BMW eyes hydrogen-powered rollout in 2028, with Toyota help

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German luxury carmaker BMW said Thursday it aimed to mass produce

its first hydrogen-powered car in 2028, using fuel cell technology jointly developed with Japan's Toyota.

Hydrogen has long been touted as an alternative to the combustion engine as countries tighten their climate targets, but it remains a niche technology plagued by high costs and a lack of infrastructure.

BMW said it would deepen its collaboration with Toyota to jointly develop the powertrain system for hydrogen passenger vehicles, using synergies to "drive down the costs" and bring the "next generation of fuel cell technology" to the roads.

The models developed by BMW and Toyota using the technology will retain "their distinct brand identities", the statement said.

Toyota launched the Mirai, the world's first mass-market hydrogen fuel cell vehicle, in 2014 but sales have stagnated at several thousand units per year.

"BMW and Toyota share the same passion for cars and belief in 'technology openness' and a 'multi-pathway' approach to carbon neutrality," said Toyota president Koji Sato.

BMW said it planned to roll out its first hydrogen-powered model in 2028, after already testing the BMW iX5 hydrogen concept car.

The mass-produced model would have a "customer-attractive price", Michael Rath, vice president of hydrogen vehicles at BMW, told reporters in a call without giving further details.

BMW is one of the few European carmakers working on hydrogen projects, with most manufacturers betting that battery-powered electric vehicles will replace fossil fuel engines in passenger cars.

Demand for electric cars however has stalled in Europe recently, as governments in some countries have dropped purchase incentives and prices remain high.

Hydrogen cars work thanks to the cleanest form of the gas combining with oxygen in a fuel cell to generate electricity. The only waste emitted is water vapor.

But the technology faces major hurdles to go mainstream.

There were only 921 hydrogen refueling stations worldwide by the end of 2023, according to consultancy LBST. China led the way with around 200 stations, twice as many as Germany, the European leader.

The European Commission, which aims to ban sales of new petrol and diesel cars by 2035, has set ambitious goals to create a network of hydrogen charging stations.

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