CLEAN AVIATION

Co-funded by
the European Union

Europe's Aviation Research & Innovation Strategy 2050

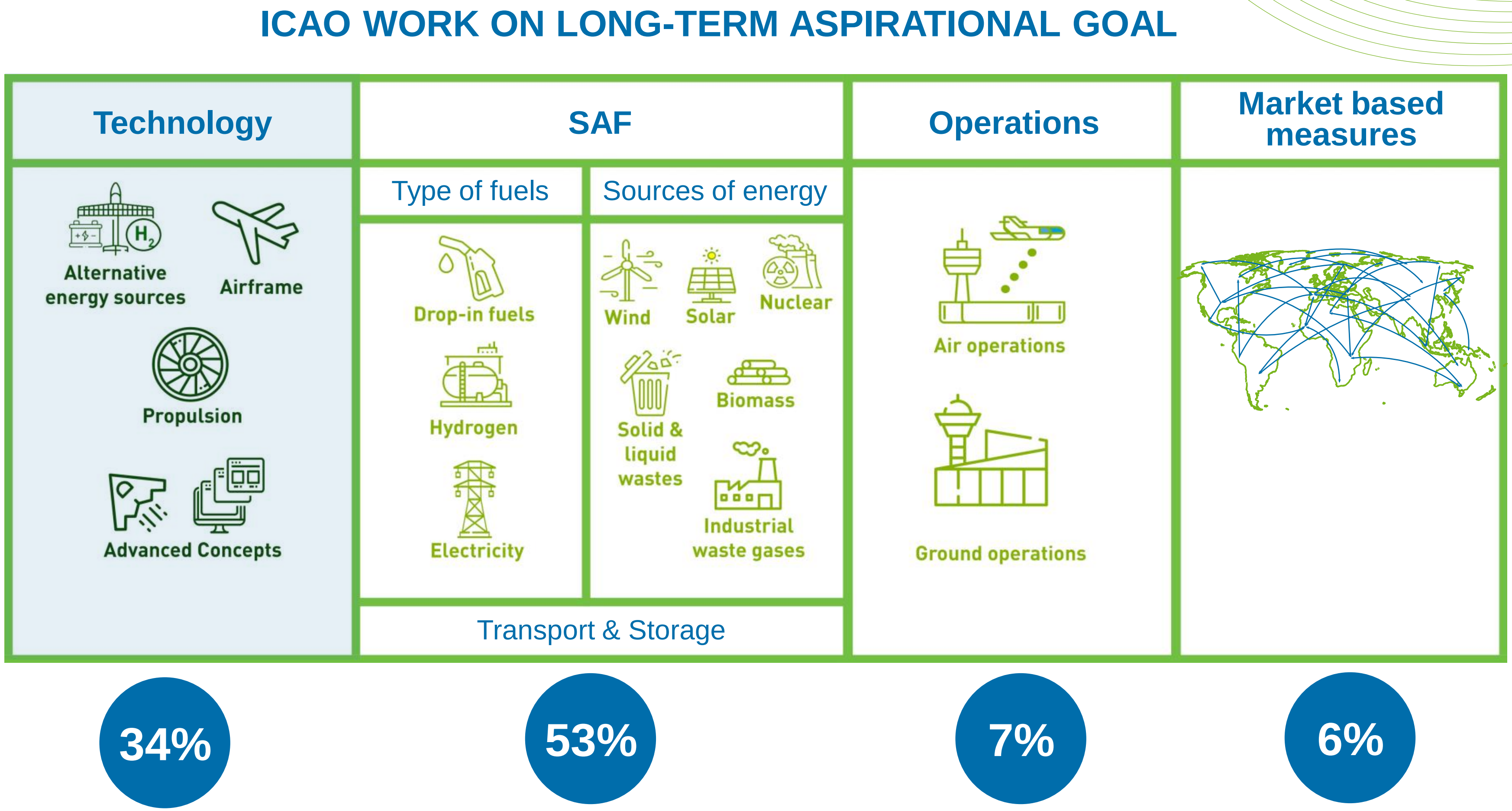
Clean Aviation's goals and programmes

Sébastien **DUBOIS**
Head of Unit, Programme Development & Communication
Clean Aviation

Luchtvaart in Transitie – 9 October 2025

The CO_2 contribution reduction panorama by 2050

Breakthrough in CO_2 reduction will be triggered by disruptive technologies & SAF

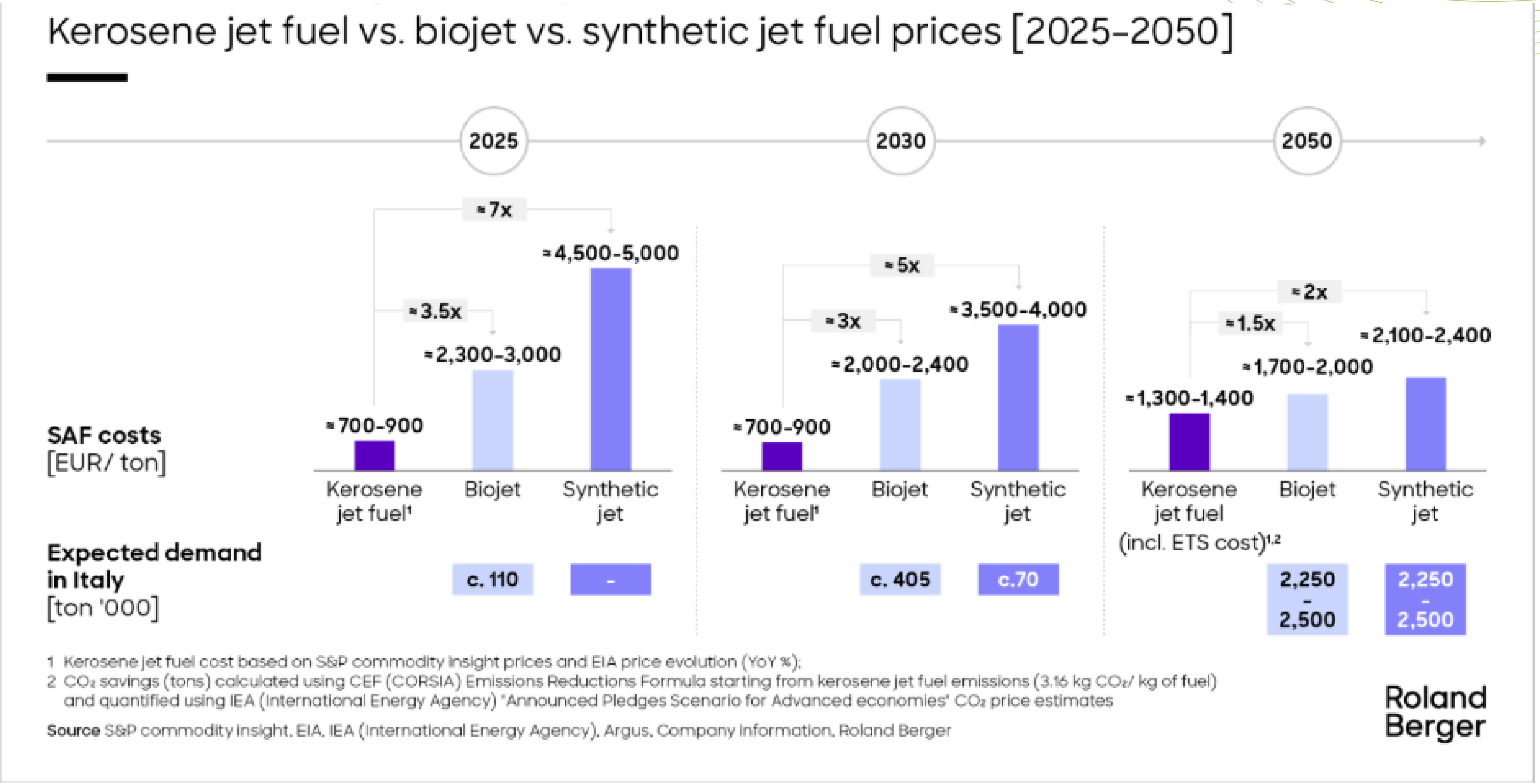


ATAG Waypoint 2050 (2021), Scenario 3: aspirational and aggressive technology perspective

CLEAN AVIATION
Co-funded by the European Union

Sustainability vs competitiveness

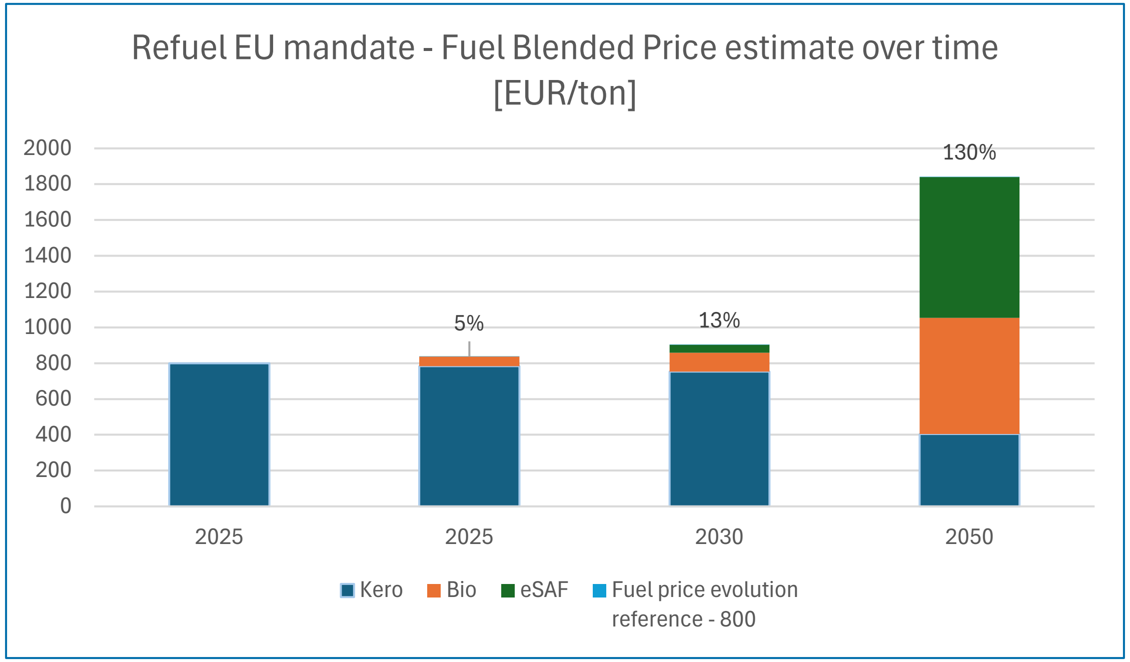
Biojet & eSAF prices will remain **35% to 70% more expensive** than kerosene in 2050

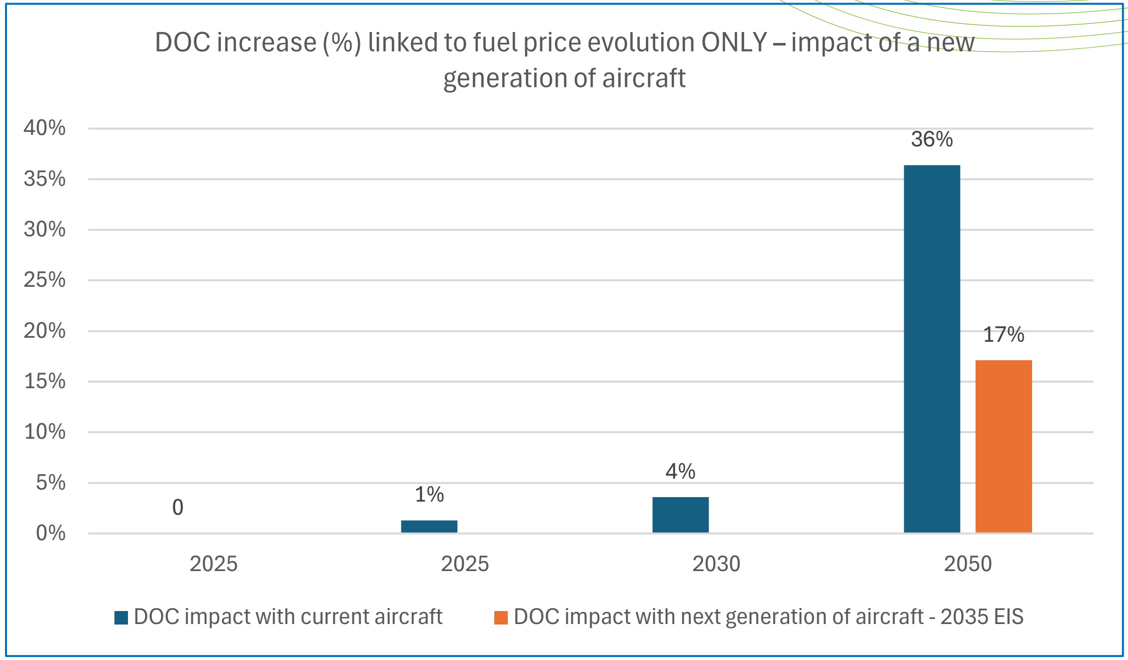


CLEAN AVIATION

Co-funded by the European Union

The need for a new generation of aircraft





>>> Transitioning **to carbon neutrality** while preserving the **competitiveness of airlines** required a **new a generation of aircraft** (30% improved performance) and **the availability of SAF at a competitive price**

CLEAN AVIATION

Co-funded by the European Union

Clean Aviation: an impact driven programme under Horizon Europe [2021 – 2028]

Achieve
-30%
GhG reduction

SAF

H2

-30%
CO_2*

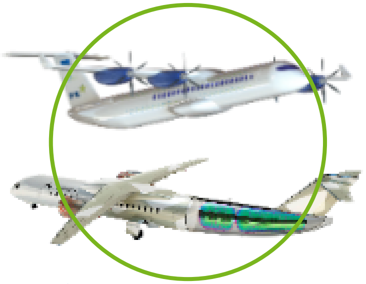
-90%
CO_2*
incl. **SAF**

Support
Entry-into-Service of new aircraft by
2035

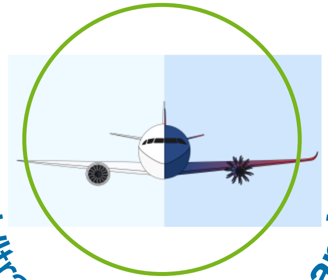
Enable
75%
fleet replacement by 2050

EU Funding:
€1.7B
Private Funding:
> €2.4B

Ultra-efficient **Regional** aircraft



Hydrogen powered aircraft



Ultra-efficient **Short and Medium Range** aircraft

Performance objectives *and* ***maturity of critical technologies demonstrated by 2030***

CLEAN AVIATION

Co-funded by
the European Union

Co-funded by the European Union

AVIATION RESEARCH & INNOVATION STRATEGY

A pathway to competitive and sustainable aviation supporting Europe's sovereignty.

ARIS : handover to the European Commission

- ARIS handover to Commissioner Apostolos Tzitzikostas
- Paris Airshow, 16 June 2025
- +100 contributors

Clean aviation official recognition: Moonshot project

European Commission

Moonshots

Clean Aviation

What: Lead the world in developing the next generation of CO_2-free aircraft.

CLEAN AVIATION JOINT UNDERTAKING

sesar JOINT UNDERTAKING

Co-funded by the European Union

ARIS: A Strategic Roadmap for Competitive and Sustainable Aviation

Europe's aviation leadership in some areas is strong but not guaranteed

Aviation is vital to Europe's economy and sovereignty

Urgent investment in R&I is needed to stay competitive and meet climate goals

Three key areas for R&I investment:
> Aircraft Technologies
> Air Traffic Management
> Transforming Enablers

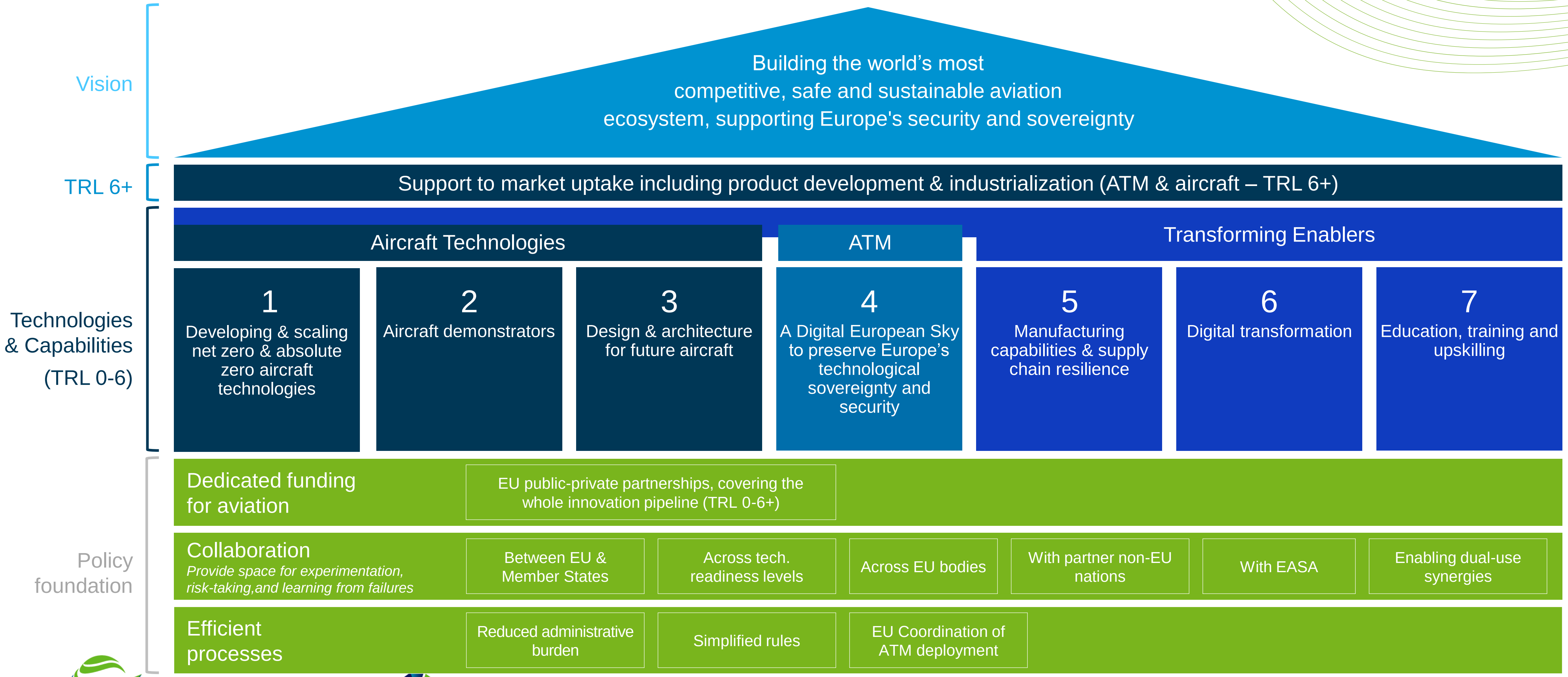
Collaboration is key: a Europe-wide R&I strategy

2028-2034 EU multiannual financial framework:

EUR 66 bn investment (of which **EUR 22.5 bn** at EU level) in EU aviation R&I and support to market uptake to meet competitiveness, sustainability, and sovereignty objectives

CLEAN AVIATION JOINT UNDERTAKING
sesar JOINT UNDERTAKING
Co-funded by the European Union

A new framework for action on European aviation



CLEAN AVIATION JOINT UNDERTAKING
sesar JOINT UNDERTAKING
Co-funded by the European Union

Call for action

Accelerating investments across **the full innovation pipeline, from research to market uptake (TRL 0 to TRL6+)** for a **competitive** and **sustainable** EU aviation economy

Strengthening investments to build **a strong and resilient EU supply chain** and creating conditions for **successul deployments**

Shaping conditions for a future Clean Aviation Moonshot partnership

CLEAN AVIATION

Co-funded by
the European Union

Thank you