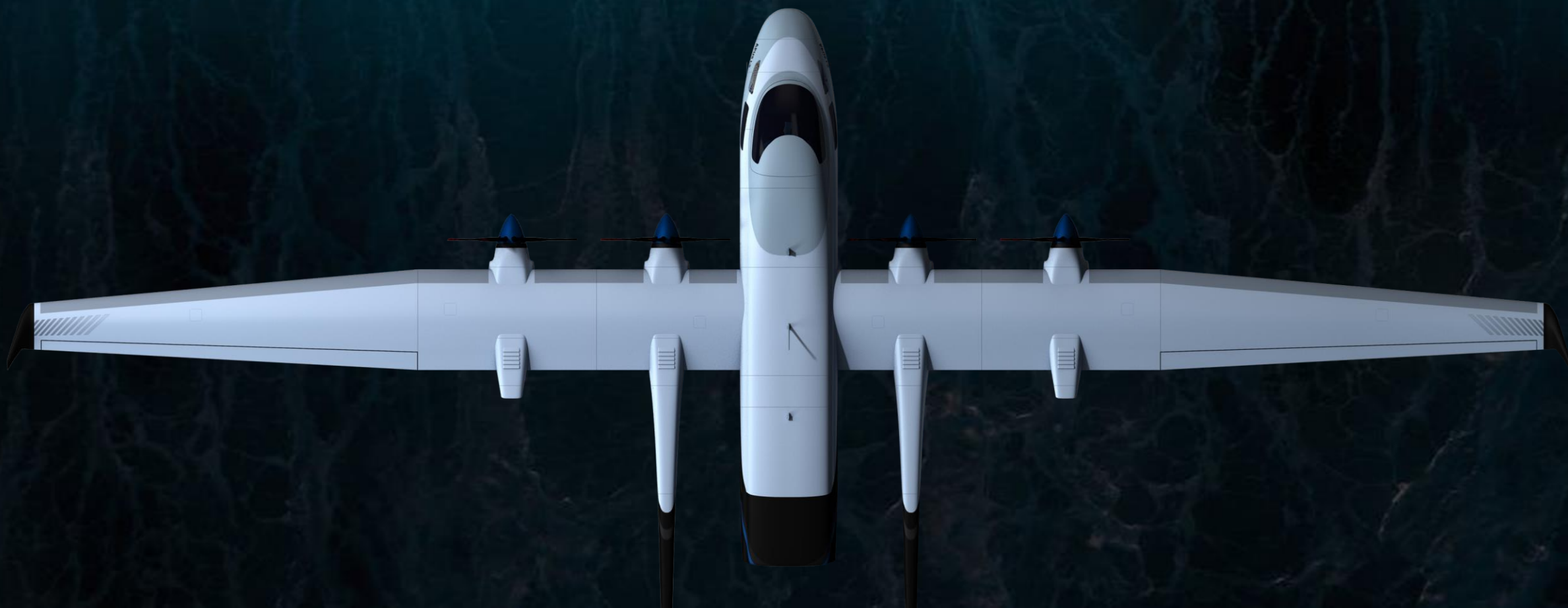




A new era of air transportation



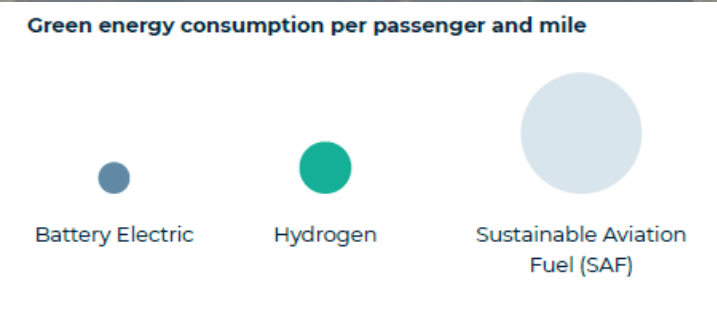
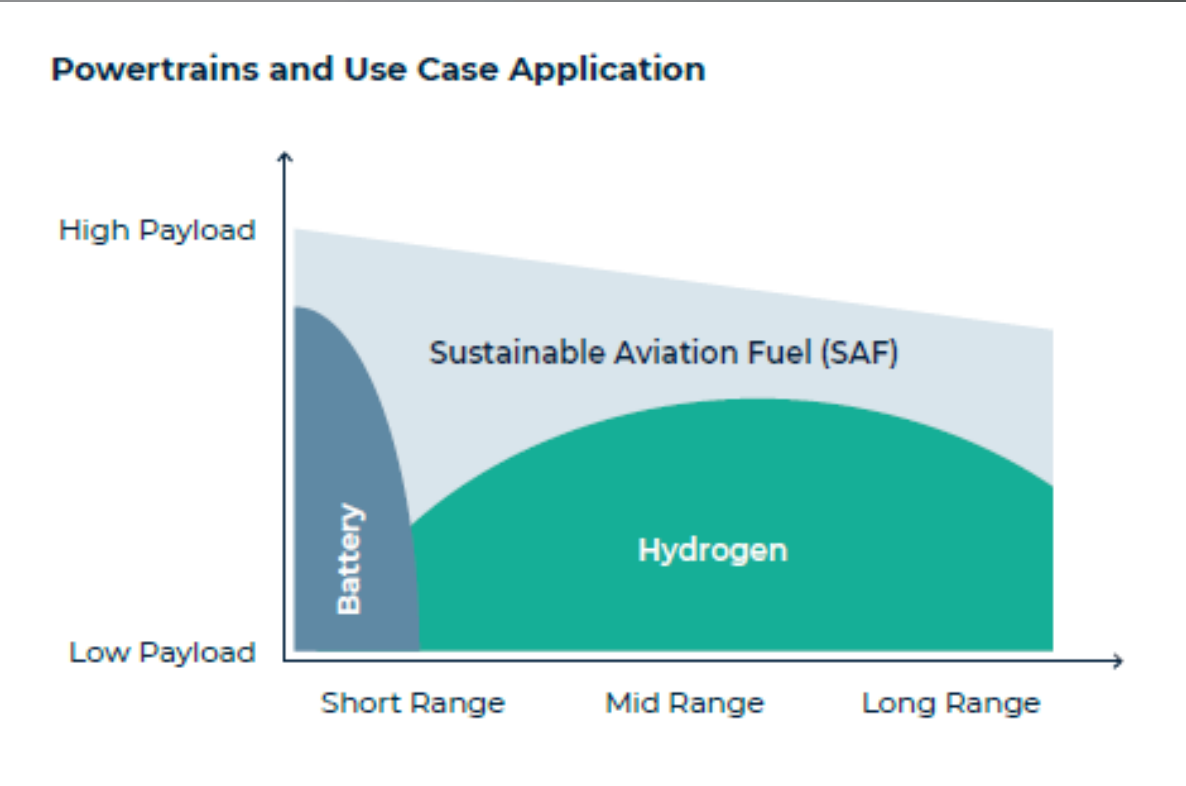
An urgent need for immediate emission reduction in aviation.



920 million
Metric Tons of CO₂
In commercial aviation worldwide per year

50% of the pollution
by regional and short haul flights.
Without new technologies
Expected to
increase 3x by 2050.

-75%
The required reduction of the aviation
industry's CO₂ emission by 2050
EU Green Deal, proposed by the EU Commission





Unsere Ziele

Erreichen von
Null-Emission
durch die Nutzung von
WASSERSTOFF
als Energieträger.

Unser Vorgehen

- **Wasserstoffspeicher** mit sehr hoher Energiedichte
- Antriebsgetriebenes **Flugzeugdesign**
- Neue **Brennstoffzellengeneration** und
- Pragmatischer **Zulassungsansatz**.

APUS – Standort

Der Firmensitz der **APUS Group** liegt 30 km östlich von Berlin. Die Büros und Werkstätten sind direkt an die Rollwege und Landebahn des gut ausgebauten Flugplatzes Strausberg EDAY angebunden.



APUS Group

Lilienthalstraße 2
15344 Strausberg
GERMANY



Fakten – APUS Group

Gegründet
Erfahrung (Key Staff):
Zulassungen:

2014
30 Years
EASA 21J / 21G / ISO 9100

Mitarbeiter:
Infrastruktur:

35+
350 m² Büros
1.300 m² Werkstatt
1.500 m² Test-Bereich

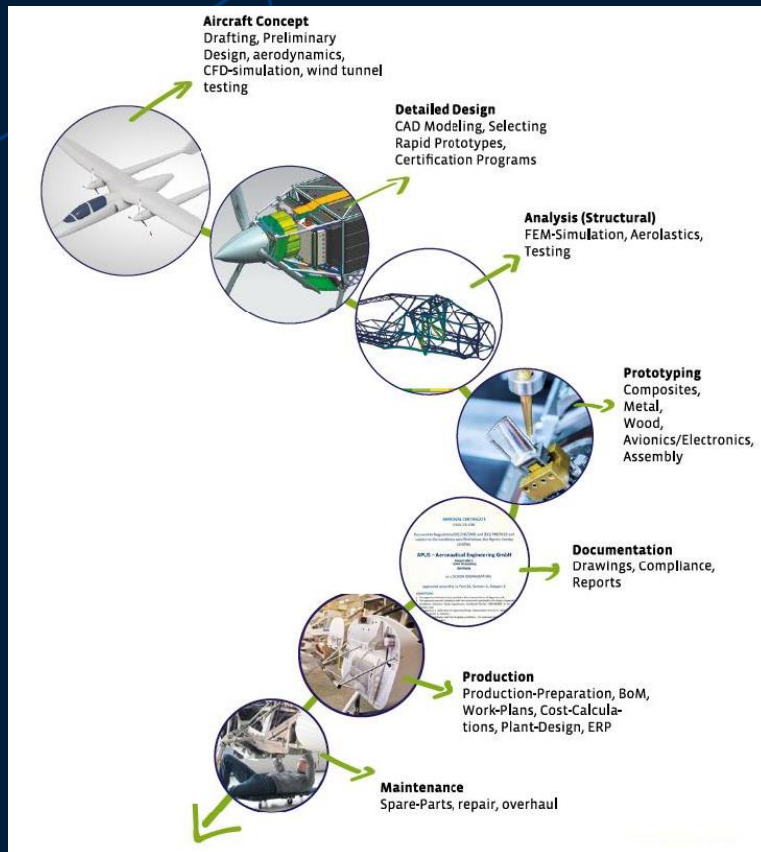
APUS – Aviation Engineering



„APUS Group is an extremely experienced and powerful engineering team that works on the aircraft development challenges of the future. Such are, hybrid-electrical powertrains, energy storage systems, airframe structures and aerodynamics.

APUS is able to combine hands-on competencies with highest certification standards and is the preferred partner for OEMs who want to develop outstanding future products with a clear and straight road to certified products.“

Phillip Scheffel, Founder & CEO



APUS Zero Emission Flugzeuge

APUS entwickelt zwei neue Flugzeuge, mit dem Ziel, der erste Hersteller zu sein, der zugelassene Wasserstoffflugzeuge anbietet.

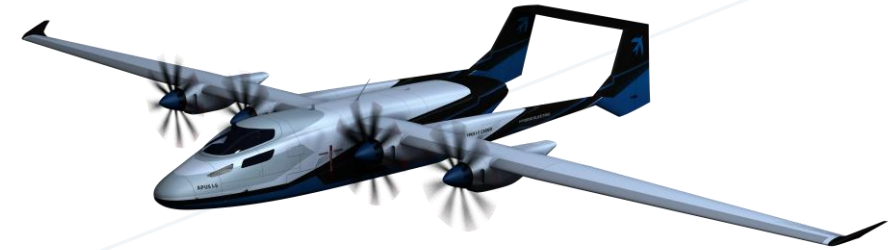
I. **APUS i-2**, a four-seat twin engine zero emission electric aircraft for general aviation



II. **APUS i-5**, a versatile air transportation platform with three main applications:

a. APUS i-5 400

b. APUS i-5 600



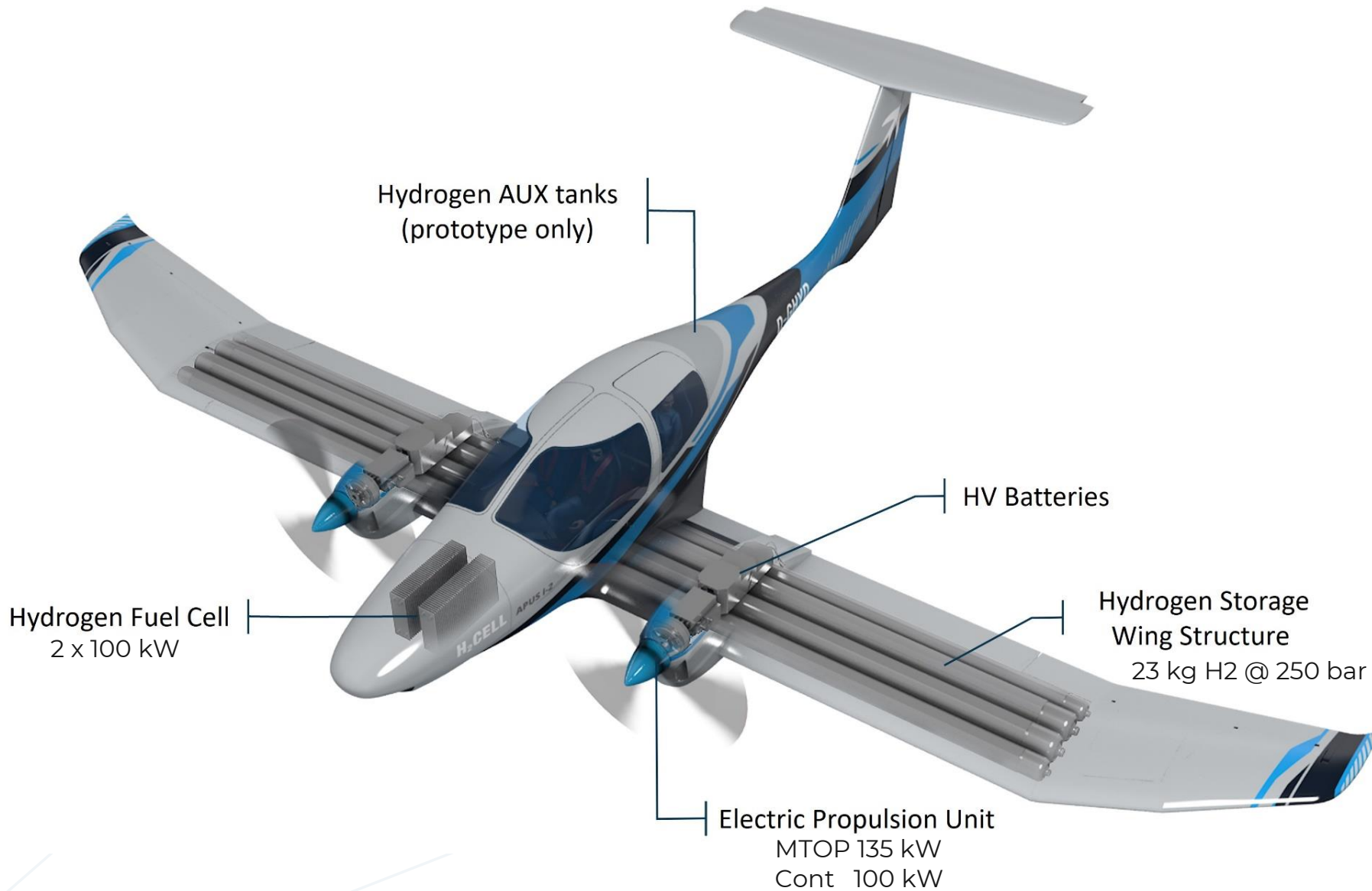
III. **HPU**

I. Scaleable hydrogen power unit from 100kW – 600kW



APUS i-2

APUS i-2 – Überblick



Performance

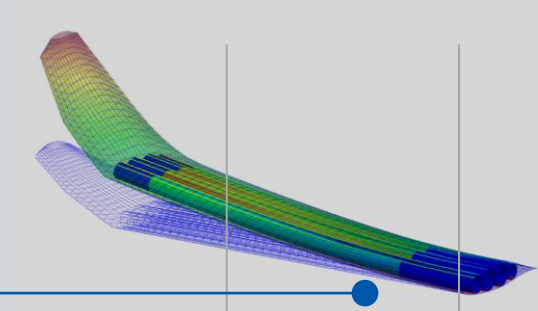
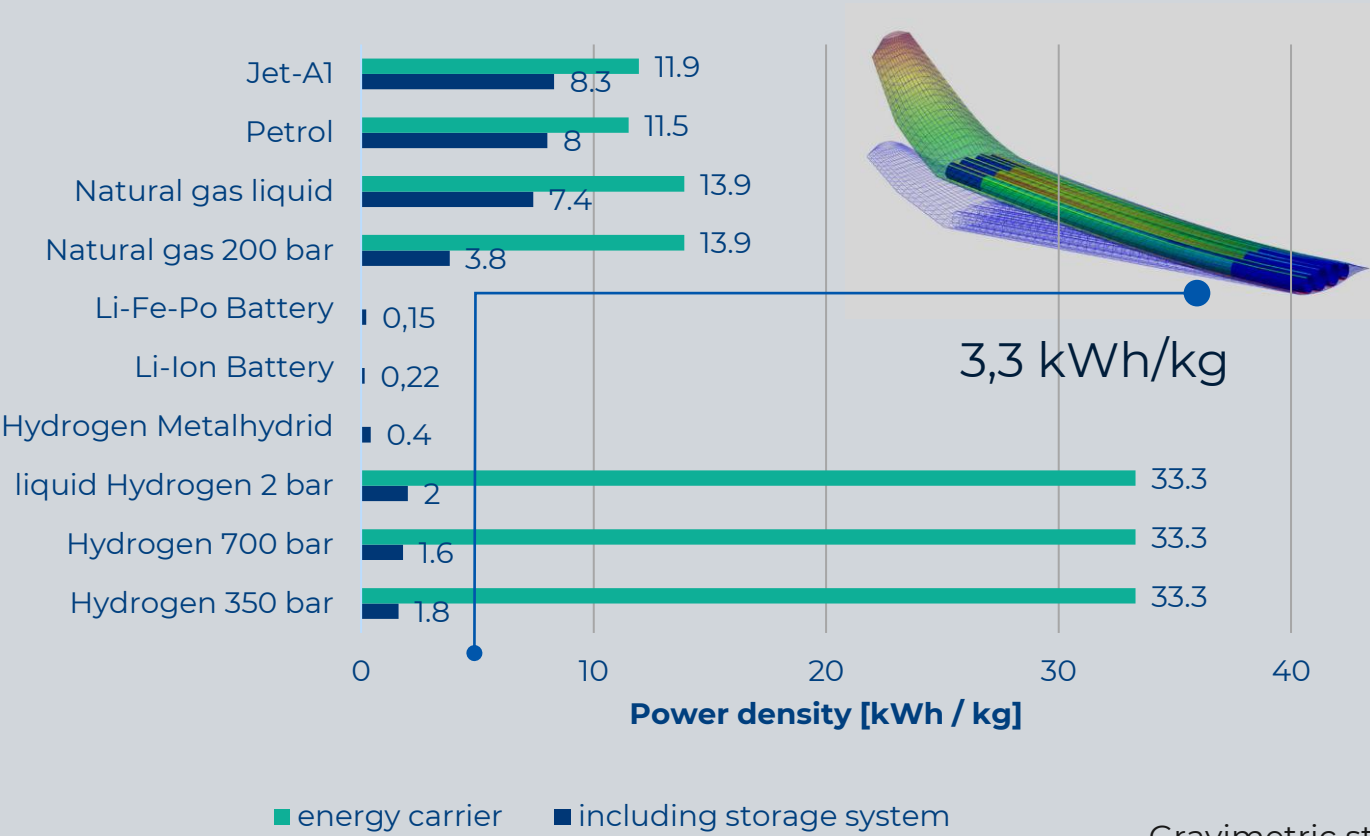
Cruise	160 kts
Payload	400 kg
PAX	1 +3 (5)
Range	500 NM
Service Ceiling	10 000 ft

Dimensions

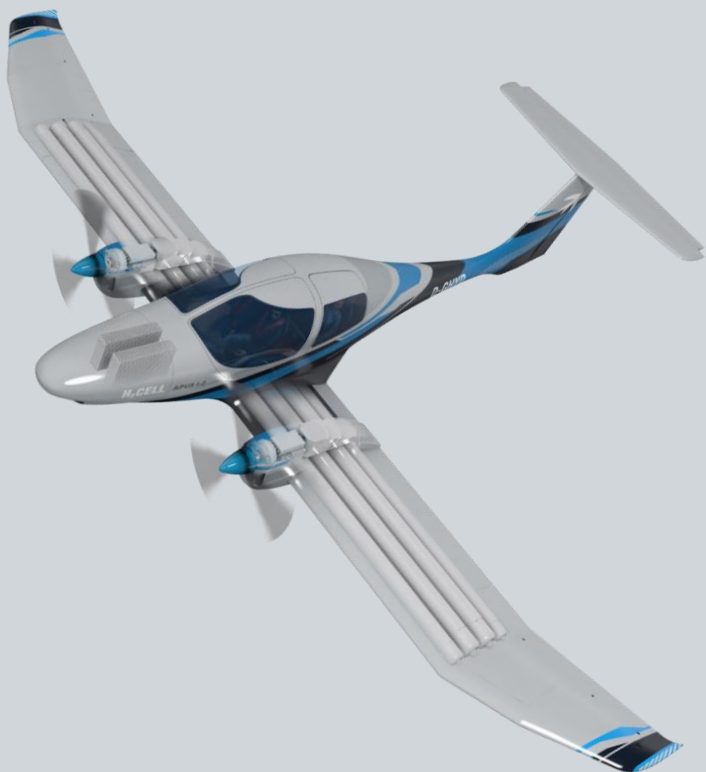
Wing Span	13.3 m
Length	8.9 m
Height	3.0 m
MTOW	2.200 kg

Energy Density – TUBESTRUCT™

With APUS patented energy storage systems APUS offers best energy density worldwide.

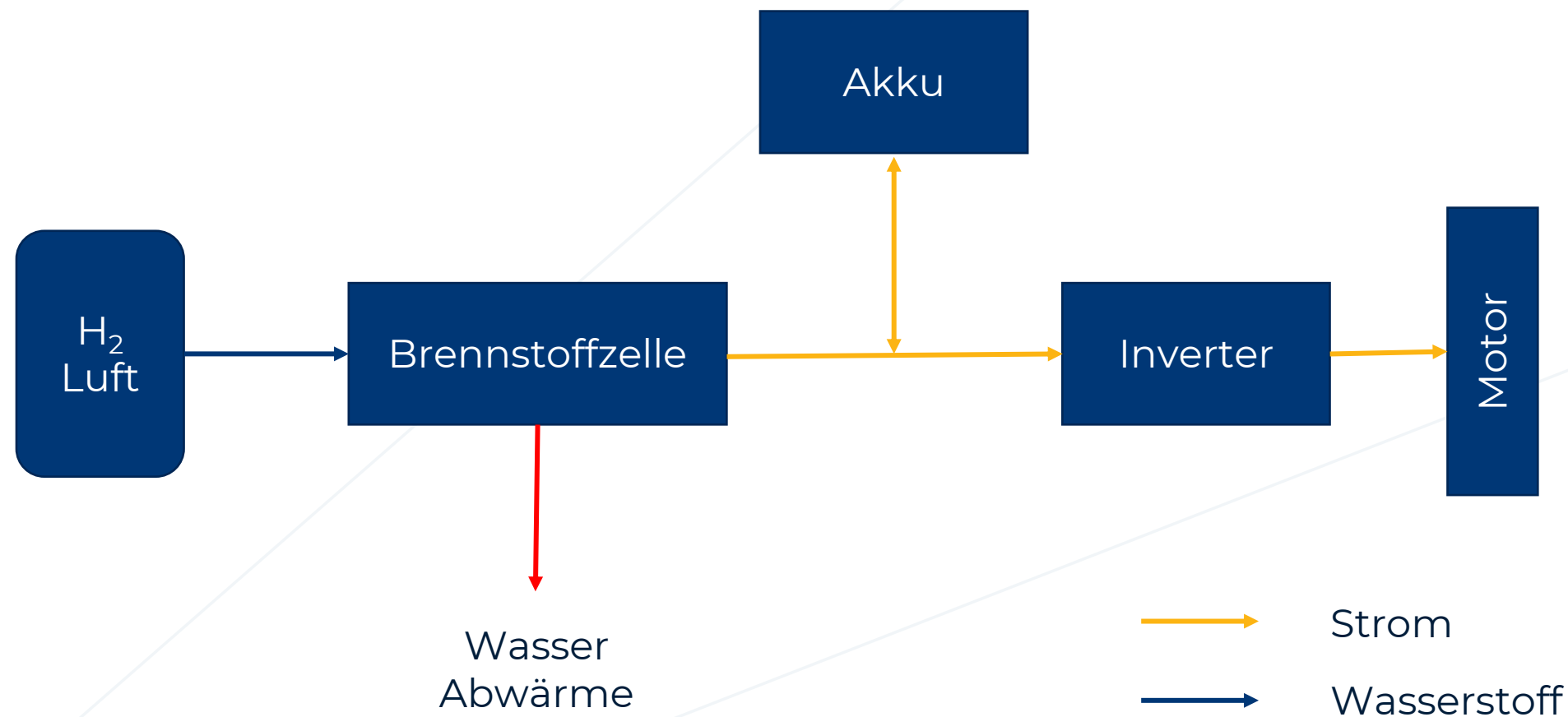


3,3 kWh/kg



Gravimetric storage eff. Incl. Fuel Cell: ~1.3 kWh / kg

Antrieb: Konzept





www.apus-aero.com

Emission Free Aircraft
Powered by Hydrogen Technologies

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APUS i-2
H₂ CELL

APUS
GROUP

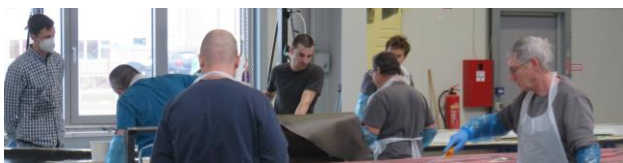
OWESA
CORPORATION

KVO

Impressionen aus der Werkstatt



Zoom of TUBESTRUCT-Structure



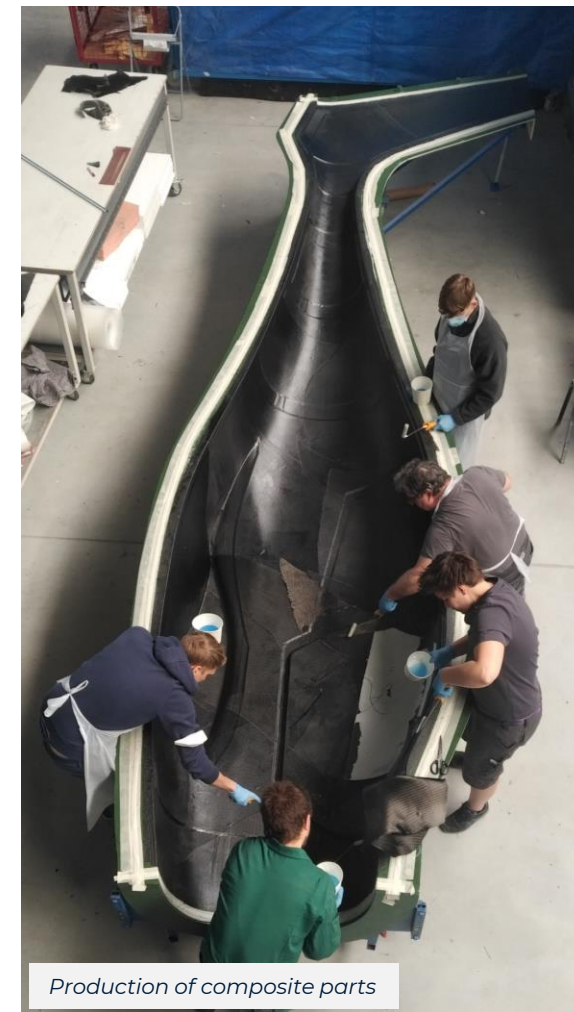
Fuselage molds



i-2 fuselage in final assembly



CNC-production



Production of composite parts



Vielen Dank

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