

“TDB-DST supports NTF Energy Solutions Pvt. Ltd. for Commercialisation of Indigenous Type-IV CNG Cylinders under India’s Clean Mobility Vision”

Posted On: 07 MAY 2026 10:51AM by PIB Delhi

In line with the Government of India’s vision of promoting clean energy mobility, reducing carbon emissions, and strengthening indigenous manufacturing under Aatmanirbhar Bharat, the Technology Development Board (TDB), Department of Science & Technology (DST), Government of India, has entered into an agreement with M/s NTF Energy Solutions Private Limited, Delhi, for the project titled “Establishment of Manufacturing Facility for Commercialization of Type-IV CNG Cylinder.”



The project aims to establish an advanced manufacturing facility for the production and commercialization of indigenously developed Type-IV Composite CNG Cylinders using cutting-edge filament winding, blow moulding, and high-pressure testing technologies. The initiative is expected to strengthen India’s domestic capabilities in advanced gas storage systems for clean transportation and emerging energy applications.

Type-IV composite cylinders represent a next-generation alternative to conventional steel cylinders and offer up to 75% weight reduction, thereby improving vehicle efficiency and significantly reducing carbon emissions. The cylinders are engineered with a corrosion-free polymer liner, optimized CFRP layup, and advanced mechanical locking systems to ensure enhanced safety, durability, and resistance against leakage, vibration, and pressure cycling. The design achieves a burst pressure exceeding 600 bar, substantially higher than the prescribed regulatory requirements, ensuring robust operational safety.

The technology has been developed indigenously by NTF Energy Solutions Pvt. Ltd. and is designed to support India’s rapidly growing CNG mobility ecosystem. The project also aligns with the Government’s broader push towards sustainable transportation, cleaner fuels, and domestic manufacturing of advanced mobility components.

The proposed facility will leverage locally available raw materials and advanced manufacturing processes to create a cost-competitive and future-ready production ecosystem for high-pressure composite cylinders. The project is expected to contribute significantly towards import substitution, technology self-reliance, and the development of a resilient clean-energy supply chain in the country.

Speaking on the occasion, **Shri Rajesh Kumar Pathak, Secretary, TDB**, stated, “The development and commercialization of advanced Type-IV composite cylinders is important for strengthening India’s clean mobility infrastructure and indigenous manufacturing ecosystem. TDB’s support to NTF Energy Solutions reflects the Government’s commitment towards enabling next-generation technologies that contribute to sustainable transportation, energy security, and Aatmanirbhar Bharat.”

Shri Naveen Jain, Managing Director, and Shri Naman Jain, Director, NTF Energy Solutions Pvt. Ltd., expressed gratitude for TDB’s support and stated that the assistance will help accelerate the commercialization of indigenous lightweight composite cylinder technologies, enabling the company to contribute towards India’s transition to cleaner and more efficient mobility solutions.

NKR/FT

(Release ID: 2258588) Visitor Counter : 449

Read this release in: Telugu , Urdu , Gujarati , हिन्दी , Tamil