Aerodays 2025: Green and digital transformation of aviation

**The second day of the European Aeronautics Days - Aerodays 2025 is behind us. The topic of the experts' discussion were the challenges of green and digital transformation in the aviation industry. The event is being held in Warsaw under the patronage of the Polish Presidency of the Council of Europe.**

The second day of the event opened with a plenary session on green transformation in aviation. The discussion began with an update on Europe's aviation decarbonization goals and progress in implementing the [Fly the Green Deal](https://op.europa.eu/en/publication-detail/-/publication/69dfdaf4-07d5-11ed-acce-01aa75ed71a1/language-en) and achieving the 2050 targets, with reference also to the European Union's broader plan for competitiveness and decarbonization (the so-called [Clean Industrial Deal](https://commission.europa.eu/topics/eu-competitiveness/clean-industrial-deal_en)). The introductory session focused on an analysis of the technological challenges facing the full implementation of the Fly the Green Deal concept and the challenges of putting the approach into practice. It also pointed out the need for support in the area of coordinated public policies from the areas of science, economy, industry, infrastructure, environmental protection and national defense, as well as the provision of adequate funding, including under the new EU Research and Development Framework Program.

**Green transformation of aviation - challenges and implementation of innovations**

The transformation of the aviation sector towards sustainability and digitization is one of the key challenges of modern civil aviation. The process requires comprehensive measures in a number of areas - from designing aircraft with reduced noise and exhaust emissions, to implementing low- or zero-emission propulsion technologies such as electric, hybrid and hydrogen propulsion, to providing broad access to sustainable aviation fuels (SAF) as an alternative to traditional fossil fuels.

Equally important is the modernization of airport infrastructure, including the installation of systems that enable aircraft charging, the handling of alternative fuels, as well as the implementation of solutions that support energy efficiency and low-carbon airports. Also required is the integration of modern digital tools - both at the air traffic management (ATM) and ground operations levels - that will optimize operational processes, increase energy efficiency and improve capacity.

Achieving these goals requires close cooperation between the aviation industry, regulatory institutions, R&D centers and airport operators and carriers. Technological innovation must go hand in hand with adequate legislative and financial support, enabling the effective implementation of the green and digital revolution in aviation.

Parallel sessions at Aerodays 2025 presented, among other things, the most disruptive technologies in the field of green aviation transformation, achievements towards ensuring that the aviation sector realizes the CLE (Closed-loop Economy) vision, efforts to reduce emissions, and the day-to-day work of the Alliance for Zero Emission Aviation - which aims to smoothly implement technologies for climate neutrality in aviation.

**Digital transformation of aviation**

The fourth plenary session of Aerodays provided an opportunity to learn about the achievements and plans of the European industry represented by Airbus and ASD, the Sesar Joint Undertaking partnership and EASA in the development of digital technologies, autonomy and artificial intelligence in aviation.

Speakers emphasized the importance of digitization, artificial intelligence and autonomy in shaping the future of aviation. Artificial intelligence and autonomy are key drivers of efficiency, safety and sustainability in aviation. They can optimize operations, improve air traffic management, enhance decision-making and contribute to decarbonization goals. EU experts spoke about how these technologies are transforming aviation systems, air traffic control and maintenance practices.

At the end of the second day of Aerodays, the results of aviation R&D projects funded by Horizon Europe, Clean Sky 2, Clean Aviation and projects of young innovative aviation companies were presented.

More about Aerodays 2025: <https://aerodays2025.eu/>.

Aerodays 2025 is an international event dedicated to the future of aviation, which takes place in Warsaw on May 7-9, 2025.