Evidence(s)

THE-Impact Ranking

HEI: TRIDENT ACADEMY OF TECHNOLOGY
COUNTRY: INDIA
WEBSITE: https://tat.ac.in/best-pratices/
13. Climate Action

13.2.1 Low carbon energy use

Plate 1- Solar panel of 580kWp

plate 2 pilot model of Wind Mill

Plate 3- Solar panel on rainwater trench system

Plate 4- Atmospheric water generator

Plate 1—Solar Panel Installation:

Trident Academy of Technology continues to lead by example in its commitment to sustainability. The campus has embraced renewable energy around 580kWp till 2024 end through the installation of solar panels, marking a major step toward clean and self-sustained energy use. These panels not only reduce dependence on non-renewable sources but also play a key role in cutting down carbon emissions and minimizing the campus's environmental footprint. Beyond the environmental impact, this initiative helps lower long-term energy costs and nurtures a spirit of sustainability among students and staff. By generating its own solar power, Trident demonstrates how innovation and responsibility can go hand in hand in shaping a greener future.

Plate 2 – Wind Mill:

Taking its sustainability efforts a step further, the institution has also installed windmills on campus to harness wind energy. This forward-thinking project reduces the reliance on fossil fuels, decreases greenhouse gas emissions, and contributes to a cleaner, more eco-friendly campus atmosphere. The windmills serve not just as a renewable energy source but also as a valuable educational resource, offering students and faculty firsthand exposure to the workings of sustainable technology. Through this initiative, Trident Academy of Technology reaffirms its role as a pioneer in promoting renewable energy and inspiring its academic community to embrace environmentally conscious practices.

Plate 3 – Solar panel on rainwater trench system:

Trident Academy of Technology has installed solar panels over the rainwater trench system as an innovative step toward promoting low-carbon energy use and sustainable infrastructure. This dual-purpose design efficiently harnesses solar energy while simultaneously supporting rainwater harvesting and groundwater recharge. The solar panels generate clean, renewable electricity for campus operations, reducing dependence on fossil fuels and minimizing carbon emissions. By integrating renewable energy with water conservation infrastructure, Trident demonstrates its commitment to sustainable development, resource efficiency, and environmental stewardship, setting a model for green campus initiatives.

Plate 4 – Atmospheric water generator

Trident Academy of Technology has installed **five Atmospheric Water Generators (AWGs)** as part of its commitment to **low-carbon and sustainable resource use**. These innovative systems extract moisture from the air to produce clean, drinkable water, significantly reducing dependence on conventional water sources and minimizing the carbon footprint associated with water transportation and treatment. Powered by renewable energy, the AWGs support campus sustainability goals by promoting efficient water management and contributing to a greener, self-sustaining environment