

AEROSPACE VALLEY, THE LEADING AEROSPACE SECTOR COMPETITIVENESS CLUSTER IN EUROPE



Serving 3 strategic sectors in the regions
Occitanie and Nouvelle-Aquitaine



Through **innovation** the cluster fosters the **development and competitiveness** of the aerospace sector and its actors in the territory.



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MAËLE – Eco-friendly & sustainable light air mobility



- 300+ regional actors working on disruptive technologies
- Platforms to test innovative technologies on small airplanes (CS-23)
- Light aviation is considered as a solutions-accelerator and a booster for these new technologies towards the decarbonisation of aviation !



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Prepare the Airport of Tomorrow





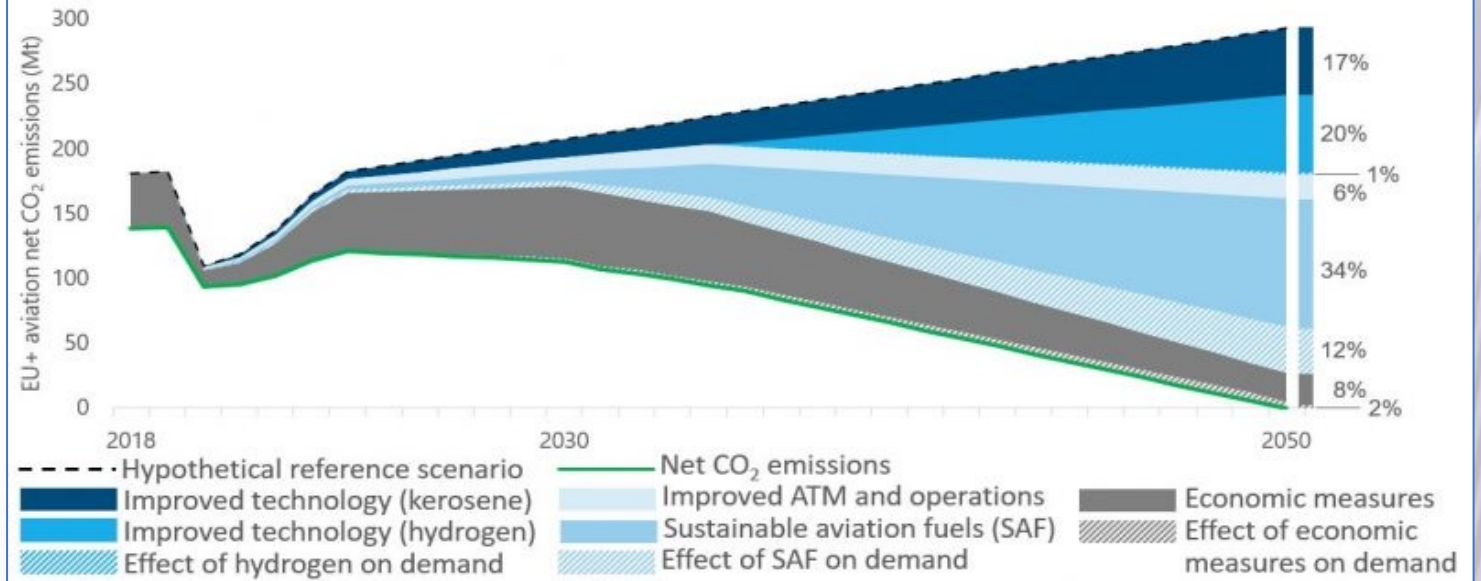
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A route to net zero European aviation

Decarbonisation Roadmap for European Aviation

All flights in scope



Paris Agreement
(December 2015)



-37%

Improvements in **aircraft and engine technologies** could achieve emission reductions of **37%**.



-34%

Using **sustainable aviation fuels (SAFs)** could achieve emission reductions of **34%**.



-8%

Implementing **economic measures** could achieve emission reductions of **8%**.



-6%

Improvements in **air traffic management (ATM) and aircraft operations** could achieve emission reductions of **6%**.



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Light aviation platforms for future de-carbonisation technologies

- High-power electronic harnesses protection
- Engine for SAF or H2-burn or e-fuel
- Propellers
- New materials / composites

- Tank H2
- Batterie/BMS
- Fuel cells
- Heat exchanger

- Modelisation / digital twin
- Design, manufacturing, services
- Certification CS-23
- Test and integration benches



- Monitoring control
- Flight Control
- Intelligence in flight

- Fly-by-wire
- Autonomous flight
- Auto-landing





Call for proposals in Occitanie and Nouvelle Aquitaine (total of 17 M€ public funding)

16 projects & consortia launched addressing the following topics:

- Fuel cell flight tests
- Power train fuel cell
- Electrical aircraft / helicopter
- Electrical function for a more electrical aircraft
- Hybrid aircraft
- Quiet propellers
- High-power fuel cells
- Hydrogen tanks and distribution
- New navigation systems

