NTPC achieves 20 pc torrefied biomass co-firing at Tanda power plant

Synopsis
NTPC achieves 20% torrefied biomass co-firing at Tanda thermal plant, marking a milestone in India's power sector. Torrefied biomass, akin to coal, enables higher co-firing percentages without major modifications. NTPC aims for decarbonization, exploring biomass co-firing in existing and new coal power plants to reduce emissions and mitigate air pollution.

State-owned power giant **NTPC** on Thursday said it has achieved 20 per cent **torrefied biomass** co-firing at Tanda **thermal plant** in **Uttar Pradesh**. The **NTPC** has established **co-firing** of 7-10 per cent non-torrefied biomass with **coal** at NTPC Dadri, a company statement said.

However, it stated that to achieve higher percentages of biomass co-firing without major modifications, the possibility of using torrefied biomass was explored by **Energy Transition and Policy Research Division of NTPC Engineering**.

According to the statement, the NTPC has achieved a new milestone by successfully demonstrating co-firing of 20 per cent torrefied biomass at its Unit-4 at **Tanda** (thermal plant) in Uttar Pradesh.

The initiative, it said, was a first of its kind in the Indian power sector, showcasing NTPC's commitment to **decarbonising** existing coal-fired fleets and advancing towards **net-zero emission targets**.

Torrefied biomass, produced by heating biomass in the absence of oxygen, exhibits characteristics akin to coal, making it suitable for higher co-firing percentages without significant system modifications.

The **Gross Calorific Value** (GCV) and cost of torrefied biomass pellets are currently equivalent to that of imported coal.

The NTPC's endeavour towards **decarbonisation** includes exploring biomass co-firing in both existing and new coal power plants, the company said.

Each per cent of biomass co-firing has the potential to reduce carbon emissions by approximately the same percentage. Additionally, biomass co-firing also mitigates air pollution caused by direct burning of stubble in the fields by the farmers, it said.