

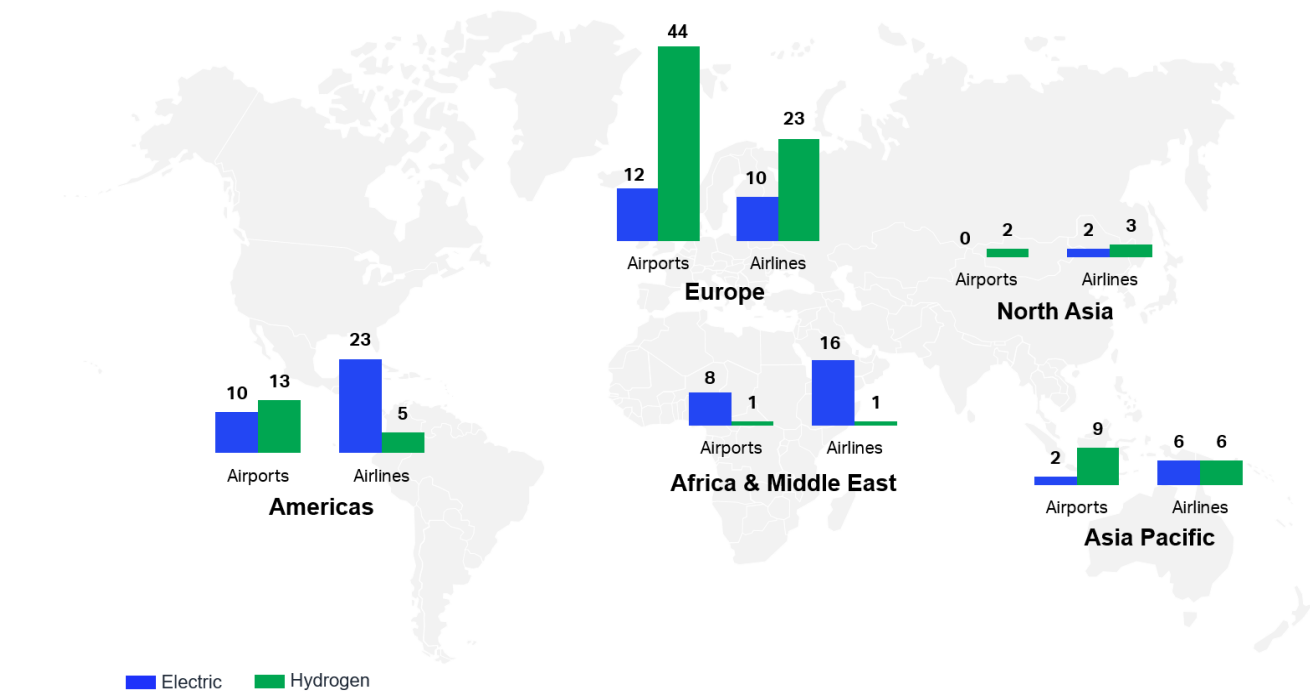


Chart of the Week

2 October 2026

Mapping the Future of Hydrogen and Electric Aviation

New aircraft technology initiatives by regions and stakeholders



- New technologies, including hydrogen and electric propulsion, are expected to deliver 13% of the emissions reductions needed for aviation to reach [net-zero CO₂ emissions by 2050](#). Despite delays to the planned entry into service of some projects, initiatives¹ across regions continue to explore how aircraft technologies, infrastructure, and operating models can evolve together to prepare the ecosystem for commercial operations.
- Following promising demonstrations in the early 2020s, hydrogen aviation currently faces broader infrastructure, operational, and energy challenges. To address these issues, airports are emerging as key partners in this effort, leading nearly two-thirds of the mapped hydrogen initiatives.
- Regional differences are shaped by policy support and technologies' application potential: Europe leads in airport hydrogen initiatives for storage, refueling, and ground operations, consistent with EU funding, while airline initiatives in the Americas favor electric regional flights and air taxis, supported in the US by recent eVTOL policies, the FAA integration pilot program, and private investment in charging infrastructure. Electric projects in Africa and the Middle East include urban and resort connections in the Gulf, and regional-aircraft conversions in Africa.
- Turning these initiatives into scalable solutions requires substantial policy and investment support to develop the necessary ecosystem for hydrogen alongside the wider energy transition, with governments, regulators, energy suppliers, and aviation stakeholders coordinating internationally to align aircraft development, infrastructure requirements, and operational standards.

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¹Notes: Initiatives include aircraft and propulsion development, flight demonstrations, ground testing, refueling/charging infrastructure trials, feasibility studies, or aircraft orders/letters of intent. Electric initiatives include battery-electric and hybrid-electric projects.