Perspectives & Announcements

The **European Nuclear Society High Scientific Council (ENS HSC)** serves as a multidisciplinary think tank within the European Nuclear Society, acting as an essential bridge between scientific research and public policy. Composed of senior experts from across Europe, the Council provides independent, science-based advice on the strategic role of nuclear technologies. Interests of the Ukrainian scientific community and nuclear sector are represented within the Council by Pylyp Kuznietsov, director of the School of Physics and Technology at V.N. Karazin Kharkiv National University and the board member of Ukrainian Nuclear Society, who ensures that Ukraine's extensive experience is integrated into European energy strategies. Through its position papers, the HSC clarifies complex technical issues and offers strategic recommendations to guarantee that the European energy transition is guided by robust scientific evidence

This particular position paper, titled **"On the Importance of Extending the Operation of the Existing European Nuclear Fleet"** focuses on the strategic necessity of **Long-Term Operation (LTO)** for current nuclear power plants. As Europe strives to achieve climate neutrality by 2050, the paper argues that maintaining the existing fleet is the most cost-effective and immediate way to secure low-carbon electricity while bridging the gap toward the deployment of new nuclear builds. By analyzing the "energy trilemma" of security, sustainability, and affordability, the document highlights how LTO preserves vital industrial supply chains, maintains a highly skilled workforce, and ensures grid stability during the transition to a decarbonized energy system.

The full position paper can be accessed through the European Nuclear Society's scientific resources (https://www.euronuclear.org/scientific-resources/position-papers/), offering stakeholders, policymakers, and the scientific community detailed insights into the strategic value of maintaining the current nuclear fleet.