## PANEL DISCUSSION I: Sustainability in air transport system

Mr. Axel Krein, Clean Aviation Joint Undertaking, Executive Director

As the aviation industry faces mounting global challenges, Clean Aviation is charting a bold course toward innovation and sustainability. With 28 projects currently underway and four cutting-edge aircraft concepts targeting entry into service by 2035, the programme is making strides to reduce environmental impact while ensuring Europe remains competitive on the global stage.

Clean Aviation's sustainability approach is built on a strong commitment to making aviation clean, affordable, and safe. By targeting net-zero CO<sub>2</sub> emissions, reducing non-CO<sub>2</sub> effects, and improving efficiency by 30%, Clean Aviation ensures that airlines can adopt Sustainable Aviation Fuels (SAF) or hydrogen without increasing ticket prices, all while maintaining the highest safety standards. Additionally, Clean Aviation is collaborating closely with EASA to develop a pioneering methodology known as the Certification Readiness Level (CRL). This innovative approach aims to streamline the certification process, accelerating the entry into service of next-generation aircraft by 2035.

Building on the legacy of Clean Sky 2, Clean Aviation continues to advance groundbreaking innovations such as the RACER helicopter, the Multi-Functional Fuselage Demonstrator (MFFD), and the Open Rotor engine–essential milestones toward a cleaner future.

Despite these achievements, significant challenges persist. European aviation faces intense competition from U.S. and Chinese state-supported investments, which far surpass European funding levels. Fragmentation within the EU's innovation ecosystem, coupled with delays in moving technologies from research to market, remains a critical issue. The Airbus A350, for example, took eight years from its initial concept to its entry into service. Furthermore, the industry faces a shortage of skilled professionals, especially as experts with practical experience in new aircraft development approach retirement.

To address these challenges, Clean Aviation advocates for an integrated European aviation strategy. This would involve creating an integrated roadmap, aligning research and innovation efforts across EU programmes, and introducing large-scale aircraft demonstrators to bridge the "valley of death" between research and market adoption. Enhancing financial resources and fostering dual-use opportunities for civil and military applications are also essential components of this vision.

Clean Aviation's transformative goals aim to position Europe at the forefront of sustainable aviation by 2035. Through collective effort, bold innovation, and strategic collaboration, the skies of tomorrow promise to be cleaner, safer, and more competitive.