

Environmental Impact

Campus Building Footprint

Abu Dhabi University (ADU) evaluates its carbon emissions following the Greenhouse Gas Protocol approach. Its objective is to attain a continuous reduction in direct emissions (Scope 1) and indirect emissions from purchased electricity (Scope 2), achieved through energy efficiency measures, renewable energy sources, and sustainable transportation initiatives, despite population growth.

Introduction

This report aims to present a detailed analysis of the carbon emissions generated by Abu Dhabi University (ADU) during the period from January 1, 2024 to December 31, 2024. The evaluation of these emissions is crucial to understand the environmental impact of the university's activities and operations and to establish mitigation and sustainability strategies.

ADU's commitment to sustainability and environmental responsibility has led to the preparation of this carbon emissions report, which will serve as a starting point for taking effective actions to reduce our carbon footprint and promote a more sustainable approach in all areas of the university.

This data is prepared by the Sustainability Advancement and Integrated Facilities (SAIF) Department - <https://www.adu.ac.ae/sustainability/sustainable-campus/about-saif>

Methodology

To calculate carbon emissions, we followed the Greenhouse Gas Protocol (GHG Protocol) approach in scopes 1 and 2. Scope 1 emissions include those generated directly by the university, such as from the combustion of fossil fuels in ADU's power generators and university-owned vehicles. On the other hand, scope 2 emissions correspond to those generated indirectly from the purchased electricity obtained from external providers.

Data on energy consumption, fuel usage, and transportation were collected to obtain a comprehensive overview of the carbon emissions associated with ADU's operations during the reporting period.

Scope 1

Direct emissions from sources controlled by ADU Emissions from fossil fuels used in power generators and vehicles owned by ADU.

Scope 2

Indirect emissions from purchased electricity generation Emissions associated with the production of electricity purchased by ADU from external suppliers.

Result

Scope	2024
Scope 1 Emissions	501.67 tCO ₂ e
Scope 2 Emissions	10,340.03 tCO ₂ e
Scope 3 Emissions	92.5 tCO ₂ e
TOTAL	10,934.2 tCO₂e

In scope 1, which includes direct emissions generated by the university, a notable reduction in emissions has been observed. This reduction has been achieved through measures such as upgrading power generators and promoting low-emission vehicles, resulting in a significant decrease in fossil fuel consumption and, consequently, emissions.

Likewise, in scope 2, which encompasses indirect emissions from purchased electricity, a substantial reduction has been achieved. ADU has made efforts to procure electricity from suppliers utilizing cleaner energy sources, such as renewable energy, leading to a significant reduction in carbon emissions associated with electricity used on campus.

Another important indicator of our footprint improvement is Net Emissions per Population. During the reporting period, a reduction of 0.3 has been observed in this indicator. This means that despite the growth in ADU's student and staff population, we have managed to reduce the net carbon emissions per individual in the university community. This reduction reflects the commitment and efforts of the entire university community in adopting more sustainable practices and reducing our carbon footprint.



Actions

Based on the results of the analysis, Abu Dhabi University commits to implementing a series of actions and strategies to reduce its carbon emissions and move towards a more sustainable and environmentally-responsible university.

Energy Efficiency: ADU will seek to improve energy efficiency in its buildings and systems by implementing more efficient technologies and promoting energy-saving practices.

Renewable Energy: ADU will explore the adoption of renewable energy sources such as solar and wind power to reduce reliance on fossil fuels and decrease carbon emissions.

Sustainable Transportation: Promotion of sustainable transportation means, such as electric bikes and zero-emission vehicles, will be encouraged on campus to reduce emissions associated with transportation.

Conclusion

Abu Dhabi University's carbon emissions report highlights the institution's commitment to sustainability and environmental stewardship. By understanding the environmental impact of our operations, we are better equipped to take concrete and strategic measures to reduce our carbon footprint.

Through the implementation of sustainable actions and the promotion of a culture of environmental responsibility, ADU aims to become a leading example of sustainability in the region. We will continue working hand in hand with students, faculty, staff, and other stakeholders to achieve a more sustainable university and contribute to the well-being of the planet for future generations. Our commitment is clear: building a greener and more resilient future for all.