

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS**

**LOK SABHA  
UNSTARRED QUESTION NO. 1618  
TO BE ANSWERED ON 10.12.2025**

**HYDROGEN FUELLED TRAINS**

**†1618.SHRI TANUJ PUNIA:**

**Will the Minister of RAILWAYS be pleased to state:**

- (a) the details of the timeline by when green hydrogen-fuelled trains are likely to be operated in the Country;**
- (b) whether the trains running on green hydrogen-fuel cost more than the trains running on other energy sources and if so, the details thereof; and**
- (c) the details of the measures being taken to reduce the cost of green hydrogen-fuelled trains?**

**ANSWER**

**MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND  
ELECTRONICS & INFORMATION TECHNOLOGY  
(SHRI ASHWINI VAISHNAW)**

**(a) to (c): Indian Railways has taken up a state-of-the-art project for running of its first hydrogen train, on pilot basis, as per specifications framed by the Research, Design & Standards Organization (RDSO) to demonstrate the use of hydrogen powered train technology in Railways.**

**Manufacturing of Hydrogen Train-set has been completed. For providing hydrogen for use in this train-set, a hydrogen plant has**

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been conceived at Jind. In this plant, hydrogen is being produced using electrolysis process which is key element of green hydrogen generation.

**Prominent features of Hydrogen Train-set are as below:**

- **Designed and Developed in India demonstrating Indian Railways' commitment to Atmanirbhar Bharat.**
- **Presently, it is the world's longest (10 coaches) and most powerful (2400 kW) Hydrogen Train-set on Broad Gauge platform.**
- **The train-set comprises of two Driving Power Cars (DPCs) of 1200 kW each, totalling 2400 kW along with eight passenger cars.**
- **Zero CO2 emissions; only emission is water vapour.**
- **Major step in development of next generation fuel technology in Railways.**

**This project involved designing from first stages, prototype manufacturing and first-time development of hydrogen traction technology in Indian Railways. As the Hydrogen Train-set and its infrastructure have been developed on a pilot basis, direct comparison of the cost of hydrogen-fuelled trains with established traction systems at this stage would not present a fair cost comparison.**

**The project establishes the commitment of Indian Railways towards advancements in alternative energy-powered train travel thereby ensuring a cleaner and greener future for the country's transportation sector.**