

FACT SHEET / Company Profile

Company name	Proton Motor Fuel Cell GmbH (www.proton-motor.de)
Founding year	1998 (founded as a spin-off from the fuel cell development branch of "Magnet-Motor GmbH" started in 1994).
Chief Executive Officer	Francois Faiz Nahab Ph.D.
Employees	More than 120
Company locations	- Benzstrasse 7, D-82178 Puchheim (approx. 25 km west of Munich) - Fraunhofer Strasse 9, D-82256 Fuerstenfeldbruck
Consolidated companies	Proton Motor Fuel Cell GmbH is a 100 percent subsidiary of "Proton Motor Power Systems plc" (www.protonmotor-powersystems.com), registered in Germany. The parent company, headquartered in Great Britain, was admitted to trading on the AIM (Alternative Investment Market) of the London Stock Exchange on 10-31-2006 with a market capitalisation of GBP 25 million.
Purpose	Development, production and distribution of emission-free hydrogen fuel cells based on PEM technology for the stationary, automotive, maritime and rail segment in European B-to-B markets.
Philosophy	Climate change is currently the greatest challenge facing humanity. Due to the burning of fossil fuels, the earth is heating up visibly. This is what makes the energy transition necessary. Proton Motor Fuel Cell GmbH was aware of the urgency of alternative solutions for power and heat supply at an early stage. It has been fulfilling its pioneering role in the development and implementation of innovative technologies for environmentally friendly decarbonisation based on renewable energies with flying colors for a quarter of a century.
CLEANTECH Competence	According to the slogan, Proton Motor customers benefit from the innovative development company's "CLEANTECH Competence". It enables the manufacturing of integration-ready quality products and the use of modern future technologies. Thanks to its expertise in integrating climate-neutral hydrogen fuel cells into overall systems, Proton Motor's service portfolio goes well beyond system interfaces. In this way, the high-tech premium supplier supports its customers as a project partner in both the planning and implementation phases in design, testing and commissioning, as well as in certification and acceptance by third parties. This is how optimal system integration is ensured.
Technology focus	<p>Proton Motor has developed a standardised hydrogen fuel cell module, produced at the company's German location near Munich. A fuel cell is a mechanism that converts the chemical energy in the molecular bonds between hydrogen and oxygen into electrical energy:</p> <p>Hydrogen + oxygen → electricity + steam + heat</p> <p>PEM Technology (Polymer Electrolyte Membrane Technology) uses gaseous hydrogen (H₂) as fuel and converts it with oxygen (O₂) from the air to form pure water. Other reaction products produced in the cell are electricity and heat.</p>

Goal

Proton Motor Fuel Cell GmbH wants to offer and establish new attractive CO₂-balanced alternatives to existing electricity and heat supply and in this way drive forward the climate transition to achieve climate protection goals. The hydrogen fuel cell key player offers sustainable, decarbonised energy solutions "Made in Germany" for mobile and stationary sectors, in order to play a decisive role in shaping the world of tomorrow and to preserve it as worth living in.

Chronology selection

2023 – Official public presentation of the production site in Fuerstenfeldbruck on the occasion of the company's 25th anniversary.
 2023 – Several new orders in the 1st half of the year for the HyShelter[®] hydrogen fuel cell power plant, such as from "University of Stuttgart" and for project context "Green Hysland" in Mallorca.
 2023 – MoU with "Wilo SE" as a global player in the pump sector.
 2022 – Announcement of the new additional site for production expansion with sevenfold increase in area.
 2022 – Alignment by name of Hy-brand product portfolio: HyFrame[®], HyRange[®], HyShip[®], HyRail[®], HyShelter[®], HyModule[®], HyStack[®].
 2022 – Delivery of the maritime product innovation "HyShip[®]" (propulsion solution) to "Fincantieri" for "ZEUS" (Zero Emission Ship).
 2021 – Delivery of the stationary product innovation "HyShelter[®]" (power plant) to "Shell New Energies" for hydrogen filling station.
 2021 – Presentation of the new rail fuel cell drive solution for world's first innovation "hydrogen powered rail milling train".
 2021 – For the 1st time in company history over 100 employees.
 2021 – Proton Motor is e-SHyIPS project partner (maritime sector).
 2021 – EU consortium member "StasHH" (heavy-duty applications).
 2020 – Record-breaking quarter despite Corona situation; contract manufacturing for the first European grid-connected hydrogen power plant.
 2020 – Name change of the UK parent company to "Proton Motor Power Systems plc".
 2019 – Public presentation of the "Fit-4-AMandA" stack production robot to increase production capacity.
 2019 – New founding of "NEXUS-e GmbH" for the production of hydrogen fast charging stations.
 2019 – Founding of the "Pure Power Pool" consortium for one-source supply of hydrogen energy supply.
 2019 – Co-operation agreement with Škoda Electric a.s. for collaboration in the development of fuel cell electric buses.
 2019 – Joint venture "Clean Logistics GmbH" for up to 44 tonne-lorries with fuel cells.
 2018 – Anniversary celebration: "20 Years Proton Motor".
 2017 – Delivery of a containerised fuel cell power plant for supplying energy to the main port on the Orkney Islands.
 2016 – Delivery of 22 emergency power supply systems to Deutsche Bahn subsidiary "DB Bahnbau Gruppe GmbH".
 2016 – First apartment building in the world, in Switzerland, that powers itself using its own hydrogen produced by solar power and a fuel cell from Proton Motor.

2016 – Retrofitting of a Mercedes Vito with a fuel cell hybrid drive, in collaboration with "Magna Steyr" (first presentation at the Vienna Motor Symposium).

2015 – Co-operation agreement with the Deutsche Bahn AG subsidiary "DB Bahnbaugruppe GmbH" on sale and servicing of hydrogen fuel cell UPS systems.

2014 – World record drive from Munich to Berlin in a 7.5 ton truck with a hybrid 8 kW fuel cell battery system (HyRange®) from Proton Motor.

2013 – Presentation of the world's first electric commercial vehicle operated in parallel with battery and fuel cell in the weight class of 7.5 to 12 tons.

2009 – World premiere for triple hybrid bus in co-operation with "Škoda Electric".

2009 – Significant participation in the development of the first fuel cell powered municipal vehicle.

2008 – Delivery of a fuel cell hybrid drive for the world's first fuel cell powered passenger ferry boat "Alsterwasser".

2008 – World premiere for the EcoCarrier HY3: Proton Motor and Karmann present joint fuel cell vehicle.

2007 – World premiere for triple hybrid forklifts: Proton Motor presents next generation of fuel cell hybrid vehicles.

2007 – New company location in Puchheim, near Munich.

2004 – Start of the first emission-free minibus with a 40 kW fuel cell system at the Bavarian bus company "Z Mobility GmbH".

2001 – Operation of the world's first fuel cell forklift at Munich Airport.

2000 – Proton Motor brings fuel cell-powered Bayernbus into line operation.

Awards

2022 – "Hessian State Prize for Energy 2022" to emission-free H2 fuel cell HyRange® system in the category "Mobility".

2022 – Award "Top Service 2022" from German Institute for Sustainability and Digitalisation.

2022 – Top 3 nomination for HyRange® at "Renewables Award".

2021 – Winner of "International busplaner Sustainability Award".

2020 – Top 25 nomination at the "Innovation Life Award".

2018 – "Energy Globe Austria Award 2018" together with Magna Steyr Engineering AG & Co KG and other project partners.

2010 – Future award of the IDW (Innovation Association of German Business) for the "Triple Hybrid® fuel cell drive" of "TriHyBus" city bus.

2008 – Bavarian innovation award for triple hybrid technology.

2008 – Silver f-cell award for the world's first fuel cell TÜV certification.