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Electrification in aviation

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Electrification in aviation

Aviation is estimated to account for approximately 3-4% of global carbon dioxide emissions. A challenge to reduce emissions.

There is interest in all-electric flight, for a few or no passengers and short distances.

The development needs for example:

- Improvements in battery technology to reduce weight and increase range.
- Development of airport infrastructure to receive and charge different types of electric aircraft.

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Are there electric passenger flights today? **Yes!**

Pipistrel Velis Electro

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Electric vertical take-off and landing aircraft (eVTOL)

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Drones for civil applications

Ongoing development: Heart Aerospace, ES-30

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Electrification at airports

Recommended reading:
Lindberg M, Leijon J. Electrifying aviation: Innovations and challenges in airport electrification for sustainable flight. Advances in Applied Energy. 2025;18.

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RESEARCH PROJECTS

- **ONGO:iFED**
- **YourFlight**
- **TAKEOFF**
- **Electric aviation as a driver** for strengthened regional growth, accessibility, and sustainability,
- **Completed project: RES-FLYG**

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Thank you so much for listening!

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