

Wind Energy powerplant, Tanakpur, New Delhi

Purpose : The purpose of visiting a wind energy powerplant was to understand renewable energy, support green job creation and know about the economic benefits of sustainable technologies.

2 June, 11:00 a.m., accompanied by father

When I first saw the wind turbines in the plant, I was amazed to see huge structures harnessing the power of nature to produce renewable energy. The size of each windmill was around 100-150 metres and had electric-generating capacity of 200 kilowatts in average.

I was even accompanied by a guide who helped me explore the area. He ensured all safety measures are followed and everything runs smoothly. He gave me knowledge about the turbines, electrical systems and environmental factors needed.

A wind turbine works by using blades to capture wind energy, spinning a rotor connected to the generator, which converts mechanical energy into electrical energy, then transmit through cables and a transformer to the power grid.

Installation of wind turbine plant have environmental impacts as they have low greenhouse gas emissions, minimal land use impact and low wildlife impact. Wind turbines can generate low levels of noise which maybe a concern for nearby residents.

Benefits of wind energy includes its status as a renewable energy, capacity to produce clean electricity with no greenhouse gas emissions, availability and role in job creation across various sectors.

Wind Turbine Installation

- When I visited a wind turbine installation plant, I saw large wind turbines standing tall in rows. There was a huge open land and roads to access each wind turbine, power lines and a main powerhouse building.
- I learnt about renewable energy and how the wind power works. I even learnt about the process of building and maintaining wind turbines. Also, the way they contribute in reducing greenhouse gas emissions.
- My views are really positive about this effort as they provide a sustainable source of energy, reduce greenhouse gas emissions and contribute to maintaining climate. I see it as a symbol of progress and more environment-friendly future. It also creates job opportunities and stimulates the local economy.
- I noticed that it takes high cost to maintain such plant, so I would suggest on focusing on making more durable turbines with low maintenance costs. Additionally, energy storage could enhance the stability of wind power.

Therefore, wind turbines contribute sustainable development by generating renewable energy, creating jobs, stimulating economic growth, reducing environmental impact and energy independence.