

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 1648
ANSWERED ON 29.07.2026

HYDROGEN BASED VEHICLES

1648. SHRI KESINENI SIVANATH
SHRI DAGGUMALLA PRASADA RAO

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the number of proposals received and approved for setting up hydrogen-based vehicles, routes and hydrogen refueling stations, State-wise including the number and type of vehicles (Fuel Cell or Hydrogen Internal Combustion Engine);
- (b) the total financial assistance allocated and disbursed so far under the scheme, project and State-wise including support for hydrogen refueling stations, vehicle procurement and validation activities;
- (c) whether the Government has established a structured feedback mechanism on vehicle performance and infrastructure challenges related to green hydrogen; and
- (d) if so, the details thereof and if not, the reasons for absence of such mechanism?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) & (b) The Government of India is implementing the National Green Hydrogen Mission (NGHM), with an objective to make India a global hub of production, usage and export of green hydrogen and its derivatives.

Under NGHM, 12 pilot projects have been awarded for deployment of 70 hydrogen - powered vehicles, comprising 27 buses and 43 trucks, including Fuel Cell Electric Vehicles (FCEVs) and Hydrogen Internal Combustion Engine (H₂ - ICE) vehicles, along with 16 Hydrogen Refuelling Stations (HRS) across 21 routes in different States.

The total financial assistance allocated for these projects is approximately ₹ 410.77 crores, out of which ₹ 41.582 crores has been released. The details are placed at **Annexure**.

(c) & (d) Yes, a structured monitoring and feedback mechanism has been incorporated for pilot projects being implemented in the road transport sector under NGHM. The agencies executing these projects are required to regularly submit performance reports on hydrogen vehicle operations, including vehicle efficiency, fuel consumption, safety aspects, and utilization patterns. The learnings from these pilot projects support the assessment of techno – economic viability of hydrogen – based mobility solutions and facilitate future policy interventions and deployment of green hydrogen vehicles in India.

Pilot Projects – Transport (Phase I)

S. No.	Consortium	Routes	Total Sanctioned Viability Gap Funding (90%) (INR Crore)	Vehicle Category	
				Buses	Trucks
1.	NTPC with buses manufactured by AL	1. Greater Noida - Delhi – Agra (NCT of Delhi and Uttar Pradesh) 2. Bhubaneswar - Konark – Puri (Odisha)	39.05	12m HFCV Buses (6)	-
2.	Tata Motors + IOCL	1. Ahmedabad - Vadodara – Surat (Gujarat) 2. Sahibabad - Faridabad – Delhi (Uttar Pradesh, Haryana and NCT of Delhi) 3. Pune – Mumbai (Maharashtra) 4. Jamshedpur - Kalinga Nagar (Jharkhand and Odisha)	70.02	12m HFCV Buses (2)	55T HICE Trucks (8) 28T HICE Trucks (4) 55T HFC Trucks (2)
3.	ANERT + BPCL	1. Thiruvananthapuram – Kochi (Kerala) 2. Kochi – Edappally (Kerala)	34.84	-	28T FC Trucks (2) 28T ICE Trucks (2)
4.	RIL + AL	1. Jamnagar – Ahmedabad (Gujarat)	46.87	11m HICE bus (1) 13.5 m HFCV bus (1)	19T HICE truck (3) 28T HICE truck (3) 35T HFCV Truck (2)
5.	HPCL – Volvo	1. NH – 16 Vasakhapatnam – Bayyavaram (Andhra Pradesh)	17.13	-	40T – Truck HICE (1)
Total			207.91	10	27

Pilot Projects – Transport (Phase II)

S. No.	Consortium	Total Sanctioned Viability Gap Funding (90%) (INR Crore)	Route	Vehicle Category	
				Buses	Trucks
1.	NTPC – GEL	26.61	1. Kandla – Gandhidham (Gujarat)	9m HFCV Bus (3)	-
2.	NHPC	1.77	1. In and around Chamba, Himachal Pradesh	9m HFCV Bus (1)	-
3.	ANERT + KSRTC + TML	51.54	1. Kochi-Kozhikode, NH 66 2. Kochi-Thrissur-Palakkad (Kerala)	12m HFCV Bus (2)	28T HICE Trucks (2)
4.	VECV + BPCL	5.91	1. Bina - Guna – Bina (Madhya Pradesh)	9m HFCV Bus (1)	19T HICE truck (3) 40T HICE truck (2)
5.	WAAREE+ Indify Horizon Fuel Cell Technologies Pvt Ltd	28.77	1. Surat-Chikhli-Tumb (Gujarat)	12m HFCV Bus (2)	35T HFCV Truck (1)
6	EKA Mobility + KPIT Technologies +BPCL + Super Spares & Services	44.84	1. Bina-Bhopal-Bina 2. Bina-Jhansi-Bina 3. Bina-Sanchi Stupa-Bina (Madhya Pradesh)	9m HFCV Bus (3) 12m HFCV Bus (5)	55T HFCV Truck (2)
7	KPI GEL + TML + AB Process Technologies	43.42	1. Vadodara-Ankleshwar-Vadodara 2. Vapi-Nashik-Vapi (Gujarat and Maharashtra)		55T HICE Truck (6)
Total		202.86		17	16

*HFCV: Hydrogen Fuel Cell Vehicles, HICE: Hydrogen Internal Combustion Engine.