

AVIATION CO₂ REDUCTIONS



STOCKTAKING SEMINAR
TECHNOLOGY · OPERATIONS · SUSTAINABLE AVIATION FUELS



Advanced Aircraft Technologies

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A white Lilium eVTOL aircraft is shown in flight, banking to the right. The aircraft has a sleek, aerodynamic design with a black nose and four sets of propellers on its wings. It is flying over a dense green forest and a river, with a misty or cloudy sky in the background.

eVTOL will play a key role in a new smart and sustainable mobility ecosystem

Total CO₂ reduction potential of a Lilium fleet of 8.000 aircraft by 2030:

1.800.000 t CO₂ p.a. (- 80%)

... compared to status quo where trips are not done with a Lilium jet

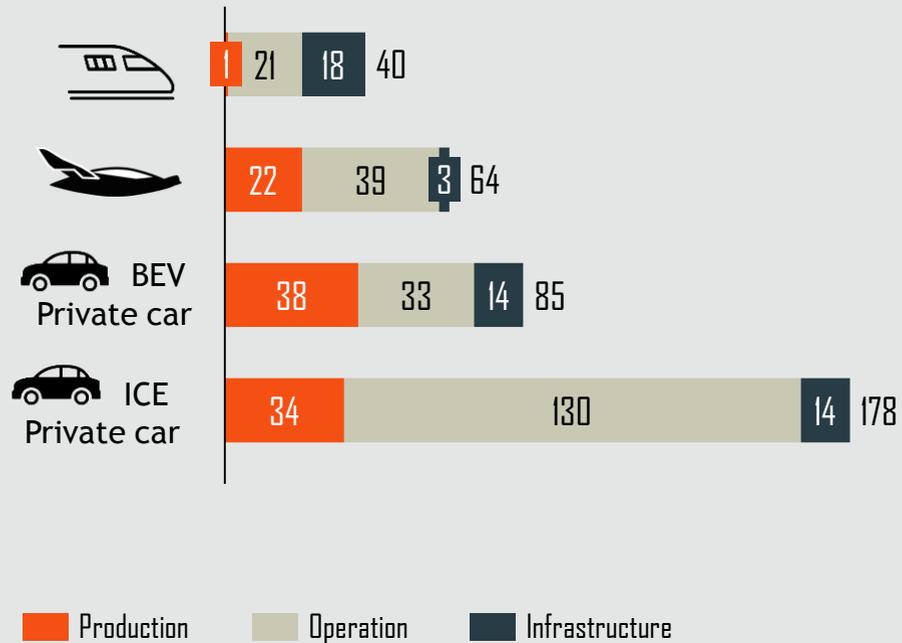
This equals the yearly carbon footprint of a small country (e.g., Malta)

Assuming that the yearly numbers of trips of each Lilium jet is made up of 1/3 of car, train and plane trips respectively, switching from their current transport mode to Lilium

Lilium and HSR will become the most sustainable high-speed transit solutions

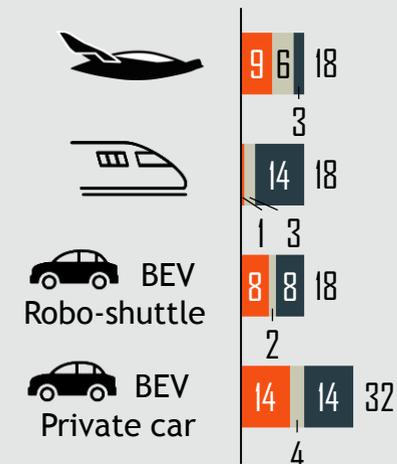
Short-term scenario - 2025

Emissions in gCO₂-equivalent per passenger kilometer



Long-term scenario - 2035

Emissions in gCO₂-equivalent per passenger kilometer



Sources: European Environment agency, Fraunhofer-Institut, International Council on Green Transportation, International Union of Railways, KBA, Office of Energy Efficiency & Renewable Energy, Forbes, Umweltbundesamt, Öko Institut

eVTOL

(based on Lilium Jet prototype)

Technology

eVTOL (electric vertical take-off and landing) aircraft will provide a high-speed regional connectivity with a low environmental footprint as soon as 2025.

The Lilium Jet has a range of 300km, a top speed of 300km/h and a payload of four passengers, one pilot and carry-on.

Fully electric, the Lilium Jet is low noise, high safety and requires minimal infrastructure due to its ability to take-off and land vertically, even in urban environments.



	CO₂ reductions per flight	90%
	Level of finance required	N/A
	Timeframe	2025
	Main challenges	N/A