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Head of product

ICAO

Session 2

Aircraft technologies

Part 2

Start-Up Session



Aviation will be electric

Unlocking full potential with hydrogen

VISION ●





Tackling the Most pressured industry

Business Aviation Most Emissive per Usage

2t of CO₂/h

10 times more polluting per passenger than commercial

23,000

Jets to electrify, 40% might fly with SAF, we can expect 60% to be replaced by hydrogen-electric aircraft

PROBLEM ●





We are making possible, certifiable and profitable, the first

Electric Business Aircraft Designed for Hydrogen Propulsion

ONE ●

Building Electric business aircraft

6 passengers on 1500 km



Base specs

Range	800 NM
Max speed	310 KTAS
Max power generated	1.4 MW
Emissions	0.0 CO ₂ eq IN FLIGHT
Passengers	6-8 PAX
MTOW	8.6 t

ONE ●



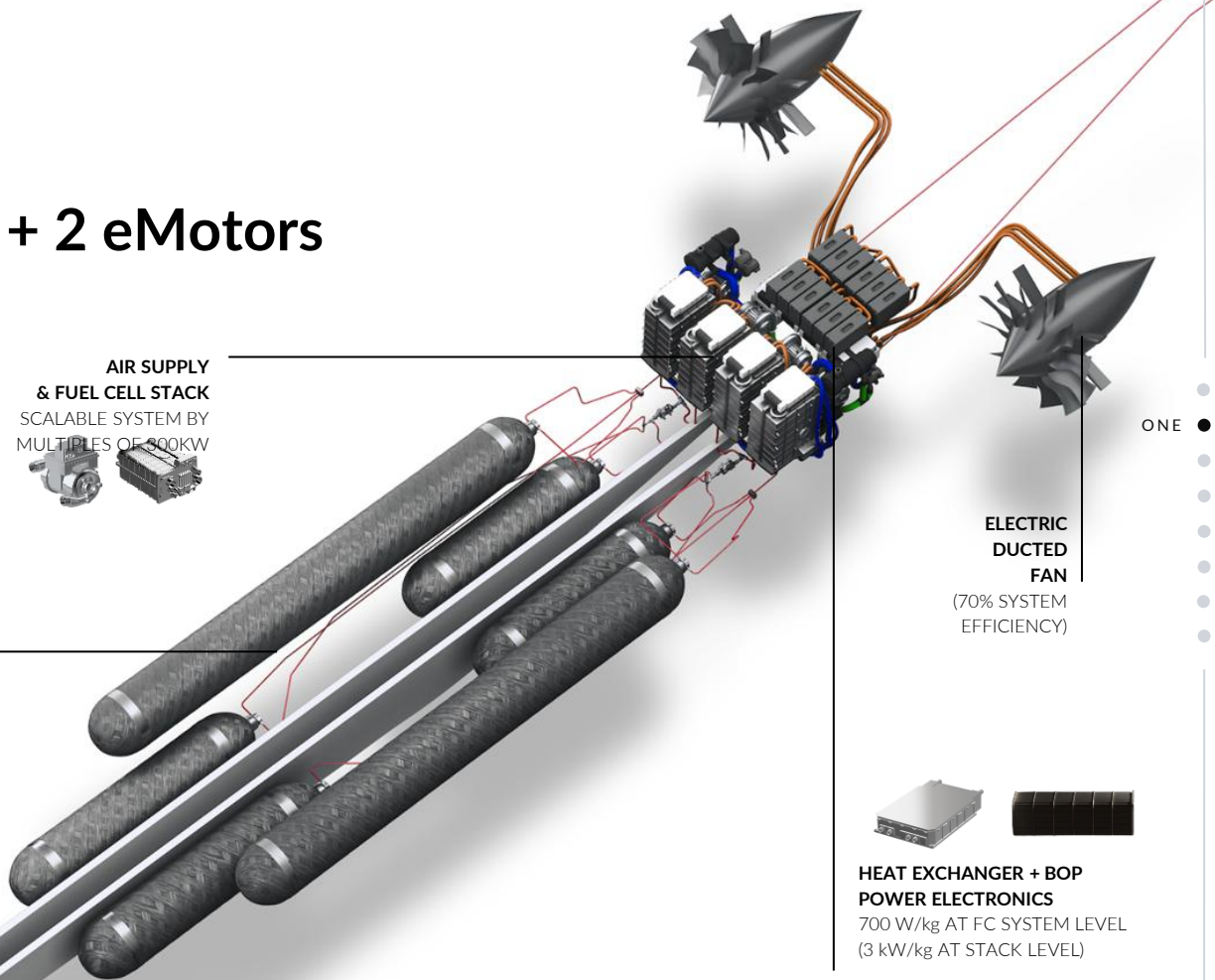
Scaling the prototype to a 4x300 kW FC system + 2 eMotors

**AIR SUPPLY
& FUEL CELL STACK**
SCALABLE SYSTEM BY
MULTIPLES OF 300KW

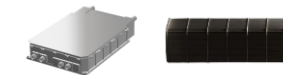


H2 TANKS

7 to 15% OF
H2 MASS FRACTION



**ELECTRIC
DUCTED
FAN**
(70% SYSTEM
EFFICIENCY)



**HEAT EXCHANGER + BOP
POWER ELECTRONICS**

700 W/kg AT FC SYSTEM LEVEL
(3 kW/kg AT STACK LEVEL)

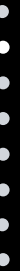
Scalable architecture, cost-effective volume pricing, and patented trade secret methods protect the product's unique features and processes.



The Push for Electric Business Jets

Tapping into a \$30 Billion Market

MARKET





Covering the main routes

80% of Europe

52%

of flights from Le Bourget fly less than 600 km

62%

of flights departing Paris can be done by One (<1500km and <8pax)

8 flights

daily between Paris and Geneva. 9 between Paris and all London airports

- Main routes
- Main business aviation airports

MARKET ●

Source: Beyond Aero Data Platform



Covering the main routes

86% of United States

20%
of flights from SF
are going to LA

25%
of flights from LA
are going to LV

29 flights
Per day (LA > SF & SF > LA)
for 8 aircrafts

MARKET ●

- Main routes
- Main business aviation airports

Source: Beyond Aero Data Platform



Transforming Airports for the Electric Era

Adapting Infrastructure for Tomorrow

INFRA



Joining forces with key airports

80%

Of the business routes are below the 1,500km

90%

Of flights operated by 15% of the top EU airports.

1.7 tons H2

Daily necessary H2 mass for **Le Bourget Airport** (average, for all flights < 8.6 t)

10 kg/100km

H2 efficiency. The average value in our models.





Our Iterative Approach

Innovative Prototyping

PROTOTYPE



It's called a retrofit **We call it a perfect fit**

We have developed an 85kW flying test bench for retrofitting a 2-seater from G1 aviation. This cutting-edge aircraft propulsion system seamlessly integrates hydrogen tanks and batteries to power the propeller.

Base specs

Max speed	130 km/h
Autonomy	20 mins
Max power generated	85 kW
Tank pressure	340 bar
MTOW	525 kg





In march, we achieved

France's first manned fully hydrogen-electric flight

Complete test flight campaign validated in South France, with 10 takes-off including 2 complete full flights, making it France's first electric aircraft manned on fully hydrogen-electric propulsion with an hybridization ratio of $\frac{2}{3}$ gaseous hydrogen to $\frac{1}{3}$ batteries.

PROTOTYPE ●



Watch the movie on Youtube

