Germany unveils zero-emissions train that only emits steam

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Tom Embury-Dennis @tomemburyd Tuesday 1 November 2016 17:49

Germany is set to introduce the world's first zero-emission passenger train to be powered by hydrogen. The Coradia iLint only emits excess steam into the atmosphere, and provides an alternative to the country's 4,000 diesel trains.

Lower Saxony has already ordered 14 of them from French company Alstom, and more are likely to be seen around the country if they are judged a success, reports Die Welt. Testing is set to be carried out by the end of the year, before it opens up to the public in December 2017.

The train was first presented at Berlin's InnoTrans trade show in August, and it is set to be the first hydrogen-powered train to regularly ferry people over long distances. There's also interest in the train from the Netherlands, Denmark and Norway.

The iLint is powered by huge lithium ion batteries, and these get their energy from a hydrogen fuel tank on the roof of the train.

The hydrail can travel almost 500 miles per day at speeds of up to 87mph, and the only sound it gives off comes from the wheels and air resistance.

"Alstom is proud to launch a breakthrough innovation in the field of clean transportation," said Alstom CEO Henri Poupart-Lafarge, in a statement.

"It shows our ability to work in close collaboration with our customers and develop a train in only two years."

Hydrogen power works when hydrogen is burned with oxygen to produce huge amounts of energy, with the only by-product being water.

NASA has used liquid hydrogen to propel its rockets into space since the 1970s.

https://www.independent.co.uk/news/world/europe/germany-unveils-zero-emissions-train-only-emits-steam-lower-saxony-hydrogen-powered-a7391581.html

iLint

The Coradia iLint is a version of the Coradia Lint 54 powered by a hydrogen fuel cell. Announced at InnoTrans 2016, the new model will be the world's first production hydrogen-powered trainset. The Coradia iLint is able to reach 140 kilometres per hour (87 mph) and travel 600–800 kilometres (370–500 mi) on a full tank of hydrogen.

It is assembled at Alstom's Salzgitter plant. It began rolling tests at 80 km/h (50 mph) in March 2017. On 16 September 2018, the first Coradia iLint entered service on the Buxtehude-Bremervörde-Bremerhaven-Cuxhaven line in Lower Saxony, Germany. A mobile hydrogen filling station refuels these trains, however, a stationary station is set to be built by 202 along with 14 more of these trains.

In 2019, Rhein-Main-Verkehrsverbund, the transit network serving the Frankfurt Rhine-Main region, ordered 27 iLint multiple-units to be delivered by December 2022. Each train will have 160 seats. The units will replace diesel trains currently plying the RB11 Frankfurt-Höchst – Bad Soden, RB12 Frankfurt – Königstein, RB15 Frankfurt – Bad Homburg – Brandoberndorf and RB16 Friedrichsdorf – Friedberg routes.

https://en.wikipedia.org/wiki/Alstom_Coradia_LINT