

Press Release

Vedanta Power Supports Set-up of Punjab's Largest Torrefied Biomass Plant to Fight Stubble Burning

- *Move to support biofuel usage and boost clean air efforts across Punjab & neighbouring states*
- *Will potentially avert nearly 2.6 million tons of CO₂ emissions*

April 28, 2025, Mansa, Punjab: Talwandi Sabo Power Limited (TSPL), a Vedanta Power company and North India's largest private thermal power producer, **has enabled the establishment of Punjab's biggest torrefied bio-pellets manufacturing facility, near its 1,980 MW plant in Mansa.** Driven by TSPL's demand for biofuel, the plant has been set up by its strategic business partners to manufacture and ensure steady supply of torrefied bio-pellets.

Torrefied biomass is a high-grade, solid biofuel made from biomass or agricultural residue through a thermochemical process. The end-product is a high-quality biofuel with far greater energy density than the original feedstock. TSPL is a highly advanced, supercritical thermal power plant and can only use high-grade biofuels such as torrefied biomass. With a capacity of **500 tons per day**, the new biomass plant will convert agricultural stubble into clean-burning, carbon-neutral bio-pellets, offering a sustainable alternative to coal.

Aligned with Vedanta's decarbonization vision to be Net Zero by 2050, the newly developed facilities were inaugurated by **Prof. (Dr.) Adarsh Pal Vig**, Chairman of the **Punjab Pollution Control Board (PPCB)**, as Chief Guest, in the presence of **Mr. Pankaj Sharma**, Chief Operating Officer, **TSPL**. Other senior officials from PPCB- Member Secretary **Mr. GS Majithia**, Chief Environmental Engineer **Mr. Rakesh Kumar Nayyar**, Senior Environmental Engineer **Ms. Samita**, and Environmental Engineer **Mr. Ramandeep Singh**, also graced the ceremony.

Punjab generates nearly 15-20 million tons of crop stubble (*parali*) annually. Much of this is traditionally burned in the fields, contributing to severe seasonal air pollution across North India. With this use of biomass in its fuel mix, TSPL will decrease its carbon footprint in two ways. First, TSPL had **procured over 8 lakh tons of agricultural stubble** in the paddy season, for conversion into approximately **6.4 lakh tons of torrefied bio-pellets**. Secondly, the company will **reduce 5% use of coal daily** by replacing a portion of coal with this carbon-neutral alternative. These two pathways together, will **potentially avert nearly 2.6 million tons of CO₂ emissions**.

Additionally, **TSPL co-fires 450 tons of torrefied biomass daily procured from open markets and made from crop stubble**. This is creating an ecosystem for farmers to divert their crop stubble into remunerative avenues, rather than burning it and causing massive air pollution. TSPL will continue its biomass co-firing initiative, contributing directly to the decarbonization of thermal power generation.



The torrefied bio-pellets are produced from agricultural stubble sourced through TSPL's extensive stubble management campaign. TSPL's broader stubble management drive, aims to curb open-field burning, improve air quality, and accelerate the state's clean energy transition, positioning the company as a key player in sustainable biomass-based solutions.

Emphasizing the role of industrial stewardship in driving environmental innovation, **Dr. Adarsh Pal Vig, Chairman of PPCB**, commented, *"The commissioning of these biomass plants reflects the kind of collaborative innovation required to improve air quality across Punjab and neighbouring states. By utilizing agricultural stubble in the form of torrefied bio-pellets, TSPL is significantly reducing coal consumption and advancing environmental compliance in thermal power generation. Their leadership in facilitating this development underscores the impact of proactive industrial action in driving environmental transformation."*

Mr. G.S. Majithia, Member Secretary at PPCB, who toured the new facility, remarked, *"TSPL's facilitation of Punjab's largest torrefied bio-pellets plant is a commendable step towards sustainable industrial development. Initiatives like these are instrumental in fostering environmentally responsible growth and setting a benchmark for green innovation across the region."*

Mr. Rajinder Singh Ahuja, CEO, Vedanta Power, said, *"As one of India's largest private power generators, this initiative is aligned with our commitment to support the nation's clean energy roadmap. Despite early-stage challenges including technology access, gaps in infrastructure, and limited bio-pellet availability, our focus on enabling a greener transition never wavered. This innovative solution will help mitigate Punjab's stubble burning and lead towards a sustainable future. These plants complement our existing biofuel efforts and underscore our long-term vision for a more sustainable and future-ready power sector."*

The development of the new facilities is being recognized as a model for how industry-led facilitation, sustainable innovation, and regulatory alignment can work in tandem, within conventional energy systems, to integrate sustainable practices and accelerate clean energy adoption.

About Vedanta Power:

Vedanta Group is one of the largest private sector power producers with 10,000 MW of thermal power capacity and its power business is committed to playing a pivotal role in generating and meeting the nation's energy requirement. Vedanta Power has plants in Mansa, Punjab (Talwandi Sabo Power Limited), Singhitari, Chhattisgarh (Vedanta Ltd. Chhattisgarh Thermal Power Plant) & Tirupati, Andhra Pradesh (Meenakshi Energy Limited), and is set to reach an installed capacity of 4,780 MW, serving various discoms and utilities, across the nation.

Talwandi Sabo Power Limited (TSPL) is a highly advanced supercritical 1980 MW world-class thermal power plant in Banawala, Mansa district, Punjab which supplies 100% of the electricity it generates to Punjab State Power Corporation Ltd and powers 30% electricity needs of Punjab state. TSPL deploys globally benchmarked environment and safety practices making it Punjab's greenest thermal power plant, and among the foremost zero-harm, zero-waste, zero-discharge thermal power producers in the country. The plant has been instrumental in the socio-economic development of the region since inception.

For more information, visit: <https://www.vedantalimited.com/eng/businesses-power.php>

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