NOVEL RECUPERATION SYSTEM TO MAXIMIZE
EXERGY FROM ANERGY FOR FUEL CELL POWERED
GEARED ELECTRIC AIRCRAFT PROPULSION SYSTEM

VIENNA AVIATION DAYS 2025

FUTURE PROPULSION SYSTEMS FROM TANK TO THRUST, FROM RESEARCH TO QUALIFICATION

PRESS RELEASE

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The Vienna Aviation Days 2025, organized by the Horizon Europe exFan project, took place on 7–8 July 2025 at the WKO in Vienna, powered by Advanced Drivetrain Technologies GmbH (ADT). Under the theme "Future propulsion systems from tank to thrust, from research to qualification," the two-day event brought together experts from industry, research and policy. With near-term innovations and scaling of ambitious propulsion technologies in focus, the event highlighted how joint efforts can drive aviation forward.

SESSION HIGHLIGHTS

DAY ONE: BRIDGING READINESS AND DEMONSTRATION

Session I: The Horizon of Propulsion Systems

The opening session highlighted the need for near-term demonstrators. Presentations by Conscious Aerospace, Diamond Aircraft, eMoSys, Austro Engine, and TU Wien showcased efforts to bring electric aircraft, high-efficiency motors, and SAF solutions closer to commercial readiness.

Session II: Climate Friendly Aviation Technologies (ClimAvTech)

This session featured the ClimAvTech Cluster, a coordinated alliance of 15 EU-funded research projects. Its goal is to accelerate innovation uptake and amplify visibility of research on climate-friendly aviation technologies. The projects and their objectives were introduced during a poster session. Joint dissemination strategies and shared visions were central to the discussion.

Session III: Beyond the Horizon of Propulsion Systems

Research results in the field of long-term climate neutral aviation, that aim to solve challenges in a broad field between SAF & H2 combustion were presented by Ruhr Universität Bochum, Combustion Bay One & TU Graz, Ergon Research, Universidad Carlos III and Safran Tech. Challenges for electric aviation, making future aircraft lighter, more efficient and the reduction of emissions have been pointed out by the speakers.

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DAY TWO: DEEP-DIVE INTO SURFACES AND POLICY SUPPORT

Session IV: Surface Technologies – Macroscopic Challenges, Microscopic Solutions

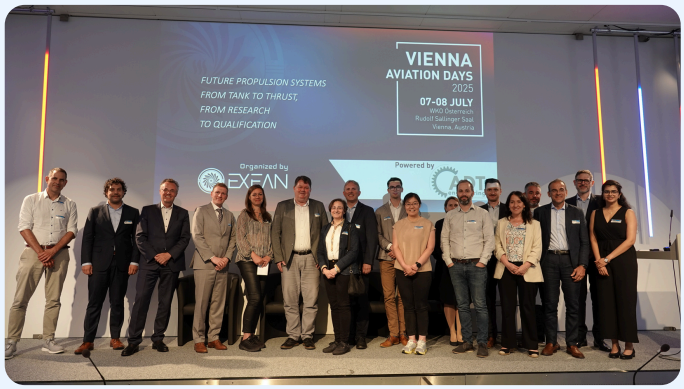
Researchers and industrial experts explored how coatings and surface treatments can optimize heat exchangers, reduce drag, and increase durability in propulsion systems. Laser-fabricated riblets, cold spray repair, electrochemical surface treatments and plasma powder deposition were presented by CIDETEC, Bionic Surface Technologies, Politecnico Di Milano and RHP Technology.

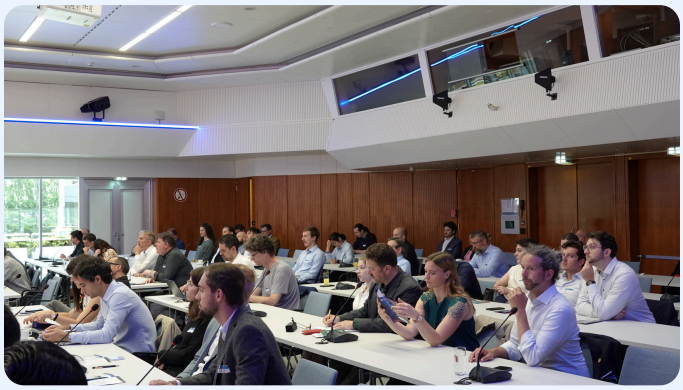
Session V: Pathway from Lab to Air – Policy and Standardization

A final session addressed the crucial policy and regulatory steps required to accelerate certification and deployment of next-generation propulsion systems. Representatives of Test-Fuchs, Magna Steyr Aerospace, Rail Tec Arsenal and the Austrian Research Promotion Agency held presentations during this session. The panel discussion on policy alignment and reducing the time-to-market for aviation innovation was joined by the Areana project, the Federal Ministry for Innovation, Mobility and Infrastructure of Austria and the Federal Ministry for Economic Affairs and Energy of Germany.

CONCLUSION

Vienna Aviation Days 2025 acted as a practical platform for sharing knowledge, aligning efforts, and encouraging collaboration between research, industry, and policy. Discussions across the sessions reflected the real progress and ongoing challenges in developing future propulsion technologies.
By bringing together technical presentations, cross-project networking, and policy dialogue, the event supported the wider goal of preparing aviation for the transition ahead. Continued cooperation across initiatives such as ClimAvTech and exFan will be essential in the years to come.





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