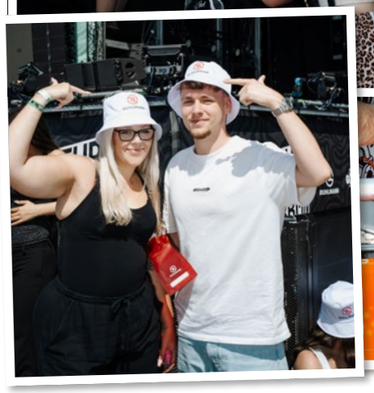
BUHLMANN was sponsor of the largest hip-hop stage in Germany: On July 31 and August 1, the TurnUp Festival on Bremen's central common shook the historic town center. Here are some impressions from an awesome weekend!

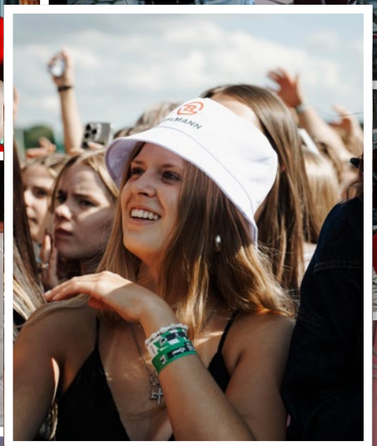
Lineup: UFO361, BONEZ MC, JAZEEK, GZUZ, DARDAN & AZET, TOM HENGST, SYMBA, FAROON; FILOW, THIZZY52, EBOW, PAJEL, KID KAPRI, OG LU, PATINA RECORDS, ERDA, BARAN KOK, CHARLIZE









Countries with Active Nuclear Power Plants

In 2026, approximately 30 countries worldwide will operate reactors for commercial electricity generation. Germany is no longer among this group following its nuclear phase-out in April 2023. The following table shows the leading nations in nuclear power generation (figures based on current operating data for 2026):

Region / Continent	Country	Active Reactors 2026	Notes / Status
America	USA	94	World's largest fleet. Focus is on extending operating lifetimes and developing the first SMR infrastructure.
	Canada	19	Strong focus on nuclear district heating and pioneering role SMR
	Mexico	2	Nuclear Power Plant Laguna Verde secures base load
Europe	France	56	Largest share of nuclear power worldwide (~70 %). New EPR2 planned
	United Kingdom	9	Modernization is underway; older AGR reactors are being phased out. The only reactor under construction in Europe is Hinkley Point C in England.
	Sweden	6	Is returning to nuclear power and planning future capacity expansions.
	Spain	7	Remain in operation until the planned phase-out begins in 2027.
	Belgium	5	Running times of the newest reactors temporarily prolonged.
	Finland	5	Olkiluoto-3 is in continuous operation; it supplies a large portion of the country's electricity.
	Switzerland	4	Reactor operating time extensions approved "as long as they are safe".
	Central & Eastern Europe	30	Czech Republic (6), Slovakia (5), Hungary (4), Romania (2), Bulgaria (2), Slovenia (1)
	Ukraine	15	The largest plant, Zaporizhzhia (6 reactors), is in cold shutdown due to the war.
Asia	China	56	Strongest growth. Is likely to surpass the U.S. in the coming years.
	South Korea	26	Major exporter of nuclear technology (e.g., PR-1400).
	Inda	23	Focus on heavy-water reactors and a domestic fuel cycle.
	Japan	33	Gradual restarts rollowing safety upgrades after the Fukushima disaster.
	Pakistan	6	Mainly Chinese reactor types in operation
	United Arab Emirates (UAE)	4	The Barakah nuclear power plant is now fully connected to the grid with all four units online.
	Russia	37	Also operates two floating SMR reactors in Eastern Siberia
	Turkey	1	Following its phased commissioning, Akkuyu-1 is now operating on the grid.
	Bangladesh's	1	Rooppur-1 has entered the operational phase.
South America	Argentina	3	Atucha I, II, and Embalse. Developing its own SMR (CAREM-25).
	Brazil	2	Angra 1 & 2 on the grid
Africa	South Africa	2	The Koeberg Nuclear Power Plant ensures the regional power supply in the Western Cape.

Source: www.grs.de/de/aktuelles/kernenergie-weltweit-2026