

We deliver sustainable energy solutions

EODev is the result of the unique experience acquired on board Energy Observer: the first clean energy self-sufficient hydrogen vessel



Founded in 2019



One mission

Accelerate the energy transition by offering sustainable, reliable, efficient, and affordable industrial solutions

EODev today



60 people



3 facilities





4 patents



Production of stationary and maritime fuel cell systems

















REXH₂ Hydrogen Technology

Zero-emission Hydrogen Onboard Power Generator

Yachting

Propulsion et Systems

Hotel load

All navigation zones

USER PROFILE

Medium to fast speeds

Short distances

Profile: Tenders, Day-Boats

CONFIGURATION

H₂ alone or coupled with photovoltaic panels

Pleasure Boating

Systems and hotel load

Port manoeuvres

Propulsion in protected areas

USER PROFILE

Slow to medium speed

Medium range

Yachts, Superyachts...

CONFIGURATION

Customized configuration

Professionals

Propulsion et Systems

Hotel load

All navigation zones

USER PROFILE

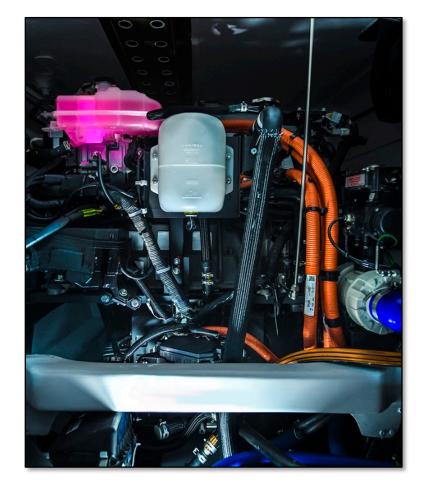
Slow speed

Regular/recurrent routes

Shuttles, Barge, Pilot boats...

CONFIGURATION

H₂ alone or coupled with solar panels/wind





REXH₂ Hydrogen Technology

Zero-emission Hydrogen Onboard Power Generator

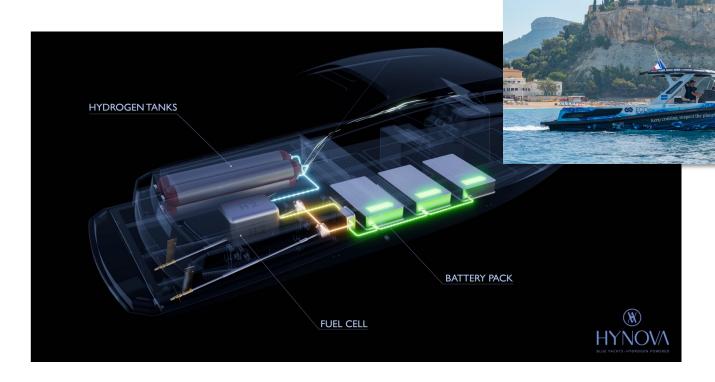


- ✓ Proven technology
- ✓ Plug & Play solution
- ✓ Compact design and light weight
- ✓ Complete modularity
- ✓ Zero emissions
- ✓ Quick refuelling
- ✓ No noise pollution
- ✓ No minimum power required
- ✓ Data monitoring
- ✓ Instant start
- ✓ Predictive and simplified maintenance
- ✓ Production Zigouni chip onboard
- ✓ Optimized consumption and efficiency



REXH₂ Hydrogen Technology

Zero-emission Hydrogen Onboard Power Generator



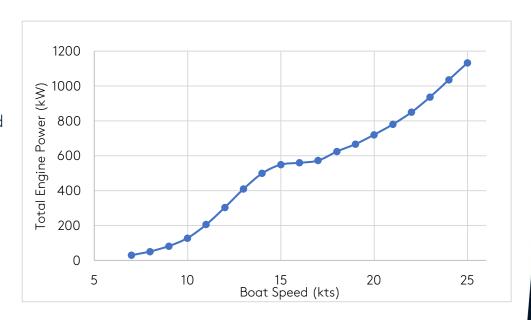


User profile: Daily cruising time of 2 hours over a total of 3 days

Power peak (at 8 knots): $2 \times 29 = 58 \text{ kW}$ with SSM (Sea State Margin)

Case Study: Comparing options

Graph of required power according to the speed for two shafts



Calculations for the propulsion of a 20-meter catamaran assuming a cruising speed of 8 knots for 2 hours a day for a 3-day trip.

Case Study: Energy needs Hotel Load + Propulsion

157 kWh per day for hotel load + 110 kWh per day for propulsion

Total of **800 kWh** for a 3-day trip



Energy needed for a 3-day hotel load + propulsion = **800 KWh**

Case Study: Scenario A Hotel load + propulsion



Total energy provided by this configuration with REXH2 efficiency = 891 kWh

Mass & Volume balance

Volume of H2 tanks: 3,2 m³

Tanks + frame mass: 560 kg

Battery mass: 4 410 kg

REXH2: 570 kg

Other electrical and electronic components

(ECU, EPMS, charger...): 200 kg

Distribution H2: 50 kg

Cabling: 230 kg

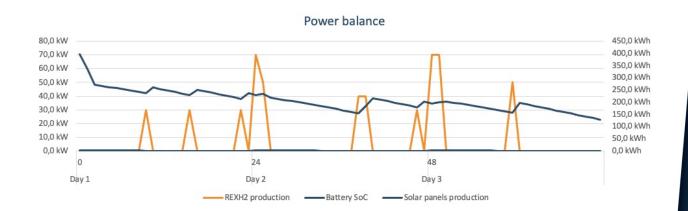
Electrical engines: 2 x 100kg

Total volume for this configuration: 9,8 m³

Total mass for this configuration: 6 220 kg



Case Study : Scenario A Batteries SOC evolution SOC min: 30 %





Energy needed for a 3-day hotel load + propulsion = **800 KWh**

Case Study: Scenario B Hotel load + propulsion



Mass & Volume balance

Volume of H2 tanks: 5,6 m³

Tanks + frame mass: 980 kg

Battery mass: 980 kg

REXH2: **570** kg

Other electrical and electronic components

(ECU, EPMS, charger...): 200 kg

Distribution H2: 2 x 50 kg

Cabling: 230 kg

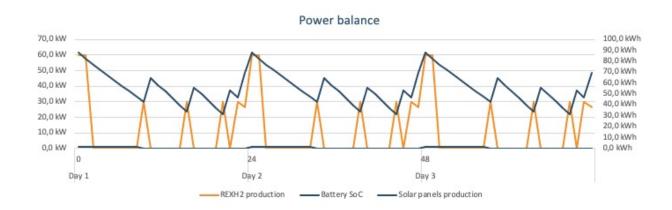
Electrical engines: 2 x 100kg

Total volume for this configuration: 8,25 m³

Total mass for this configuration: 3 210 kg



Case Study : Scenario B Batteries SOC evolution SOC min: 30 %





The real thing















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Time to shift

