Airbus MTU Aero Engines

Is this the beginning of real technological sovereignty for Europe and a shift towards fuel cells?

On July 7, 2026, Airbus and MTU Aero Engines announced their intention to establish a joint venture dedicated to the development and commercialization of a fully electric aircraft engine powered by a hydrogen fuel cell. This is the most concrete industrial step in the history of European work on hydrogen propulsion for commercial aircraft—and a signal that, despite previous delays in the ZEROe program, Airbus and the German engine manufacturer view fuel cells as a technology worth investing real organizational capital in, not just research capital.

The following study organizes the facts: the origins of the agreement, the scope of cooperation, the competences of both partners, the state of technology, the context of EU financing and the importance of the project for European technological sovereignty in aviation.

---

1. What exactly was announced on July 7, 2026

Announcements issued simultaneously by Airbus (Toulouse) and MTU Aero Engines (Munich) indicate **a non-binding agreement** to establish a dedicated joint venture. Key findings:

- **Scope of activity** : technology development, design, testing and certification of aircraft propulsion based on a hydrogen fuel cell, fully electric.
- **Nature of the agreement** : non-binding, subject to standard regulatory approvals and completion of social/employee consultation processes at the European and national levels – i.e. antitrust procedures and dialogue with trade unions typical of large industrial merg
- **Start** is expected to begin operations in 2027.

- **Resources** : The new entity is to be supported by both companies with “all competencies” – through engineering and production teams seconded from Airbus and MTU, rather than built from scratch.
- **Undisclosed Items** : Neither party disclosed the financial terms of the joint venture—neither the shareholding structure, the capitalization nor the name of the future company. Nor was a timetable for the first flight of the hydrogen-powered demonstrator provided.

The statements of the signatories of the agreement indicate two complementary themes. Bruno Fichefeux, head of Airbus's future programs, presented the joint venture as a natural extension of existing cooperation and emphasized the creation of a "European competence center" capable of transforming advanced research into industrially certified propulsion systems, which is also intended to strengthen Europe's strategic technological sovereignty. Dr. Stefan Weber, MTU's Vice President of Engineering and Technology, described the project as a key milestone on the path to the first hydrogen engine and announced that the new company will cover the entire lifecycle of fuel cell propulsion—from development and testing, through certification, to commercialization.

---

2. Origins: from the Paris MoU to the joint venture

June 2025 Memorandum

The July 2026 agreement didn't come about in a vacuum. On June 18, 2025, during the 55th Paris Air Show (Le Bourget), Airbus and MTU signed a Memorandum of Understanding (MoU) for the joint development of fuel cell technology for aviation. The signatories were the same representatives of both companies—Fichefeux and Weber—confirming the continuity of the project at the personnel level.

The 2025 MoU included a three-stage roadmap:

1. **Maturation of the technological blocks** necessary for the engine through joint research projects, including those under the EU Clean Aviation programme.
2. **Agreeing on the roadmaps** of both partners for research and development of hydrogen technologies.
3. **Consideration of the third stage** – the actual development of a fuel cell engine for a hydrogen-powered aircraft.

The joint venture announced in July 2026 is essentially the implementation of the third stage of this roadmap – the transition from the research and concept phase to the industrial phase.

Airbus' technological shift in the ZEROe program

To understand why fuel cells and not hydrogen combustion, we need to go back to decisions made in the first half of 2025 as part of Airbus’ flagship ZEROe programme, launched in 2020.

From the outset, Airbus has been exploring several hydrogen propulsion concepts in parallel: a hydrogen-burning turbofan engine, a turboprop, a blended wing body configuration, and a fully electric fuel cell propulsion system. On February 7, 2025, Airbus confirmed that the ZEROe timeline would be extended by five to ten years from the initial goal of entering service in 2035. The company attributed this to the slower-than-expected pace of maturation of key factors—primarily the large-scale availability of hydrogen produced from renewable energy sources and the maturity of certain on-board technologies.

Despite the delay, at the Airbus Summit in Toulouse on March 25, 2025, the company announced **the downgrading of the concept** —that is, narrowing further development to a fully electric fuel cell propulsion system, abandoning (at least as a research priority) the parallel development of hydrogen combustion. A new, demonstrative aircraft concept was unveiled, featuring four 2 MW electric motors each, powered by two liquid hydrogen tanks, designed to carry approximately 100 passengers on routes up to approximately 1,850 km (1,000 nautical miles). This decision was preceded by component, system, and full-aircraft reviews, which confirmed the concept's feasibility at the TRL3 technology readiness level.

This decision was driven by previous test achievements: in 2023, Airbus's joint venture with the German company ElringKlinger (Aerostack, established in 2020, 90% Airbus / 10% ElringKlinger) demonstrated the operation of a 1.2 MW fuel cell system—described at the time as the most powerful test of its kind in aviation history. Integration tests of the fuel cell stack, electric motors, gearboxes, inverters, and heat exchangers were completed in 2024. Airbus also announced integrated ground tests for 2027 at the Electric Aircraft System Test House in

Munich, combining the propulsion bench with the hydrogen distribution system. A separate, parallel track is under development with Air Liquide Advanced Technologies in Grenoble for a liquid hydrogen system (Liquid Hydrogen BreadBoard, LH2BB).

In other words: when Airbus signed the MoU with MTU in June 2025, it did so after strategically choosing cell technology as a priority – MTU was therefore a natural partner because it was developing exactly the same class of solutions, but from the perspective of an engine manufacturer, not an airframe manufacturer.

---

3. MTU and the Flying Fuel Cell program - where does the competence of the German partner come from?

MTU Aero Engines has been running its own, independent program for the development of an electric drive powered by a hydrogen fuel cell – Flying Fuel Cell (FFC), which is part of the company's broader technological agenda called Claire.

FFC Milestones

By June 2025 (i.e. by the time the MoU with Airbus is signed), MTU has reported a series of key progresses:

- **completion of the design phase (critical design review) for the first 600 kW** electric power unit , intended ultimately for regional aircraft;
- start of production of fuel cell stacks at the Munich plant;
- the first successful tests of the eMoSys electric motor – developed by the subsidiary eMoSys GmbH from Starnberg, acquired in 2023 – which achieved a continuous power of 600 kW with an efficiency exceeding 96% in both the take-off and cruise phases; the motor weighs only 40 kg with a diameter of 300 mm, giving a power density of 15 kW/kg;
- launch of the first test chamber for stacks with a power of up to 500 kW in Munich, with the parallel construction of a test stand for the entire drive unit.

Collaboration with DLR and the Do 228 flying demonstrator

The FFC is being developed in collaboration with the German Aerospace Center (DLR), which is providing a Dornier 228 test aircraft as a technology platform. The goal is to replace one of the two conventional turbine engines with a 600 kW electric power unit powered by a hydrogen fuel cell and test this configuration in flight. DLR is responsible for the research aircraft and conducting flight experiments, while MTU is tasked with developing the entire propulsion system—including the liquid hydrogen fuel system and control. Ultimately, the FFC is intended to be used initially for short regional and commuter routes (from around 2035), and later, once efficiency is improved, also for short- and medium-haul routes (from around 2050).

HEROPS - EU Clean Aviation Funding

The FFC forms the foundation for **the HEROPS** (Hydrogen-Electric Zero Emission Propulsion System) project, partly funded by the EU's Clean Aviation program and led by MTU as consortium leader. The consortium comprises seven partners: MTU (leader), MT Aerospace, Collins Aerospace (an RTX company), Lufthansa Technik, and Eaton as industrial partners, and the Royal Netherlands Aerospace Center (NLR) and Vienna University of Technology as research partners. The project involves the construction of a ground-based demonstrator with a powerplant power output of 1.2–1.8 MW, with the ultimate goal of demonstrating the technology's scalability to the 2–4 MW range with a modular engine architecture. According to MTU, the program's two-stage approach – encompassing extensive development, testing and validation cycles – is expected to bring the FFC concept to the TRL6 technology readiness level with integration and demonstration on a regional aircraft by 2028, with a view to commercial deployment in the regional market around 2035.

Importantly, for assessing MTU's scale as an industrial partner, the company, listed on the German DAX index, generated revenues of **€8.7 billion** in fiscal year 2025. MTU employs over 13,000 people from over 80 countries in 20 locations on five continents, supplies technology for one in three commercial aircraft worldwide, and services approximately 1,500 engines and gas turbines annually.

---

4. Who is in the consortium - or how are the competencies divided?

Formally, the “consortium” is formed by two parties – Airbus and MTU Aero Engines – but both companies bring very different, complementary resources to it:

Airbus contributes:

- extensive commercial aircraft program knowledge (airframe integration, type certification, relations with airlines and aviation authorities);
- several years of experience in cell propulsion gained within ZEROe and Aerostack (together with ElringKlinger);
- competences in the field of liquid hydrogen – cryogenic storage, on-board and airport distribution (including the LH2BB project with Air Liquide);
- "Hydrogen Hubs at Airports" network - a program to build a hydrogen ecosystem with the participation of over 220 partner airports in several countries, aimed at ensuring the refueling infrastructure of the future.

MTU submits:

- long-term development of our own fuel cell technology as part of the Flying Fuel Cell program;
- recognized competence in aircraft engine design, integration, validation, certification and maintenance (MTU is a partner in the geared turbofan program with Pratt & Whitney, hence the letter "M" in the PW1100G-JM engine designation);
- production and testing facilities in Munich (stack production line, test chambers, eMoSys engine);
- the leading position in the EU HEROPS consortium, which includes Collins Aerospace (RTX), Lufthansa Technik, Eaton, MT Aerospace, NLR and TU Vienna – and therefore a wider network of research and industrial partners, some of which (especially Collins Aerospace) also represent large American automotive and aviation groups.

Importantly, neither party has yet revealed the ownership structure or the name of the new company – it is only known that both parent entities will “support” the joint venture with engineering and production teams, which suggests a model similar to the previous Aerostack (a JV with a specific share division, but operationally integrated with the majority partner’s facilities).

---

5. Financing - What's Known and What's Not

It is worth separating two levels of financing that are easily confused.

Level 1: Financing the joint venture itself

As of the announcement date (July 2026) , **neither party had disclosed the financial terms** of the joint venture—neither the planned capital expenditure, nor the capital structure, nor the shareholding split between Airbus and MTU. The agreement remains non-binding and contingent on regulatory approvals and the completion of employee consultations at the EU and national levels (a typical procedure in Germany, where major organizational changes require the involvement of works councils, and in France).

Level 2: EU research funding in the background

The work underpinning the joint venture is largely co-financed by the EU's **Clean Aviation Joint Undertaking** —the European Commission's flagship public-private partnership under Horizon Europe, which has a total budget of €4.1 billion for the current phase (€1.7 billion from EU funds and €2.4 billion from private contributions). Clean Aviation has consistently directed funding towards hydrogen technologies in subsequent calls for proposals. For example, in the 2023 call, €86 million of EU funding was allocated directly to projects related to hydrogen-powered aircraft, and the hydrogen component returned in the fourth call for proposals, announced in 2025/2026 (after being omitted in the third call)—with the express goal of strengthening the European supply chain for the hydrogen ecosystem. The HEROPS project, led by MTU, is benefiting from this funding mechanism.

In other words: the Airbus-MTU joint venture is not being developed in isolation from EU public money – it is rather an industrial superstructure on a multi-year research effort, co-financed by the European Commission, whose organizational driver so far has been mainly a network of projects such as Clean Aviation and the Clean Hydrogen Joint Undertaking (the latter in turn manages around €1 billion from Horizon Europe funds for the entire hydrogen value chain, with an additional €200 million for so-called hydrogen valleys under REPowerEU).

---

6. Why is it important for Europe?

a) Technological sovereignty in a critical industry segment

Fichefeux explicitly linked the joint venture to "strategic sovereignty" in the next generation of aviation technology. This phrase is not coincidental: aircraft propulsion is one of the few areas of heavy industry where Europe (through Airbus, MTU, Safran, and Rolls-Royce) still competes on par with the U.S. If fuel cell technology truly becomes the future of regional and short-haul propulsion, having our own, integrated capability to design and certify such an engine—from the fuel cell stack to the finished, certified powerplant—means independence from non-European suppliers in the next generation of civil aviation, much as geared turbofan engines and composite technology have previously established the European aviation industry.

b) Consolidation in a segment that has lost several previous contenders

The competitive context reinforces the significance of this announcement. Two previous contenders for commercializing hydrogen-electric propulsion are facing significant challenges: the American-British company ZeroAvia (in which Airbus also invested) scaled back its workforce and operations in 2026 after a modest financing round in late 2025, while the American company Universal Hydrogen filed for bankruptcy in 2024. In this light, the entry of two large, established industrial players—an aircraft manufacturer and an engine manufacturer with annual revenues in the range of several to several dozen billion euros—gives the segment the credibility and capital that startups lacked, and at the same time, could accelerate the actual implementation of the technology, rather than leaving it solely in the venture-funded demonstrator phase.

c) Complementing, not competing with, SAF and ReFuelEU Aviation

Hydrogen fuel cells are not replacing sustainable aviation fuels (SAFs) in the next decade, which remain the main short-term tool for decarbonizing aviation in Europe. The EU's ReFuelEU Aviation regulation requires a growing share of SAFs in fuel refueled at EU airports, gradually reaching very high thresholds in the coming decades. Hydrogen fuel cell propulsion is more of a parallel, longer-term technology path, targeting the regional and short-haul segments, where—according to Airbus and MTU—it can deliver a much deeper reduction in the climate footprint than any substitute fuel burned in a classic turbine, because it eliminates both CO2 and nitrogen oxide (NOx) emissions in flight, leaving only water vapor as a byproduct.

d) Multiplier effect on the supplier ecosystem

The project itself isn't limited to just two corporate headquarters. Through the HEROPS network, it already encompasses Collins Aerospace (RTX), Lufthansa Technik, Eaton, MT Aerospace, the Dutch institute NLR, and Vienna University of Technology—thus extending to component suppliers, airlines acting as system integrators (Lufthansa Technik), and research centers in several EU countries. In addition, there's a network of over 220 airports participating in the Hydrogen Hubs at Airports program, building the demand side of the future refueling infrastructure. The joint venture's success therefore has the potential to draw a much broader circle of European (and partially transatlantic) suppliers into the development of hydrogen technology than the names of the two signatories would suggest.

---

7. Challenges and risks that should not be forgotten

Reliability also requires that the limitations of this announcement be indicated:

- **This is still a non-binding agreement.** It requires regulatory approvals (most likely including antitrust approvals, given the scale of both companies) and the completion of consultation processes with employees and their representatives in Germany and France. It's possible that the final shape of the company—or even the decision to establish it—will change.
- **The parent program (ZEROe) has already experienced a delay.** In February 2025, Airbus pushed back the hydrogen aircraft's entry into service target by five to ten years from its original 2035 target, citing the slow pace of development of the hydrogen ecosystem (the availability of green hydrogen on an industrial scale) as the primary reason. There's no guarantee that establishing a joint venture alone will remove these external barriers—the renewable hydrogen production and distribution infrastructure must be built in parallel, beyond the joint venture's control.
- **Financial details and a product timeline have not been disclosed.** It is unknown how much capital will actually be committed, what the company's ownership structure will be, or when the first demonstration flight of the new, common engine (as opposed to the previous, separate Airbus and MTU demonstrators) will take place.
- **The scale of the technological challenge remains enormous.** Even advanced components—such as the 600-kilowatt eMoSys engine or the 1.2-megawatt Aerostack testbed—are orders of magnitude smaller than the power needed for a passenger plane the size of a regional jet, and remaining challenges related to cryogenic storage, tank weight, and on-board hydrogen safety certification still need to be addressed.

---

8. What's Next - A Schedule to Remember

Date	Event
2020	Launch of the ZEROe program by Airbus; establishment of Aerostack (JV with ElringKlinger)
2023	Aerostack demonstrates 1.2 MW fuel cell system
Early 2024	Launch of the HEROPS project led by MTU, financed under Clean Aviation
February 7, 2025	Airbus confirms ZEROe programme delay of 5-10 years from 2035 target
March 25, 2025	Airbus Summit in Toulouse: down-selection of the fully electric cell propulsion concept (4 × 2 MW, approx. 100 seats, up to approx. 1,850 km)
June 18, 2025	Airbus and MTU sign MoU at the 55th Paris Air Show
Mid-2025	MTU completes the design phase of the 600-kilowatt FFC unit, stack production begins, and eMoSys engine tests begin
July 7, 2026	Announcement of the intention to establish an Airbus–MTU joint venture
2027 (plan)	Operational launch of the new company; integrated Airbus ground tests at the Electric Aircraft System Test House in Munich
around 2028 (HEROPS plan)	Achieving TRL6 and demonstrating FFC on a regional aircraft
around 2035 (plan)	Potential commercial entry of FFC/ZEROe technology into the regional market

Here is a proposed expansion of the point about the global balance of power, in the strict, analytical and precise style of the rest of your paper.

You c tion:

9. Global Balance of Power: Airbus-MTU Strategy Compared to the US, China and Embraer

The establishment of the joint venture by Airbus and MTU Aero Engines is not only a technological move but, above all, a geopolitical preemptive strike in the global aviation market. This sector is entering a phase of polarization in decarbonization strategies between three major centers of power.

a) USA: Boeing's SAF-Based Doctrine and Skepticism About Hydrogen Airbus's main global rival, Boeing, takes a radically different strategic approach. Boeing officially maintains that hydrogen will not play a significant role in large-scale commercial aviation before 2050, citing insurmountable infrastructure and physical barriers (tank volume) that cannot be overcome in the short term. The American giant is directing almost 100% of its engineering transformation resources toward sustainable aviation fuels (SAF) and aerodynamic optimization (the Transonic Truss-Braced Wing program with NASA).

Consequently, the Airbus-MTU alliance creates an asymmetric technological advantage for Europe: if the US doctrine based solely on SAF proves to be a dead end due to supply barriers and the high cost of producing biofuels, Europe will enter the 2040s with a ready-made, certified hydrogen propulsion system for the regional segment, leaving the US in a technologically defensive position.

b) Embraer and the Energia Program: Head-to-Head in the Regional Segment. Brazil's Embraer, a global leader in regional aircraft production (including its extensive E-Jets family), is the Airbus-MTU consortium's most direct and dangerous market competitor. The Flying Fuel Cell (FFC) project, with a target power of 2-4 MW, and the ZEROe concept for 100 passengers target the very core of Embraer's business.

For years, the Brazilians have been developing their own *Energia* program , which explores four alternative propulsion architectures (Hybrid-Electric, Electric, Hydrogen Fuel Cell, and Hydrogen Gas Turbine). While Embraer doesn't have the capital budget of Airbus, it has a huge advantage in engineering flexibility in the 50-90-seat segment. Airbus's transition from the concept phase to an industrial joint venture with MTU forces Embraer to accelerate its decision on a strategic engine partner (likely from American players like Pratt & Whitney or GE Aerospace) to avoid losing the regional market after 2035.

c) China (COMAC): Attempting to leapfrog a technological generation. Chinese state-owned aviation holding COMAC (manufacturer of the ARJ21 and C919) sees the hydrogen transition as a historic opportunity to break the Airbus-Boeing duopoly. China, lacking the historical expertise in building high-efficiency, classic ultra-high bypass gas turbines, is investing enormous public funds in electric and hydrogen propulsion systems.

Beijing is pursuing this strategy through state-owned research institutes and intense pressure on the domestic automotive and battery sectors (CATL, BYD) to transfer mass-produced fuel cell stack technologies to the aerospace sector. For the Airbus-MTU alliance, securing European patents and the supply chain around the HEROPS project is a key element of defense against Chinese government-subsidized competition, which may offer cheaper hydrogen alternatives to Asian and African markets in the 2030s.

Bibliography

1. Airbus, *Airbus and MTU Aero Engines to create a joint venture to develop a fully electric hydrogen fuel cell engine* , press release, July 7, 2026: https://www.airbus.com/en/newsroom/press-releases/2026-07-airbus-and-mtu-aero-engines-to-create-a-joint-venture-to-develop-a-fully-electric-hydrogen-fuel-cell
2. MTU Aero Engines, *Airbus and MTU Aero Engines to create a joint venture to develop a fully electric hydrogen fuel cell engine* , press release, July 7, 2026: https://www.mtu.de/newsroom/press/latest-press-releases/press-release-detail/airbus-and-mtu-aero-engines-to-create-a-joint-venture-to-develop-a-fully-electric-hydrogen-fuel-cell-engine/
3. Airbus, *Airbus and MTU Aero Engines advance on hydrogen fuel cell technology for aviation* , press release, June 18, 2025: https://www.airbus.com/en/newsroom/press-releases/2025-06-airbus-and-mtu-aero-engines-advance-on-hydrogen-fuel-cell
4. Airbus, *Airbus showcases hydrogen aircraft technologies during its 2025 Airbus Summit* , press release, March 25, 2025: https://www.airbus.com/en/newsroom/press-releases/2025-03-airbus-showcases-hydrogen-aircraft-technologies-during-its-2025
5. Airbus, *ZEROe: our hydrogen-powered aircraft* (program website): https://www.airbus.com/en/innovation/energy-trans gen-powered-aircraft

6. FlightGlobal, *Airbus confirms feasibility of 100-seat ZEROe hydrogen fuel cell aircraft concept* , March 2026: https://www.flightglobal.com/air-transport/2026/03/airbus-confirms-feasibility-of-100-seat-zeroe-hydrogen-fuel-cell-aircraft-concept/
7. FlightGlobal, *MTU powers ahead with Flying Fuel Cell development* : https://www.flightglobal.com/aerospace/mtu-powers-ahead-with-flying-fuel-cell-development/163363.article
8. Aerospace Testing International, *Paris Air Show 2025: MTU Aero completes design of 600kW Flying Fuel Cell* : https://www.aerospacetestinginternational.com/news/electric-hybrid/mtu-aero-completes-design-of-600-kilowatt-flying-fuel-cell.html
9. Aerospace Testing International, *Airbus and MTU Aero to launch hydrogen fuel cell engine company* : https://www.aerospacetestinginternational.com/news/airbus-and-mtu-aero-to-launch-hydrogen-fuel-cell-engine-company.html
10. MTU Aero Engines, *Flying Fuel Cell™: MTU Aero Engines develops aviation fuel cell technology* (collaboration with DLR, Do 228 demonstrator): https://www.mtu.de/newsroom/press/latest-press-releases/press-release-detail/flying-fuel-celltm-mtu-aero-engines-develops-aviation-fuel-cell-technology/
11. Green Car Congress, *MTU Aero Engines completes testing of LH2 fuel system for Flying Fuel Cell* , September 2024: https://www.greencarcongress.com/2024/09/20240924-mtu.html
12. AeroTime, *Airbus reignites hydrogen-electric engine ambitions with new joint venture* : https://www.aerotime.aero/articles/airbus-hydrogen-electric-mtu-aero-engines
13. GreenAir News, *Airbus delays its ZEROe hydrogen aircraft as UK CAA expands hydrogen program* : https://www.greenairnews.com/?p=6742
14. AirInsight, *Airbus and MTU join forces on hydrogen* (competitive context — ZeroAvia, Universal Hydrogen): https://airinsight.com/airbus-and-mtu-join-forces-on-hydrogen/
15. gasworld, *Airbus, MTU Aero to form JV for hydrogen fuel cell engine commercialization* (ReFuelEU Aviation context): https://www.gasworld.com/story/airbus-mtu-aero-to-form-jv-for-hydrogen-fuel-cell-engine-commercialization/2253941.article/
16. Clean Aviation Joint Undertaking, *€945 million in total research effort for 12 new Clean Aviation Projects* , September 2025: https://www.clean-aviation.eu/eu945-million-in-total-research-effort-for-12-new-clean-aviation-projects
17. Clean Aviation Joint Undertaking, *€329.5 million in EU funding: Clean Aviation launches its Call 4 for proposals* : https://www.clean-aviation.eu/eu3295-million-in-eu-funding-clean-aviation-launches-its-call-4-for-proposals
18. Clean Aviation Joint Undertaking, *Draft Work Program and Budget 2026–2027* (GB CAJU document): https://www.clean-aviation.eu/sites/default/files/2025-12/Draft-Work-Programme-and-Budget.pdf
19. Zabala Innovation, *Clean Hydrogen Call 2026: EU funding and key requirements* : https://www.zabala.eu/news/clean-hydrogen-call-2026/
20. Air Data News, *Airbus, MTU Aero Engines plan hydrogen fuel cell engine joint venture* : https://www.airdatanews.com/airbus-mtu-aero-engines-plan-hydrogen-fuel-cell-engine-joint-venture/

← Previous Post

Next Post →

Featured articles

Economies of Scale in Hydrogen Production: CAPEX and OPEX of the Electrolyzer Gigafactory

After analyzing the technological competition (AEL vs. PEM) and critical material barriers (iridium), we come to the fundamental question for...

Hylane

Polski

DHL Freight tests the future of diesel-free transport Eindhoven, January 2026. On the roads of the Dutch provinces of Overijssel and...

Strategic Fuel Cell Battle: BMW and Porsche vs. Asian Leaders

1. Asian Hegemony: FCEV Standards and Scalability Japan and South Korea dominated the first phase of FCEV development with...

SFC Energy

SFC Energy Fuel Cells: From Soldier's Backpack to Data Center How One Bavarian Company Built a Power Ecosystem That...

OPEX Cost Analysis: Ammonia Cracking vs. Hydrogen Liquefaction – Which Route Will Provide Lower LCOH?

The decision to build hydrogen infrastructure in transport corridors depends on the total energy consumption and conversion efficiency...

WTAZ – Wasserstoff Technologie-Anwender-Zentrum

WTAZ Pfeffenhausen In February 2026, after years of preparations and conflicts of jurisdiction, the German Federal Ministry of Transport (BMV)...

Polski

LCOH and the Global Subsidy War: The Impact of the IRA on the Competitiveness of European Green Hydrogen

In the context of the green steel revolution (H2-DRI) and other decarbonizing industrial processes, the key driver of transformation is no longer...

European Hydrogen Race: Status and Country Strategy

The development of hydrogen infrastructure in the EU is highly diverse. Three main groups of countries can be distinguished: Production Leaders and...

Search

SEARCH

The latest

Clean Hydrogen Partnership

Airbus MTU Aero Engines

Stargate Hydrogen

Mantle8

Liquid hydrogen at Le Mans - a historic breakthrough in motorsport

Comments

Polski

No comments to display.

Archives

Categories

Topic
(All)

EU27 EFTA UK

Country
(All)

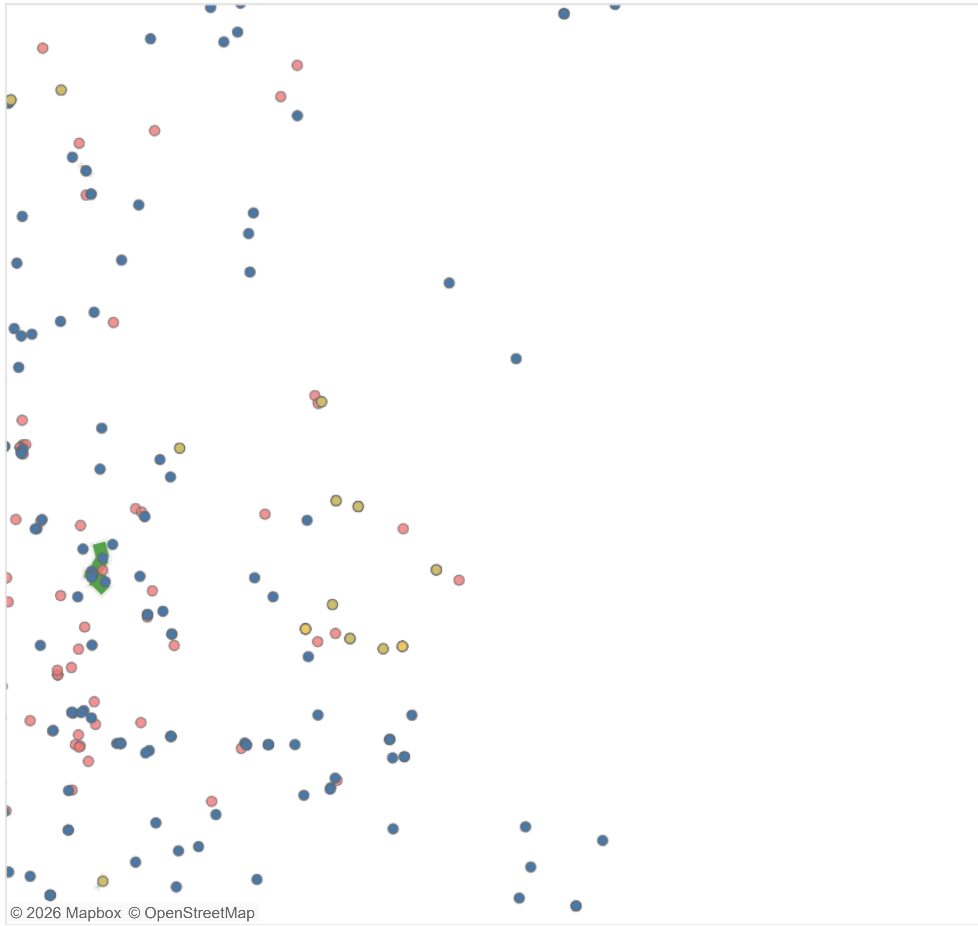
Production process
(All)

Production subprocess
(All)

Type of dispenser at refuelling station
(All)

End-use
(All)

Topic
- Hydrogen production
- Hydrogen pipelines
- Hydrogen refuelling stations
- Hydrogen consumption



Implementations
Competitors and Strategy
Transport and Logistics
Power engineering
H2 production
Hydrogen Technology
Industrial applications
For starters Solution providers
About Us Partnership Store

Polski

Analyses, implementations, facts. Join the wodowa.eu newsletter and never miss a breakthrough in the industry.

Wodorowa.eu
Poland
43-100 Tychy
ul. Edukacji 20/6
+48 504 27 67 99
jan@wodorowa.eu

Polski