H₂ – a Herculean Task

Dear Reader,

Who invented it? The Swiss did! The truth of this saying was demonstrated yet again in a post on the British hydrogen website H₂-View, which reported that 1600 fuel cell trucks powered by green hydrogen would soon be in operation on Switzerland's roads. The report even reached the Asia-Pacific Hydrogen Association in Singapore, which considered the information to be so important that it was included in the association's newsletter. With their joint venture known as Hyundai Hydrogen Mobility (HHM), the Swiss are following up words with deeds. The Swiss company H₂ Energy has a coherent overall concept that it is putting into practice with the help of its partners.

By 2025 Faurecia, one of the partners of HHM, will have installed hydrogen storage systems in 1600 Hyundai H₂ Xcient trucks with 190-kW fuel cells. Faurecia will manufacture the tanks, with a capacity of 35 kg hydrogen per truck, at its center of competence in Bavans (France). A total of 1600 trucks in five years amounts to a production rate of 27 units per month, which seems like slow progress. However, Faurecia estimates that by 2030 around 350,000 new commercial vehicles will be fitted with fuel cell technology worldwide. The market is obviously flourishing.

Another player on the market is a German-Swedish alliance. Daimler Truck and the Volvo Group have begun cooperating on the development of fuel cells. This Herculean hydrogen task can only be handled by large companies that combine their forces in joint ventures. The goal is to develop, manufacture and market fuel cell systems for use in heavy-duty trucks. For this purpose, Daimler has brought together all its fuel cell activities in its Daimler Truck Fuel Cell company. At the same

time, it is stopping all research and development of fuel cells for cars.

The high priest of fuel cells, Christian Mohrdiek, is moving from Mercedes-Benz Fuel Cell in Nabern (Germany) to join the new joint venture as co-Managing Director.

This heralds the end of fuel cell cars at Daimler. It all began at the company in 1994 with the world's first fuel cell model, the Necar 1, which was based on the Mercedes-Benz MB 100 van. After 25 years and the production of 3000 Mercedes-Benz GLC F-Cell cars, it is all coming to an end. However, Germany has more H₂ fuel stations for cars than anywhere else in Europe. No other country can compete with the German network of 87 stations (Europe as a whole has only 177). Hopefully Daimler Truck and Volvo will make it possible for cars to be retrofitted quickly with the truck connections, but because of the different nozzles and pressure levels this is likely to prove very difficult.

Dipl.-Ing. Michael Reichenbach
Deputy Editor in Chief

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