SIEMENS

DIGITAL INDUSTRIES SOFTWARE

Innovate the future aircraft: rethink next generation aircraft engineering

siemens.com/software

Making flying sustainable

Tackling climate change remains a top priority for the aircraft industry *Source: IATA*

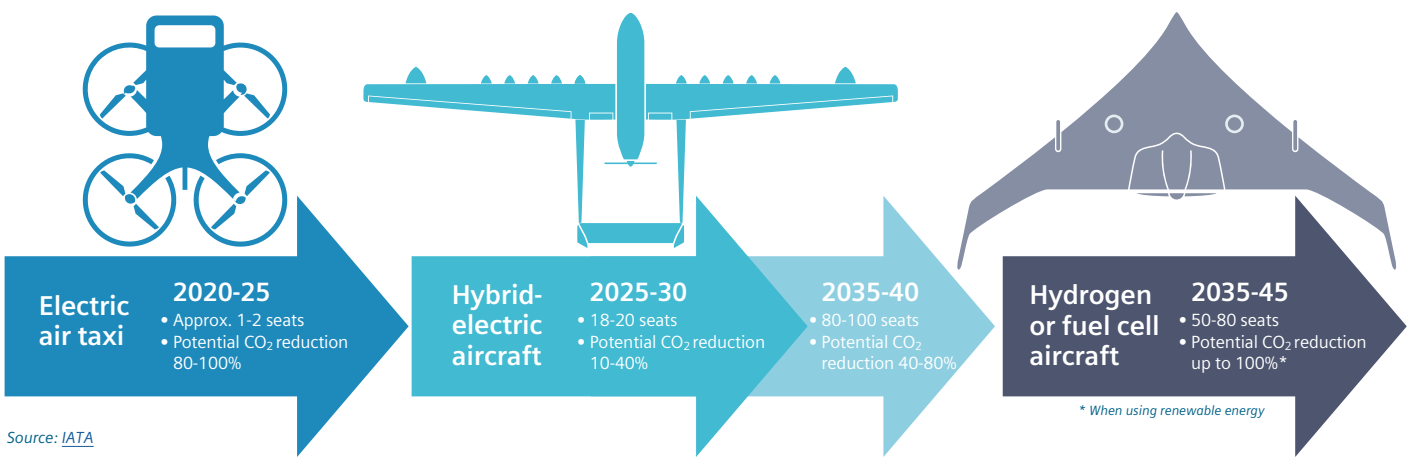
-50%
reduction in net aviation CO_2 emissions by 2050
Source: IATA

-1.5%
annual improvement in fuel efficiency, 2009-2020
Source: IATA

-15%
smaller noise footprint of new aircraft
Source: IATA

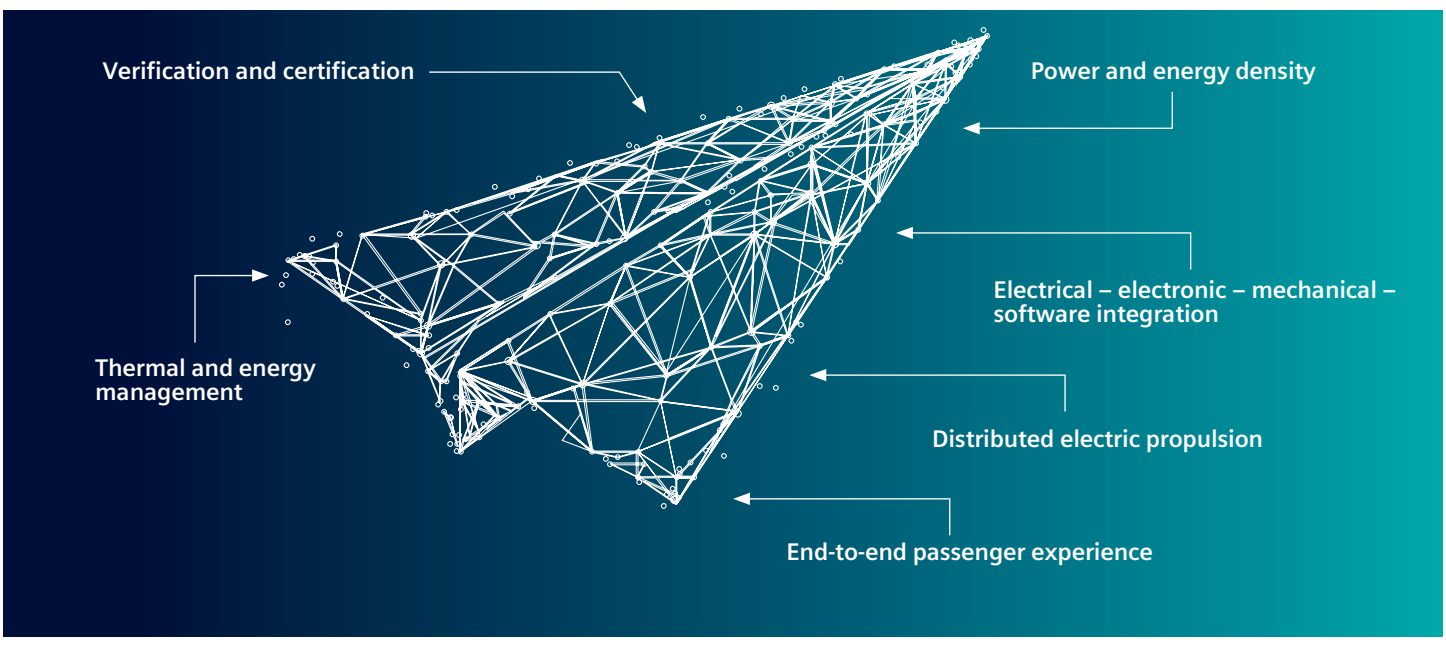
Electrifying the propulsion of future aircraft

Fully electric aircraft can eliminate CO_2 emissions in aircraft operation*.



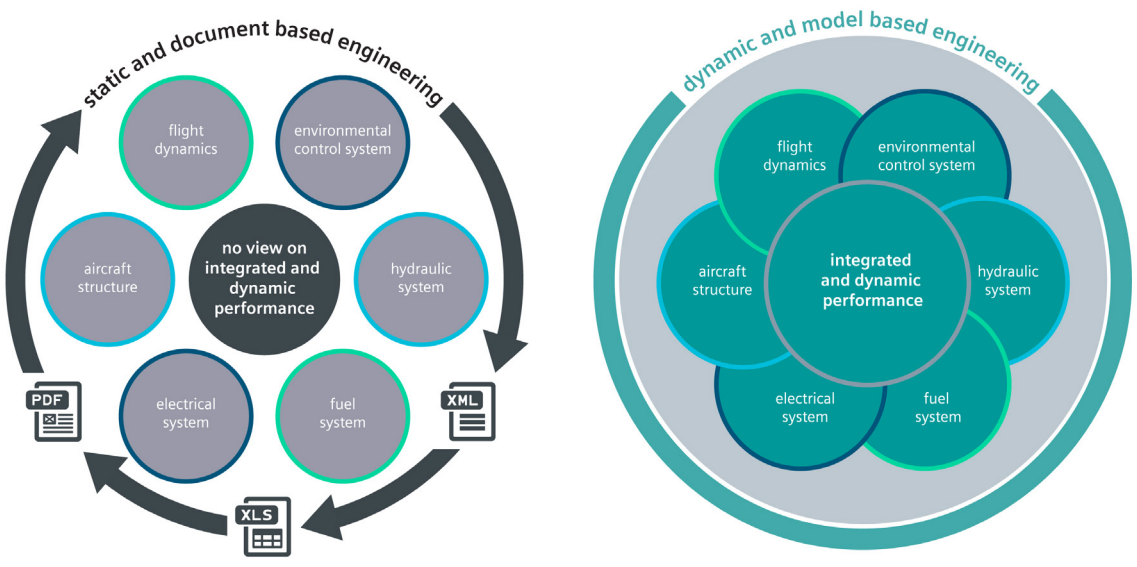
Source: IATA

Electrification adds new complexity to the engineering process



Increase collaboration to successfully engineer innovation

Remove silos with model-based systems engineering and unlock the potential of the digital twin and thread



Siloed approach

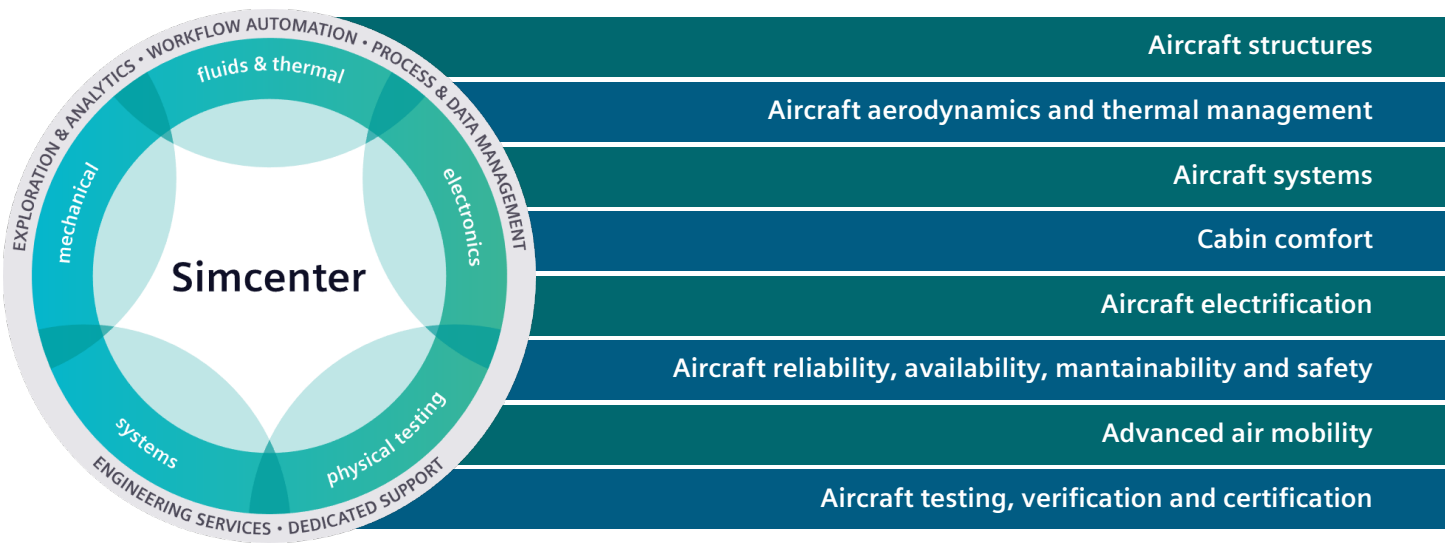
- Blind spots in integrated aircraft behavior
- Excessive safety margins
- Increased testing and certification costs
- Late integration issues
- Compromised missions

Dynamic and model-based engineering

- Virtual integrated aircraft
- Early insights in the integrated aircraft behavior, from the concept phase onwards
- Less rework, effective model re-use
- Accelerated and digitalized certification

Fly it before you build it

Accurately predict all aircraft performance aspects, optimize designs and innovate faster, with greater confidence.



To learn more, download the white paper: *Designing the next generation of aircraft.*

83211-D13 11/21 A