

CONNECTING AN ALL-ELECTRIC WORLD

Hybrid-electric propulsion for sustainable aviation & new mobility concepts

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Aviation as of today is not sustainable – the future and the industry **SIEMENS** call for environmentally friendly and economical flight solutions



1) IATA technology roadmap, June 2013

2) example 737-800

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Hybrid-electric propulsion systems are key technology for sustainable flight





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Siemens eAircraft offers electric propulsion units for applications with high power/torque to weight requirements





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After small propeller aircrafts we see a possible market entry for air **SIEMENS** taxis and commuter aircrafts by the middle of the next decade Ingenuity for life



Hybrid-electric propulsion is a scalable technology, making its way into

- General aviation by 2018-2022
- Commercial aviation (<100 passengers) by 2030
- eVTOL potentially in a large number (economy of scale)

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The eAircraft portfolio has been designed to meet aerospace **SIEMENS** requirements and is now on the way to industrialization & certification Ingenuity for Life



The eAircraft portfolio has been shaped by close collaboration with partners such as Airbus.

In the lower power classes, the systems have already been tested in flight and are being installed in first commercial applications.

In the high power classes, a 2 MW lab demonstrator is currently awaiting test results and a design of a 10 MW generator based on superconducting technology exists as digital twin.

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A successful start-up story: acquisition by Rolls-Royce accelerates **SIEMENS** achievement of sustainable flight vision (announced June 18, 2019) *Ingenuity for Life*

Market and competition

Fast market development requiring industrialization speed

Strong competition

High capital invest in new enterprises

Competencies



SIEMENS eAircraft

- Innovative developments
- Strong team and competencies
- Successful technology demonstration
- Customer access in general aviation market
- Pioneer and driver of electric aviation vision



- Leading supplier of propulsion systems
 - Strives to become the leading supplier of electric and hybrid-electric propulsion systems for aircraft
- Experience in industrialization, certification and marketing of products for the aerospace industry
- Certified design organization
- Established customer relationships in commercial aviation markets

Technology & business prospects

Sustainable, lower-emission, silent aviation with hybrid-electric propulsion systems

Contact





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