

Carbon reduction and emission reduction process



To reduce carbon emissions and promote sustainability, TIAME National Research University has implemented several initiatives. Here's an overview of what the university is doing in each area:

1. Carbon and Emission Reduction Measures:

a) Energy Efficiency: TIAME National Research University has implemented energy-efficient practices across its campuses. This includes upgrading lighting systems to LED technology, optimizing HVAC systems, and improving insulation in buildings to reduce energy consumption and associated carbon emissions.



b) Renewable Energy Sources: The university has invested in renewable energy sources to power its facilities. Solar panels have been installed on rooftops and open spaces, generating clean electricity and reducing reliance on fossil fuels.



c) Sustainable Transportation: TIAME National Research University encourages the use of electric-type transport devices such as electric cars, bicycles, and scooters within its campuses. By promoting the adoption of these vehicles, the university aims to minimize exhaust emissions and reduce the carbon footprint associated with transportation on campus.



Free bicycles for rent



Free scooters for rent



Autonomous electro tractor created by university students

d) **Public Transportation Promotion:** The university actively promotes the use of public transportation among faculty, staff, and students. It provides information on public transportation routes, schedules, and discounts to encourage individuals to choose eco-friendly commuting options, thereby reducing the number of private vehicles on the road and decreasing emissions.

e) **Waste Management:** TIIAME National Research University has implemented comprehensive waste management practices. It emphasizes waste reduction, recycling, and composting to divert waste from landfills and reduce the greenhouse gas emissions associated with waste disposal.

2. Air Quality Monitoring:

TIIAME National Research University recognizes the importance of monitoring air quality to ensure a healthy and sustainable environment. The university has deployed air quality monitoring devices throughout its premises to continuously assess air pollution levels. These devices measure parameters such as particulate matter, pollutants, and air quality indices.



The air quality monitoring devices enable the university to:

a) **Identify Areas of Concern:** By monitoring air quality, the university can identify specific areas or activities that contribute to poor air quality. This information helps

in developing targeted strategies to address the issues and improve air quality in those areas.

b) **Implement Mitigation Measures:** The data collected from air quality monitoring devices provides valuable insights into the sources and patterns of air pollution. This information enables the university to implement appropriate measures to reduce emissions and enhance air quality, such as adjusting ventilation systems, implementing green landscaping strategies, or modifying transportation routes.

c) **Raise Awareness:** The availability of real-time air quality data allows TIIAME National Research University to raise awareness among its community members about the importance of air quality and its impact on health. The data can be shared through online platforms, campus signage, or awareness campaigns, empowering individuals to make informed decisions and contribute to air quality improvement efforts.

d) **Research and Policy Development:** The air quality monitoring devices support research initiatives related to air pollution, health impacts, and mitigation strategies. The data collected can inform the development of evidence-based policies and guidelines aimed at reducing emissions and improving air quality within the university's territory.

TIIAME National Research University is committed to continuously assessing and improving its strategies to reduce carbon emissions and mitigate air pollution. By prioritizing sustainable practices, promoting electric-type transport devices, and utilizing air quality monitoring devices, the university is taking proactive steps towards creating a cleaner and healthier environment on its campuses.