

ENEC and Newcleo Partner to Explore Deployment of Lead-Cooled Fast Reactor Project

February 26, 2025



The Emirates Nuclear Energy Company (ENEC) and Newcleo, a European advanced reactor company, have signed a memorandum of cooperation (MOC) to explore the deployment of Newcleo's Generation IV European Lead-Cooled Fast Reactor (LFR-AS-200) for projects across Europe, the Middle East, and North Africa (MENA).

The MOC establishes a framework for collaboration on advancing LFR projects, developing comprehensive reactor lifecycle management strategies, and addressing the closure of the nuclear fuel cycle for European projects. The partnership aims to create significant value for both organizations and contribute to the evolution of the energy sector.

Key areas of collaboration include identifying investment and deployment opportunities for Newcleo's existing European projects and exploring potential deployments within the MENA region. ENEC and Newcleo will also assess the suitability of LFR technology for decarbonizing hard-to-abate sectors, such as data centers, off-grid applications, and hydrogen production.

ENEC, renowned for successfully delivering the four APR-1400 reactor units at the Barakah Nuclear Power Station in the UAE, brings extensive expertise in nuclear development and operations. Newcleo, focused on licensing its LFR technology in Europe, is currently advancing its reactor design.

Mohamed Al Hammadi, ENEC's Managing Director and Chief Executive Officer, stated, "This agreement provides ENEC with a unique opportunity to leverage our proven capabilities in nuclear project execution while exploring the potential of cutting-edge small modular reactor and advanced reactor technologies."



Stefano Buono, Founder and Chief Executive Officer of Newcleo, commented, "The Barakah project demonstrates the successful delivery of large-scale nuclear projects, and ENEC is the ideal partner to collaborate with on exploring the application of advanced modular reactors for energy-intensive industries."

Newcleo is currently in the process of acquiring land in the Chinon Vienne et Loire region of western France for its first lead-cooled LFR-AS-30 reactor. The company's focus is on designing, constructing, and operating Generation IV advanced modular lead-cooled reactors fueled by reprocessed nuclear waste