

## 29.03.2023

## Grupa Azoty Police, Ultra Safe Nuclear Corporation and West Pomeranian University of Technology have signed agreement to develop 4th Generation MMR research reactor in Police

Grupa Azoty Police, the US-based Ultra Safe Nuclear Corporation (USNC) and the West Pomeranian University of Technology in Szczecin have signed an agreement to develop and construct a nuclear energy research facility based on Ultra Safe Nuclear's Micro-Modular™ Reactor (MMR®) technology. Over the next six months, the parties will prepare a comprehensive research programme and will jointly develop a plan for the construction, operation and maintenance of the MMR.

The first stage of the collaborative project will consist in the construction of a 30MWt MMR to serve as a training, research and test facility. It will be connected to the existing energy infrastructure of Grupa Azoty Police, providing a unique opportunity to study, test, optimise and integrate the MMR as a zero-carbon generation source into an industrial plant. The collaboration will ultimately lead to the development of a plan for full-scale use of nuclear energy to power chemical processes and to generate steam and hydrogen at Grupa Azoty Police's plant. This will represent another major step towards decarbonisation of the Grupa Azoty Group's industrial processes.

The experience of the last several months, especially the situation on the gas market, has proved how important the diversification of energy sources is for the domestic business. I have no doubt that investments in this direction should be treated as a priority, which is why we support all projects - including, of course, SMR and MMR technologies - whose goal is to develop sources of stable and low-emission energy in Poland, says Karol Rabenda, Deputy Minister of State Assets.

Cooperation on energy security is a critical component of the U.S.-Polish relationship and helping develop Poland's nuclear energy sector is a core part of that effort. This agreement is yet another step in advancing our shared prosperity and security, Mark Brzezinski, United States Ambassador to Poland.

In recent years, the Zachodniopomorskie Voivodeship has become a place of strategic investments accompanied by the development of important fields of science. I am glad that next to the "West Pomeranian Hydrogen Valley" a center will be built where our scientists and students will have the opportunity to conduct research on the advanced technology of nuclear microreactors. The cooperation will provide Grupa Azoty Police with access to safe, reliable and emission-free Energy, says Zbigniew Bogucki, West Pomeranian Voivode

The Grupa Azoty Group's strategy for 2021-2030 with its flagship Green Azoty project targets new renewable capacities totalling nearly 380 MW across the Group by 2030. In our strategic plan, we have also communicated

entry into the segments of wind power and small nuclear sources, including MMRs, which will provide us with additional megawatts of zero-carbon energy. The tripartite agreement signed today at the Szczecin Province Office is paving the way for the Grupa Azoty Group to successfully deploy the 4th Generation MMR technology at our sites by the end of the period covered by our current strategy, that is by 2030. Seeking to make the fastest possible transition towards climate neutrality, clean energy and diversified energy sources, we want to agree on the detailed framework of our cooperation within the next six months, says Tomasz Hinc, CEO and President of the Management Board of Grupa Azoty S.A.

Ultra Safe Nuclear, headquartered in Seattle, Washington, USA, is a global leader and strong vertical integrator of nuclear technologies and services, on Earth and in Space. The company's MMR is a fourth generation high-temperature gas-cooled "nuclear battery" utilizing Fully Ceramic Micro-encapsulated (FCM®) nuclear fuel to promote the highest possible safety performance. The MMR offers a simple, scalable, carbon-free energy source that protects the industrial facilities it powers. Ultra Safe Nuclear has active micro reactor deployment projects in Canada at the Canadian Nuclear Laboratories in Chalk River, in the United States at the University of Illinois Urbana-Champaign, and at LUT University in Lappeenranta, Finland. Additional projects are in development in the United States, Canada, and Europe.

This cooperation agreement builds on the U.S.-Poland cooperative framework formally established by a February 2021 Intergovernmental Agreement. The high-temperature gas-cooled MMR is perceived as essential solution for decarbonization of industry.

Deploying our high-temperature nuclear batteries with Grupa Azoty and the West Pomeranian University of Technology opens the path for decarbonization and the development of modern nuclear infrastructure and workforce in Poland and exemplifies US support of Poland's national energy independence. Together with our partner Hyundai Engineering Corporation, we fully support Grupa Azoty's plans to reduce CO2 emissions and we are glad to offer the West Pomeranian University the possibility of research in the area of our high-temperature nuclear batteries, said Francesco Venneri, CEO and founder of Ultra Safe Nuclear Corporation.

The agreement also provides for training opportunities available to students of the West Pomeranian University of Technology, as part of which they would be able to conduct practical industrial research related to the generation of clean energy from MMRs.

The project to construct a 4th generation MMR research reactor will require new human resources with expertise in nuclear power. At the West Pomeranian University of Technology, we have a wealth of capabilities to equip these individuals with the necessary knowledge in this field. We are committed to constantly developing a unique research infrastructure that allows both domestic and foreign entities to conduct research and engage in R&D projects in engineering, science, and life sciences. We are a key player on the Polish Research Infrastructure Map in the field of technical sciences and energy, and one of the eleven universities of technology in Poland. Our expertise is acknowledged by Polish institutions that set standards in the higher education and research market, said Prof. Jacek Wróbel, Rector of the West Pomeranian University of Technology in Szczecin.