



جامعة عجمان
AJMAN UNIVERSITY

20
24

SDG 13 CLIMATE ACTION

13.4.1 Commitment to carbon neutral university



THE GLOBAL GOALS

Table of Contents

Introduction.....04

Message from our Cabinet Member.....05

Ajman University's Climate & Sustainability Strategy 2022-2023.....06

Ajman University's Strategic Commitment to Climate Action.....07



Table of Contents

<u>Calculation of Carbon Footprint</u>	09
<u>Ajman University Greenhouse Gas Inventory Report (2020-2023)</u>	10
<u>Summary Findings (Years: 2020-2021 and 2021-2022)</u>	12
<u>Summary Findings (Year: 2022-2023)</u>	14
<u>CO2 Reduction Targets</u>	15





Introduction

As the global climate crisis intensifies, the urgency to reduce greenhouse gas emissions and transition to a low-carbon future has never been greater. Universities, as centers of knowledge and innovation, have a crucial role to play in driving this transition.

This report delves into the University's commitment to carbon neutrality and its progress towards achieving this goal. By examining the University's carbon neutrality target, the scope of its emissions reduction efforts, and the implementation strategies in place, we aim to assess its contribution to a more sustainable future.

To evaluate the University's performance, we will focus on the following key indicator:

- **Commitment to Carbon Neutral University (13.4.1):** This indicator assesses the University's target date for achieving carbon neutrality and the scope of its emissions reduction efforts, including direct emissions (Scope 1), indirect emissions from purchased energy (Scope 2), and other indirect emissions (Scope 3).

By analyzing this indicator, we can gain valuable insights into the University's leadership in climate action and its potential to inspire others to adopt sustainable practices.



Message from our VCIPE

As we face the urgent challenge of climate change, our University is committed to taking bold and decisive action to reduce our carbon footprint.

By setting ambitious targets for carbon neutrality, we are demonstrating our leadership in sustainability and our commitment to a greener future. Achieving carbon neutrality for both Scope 1 and Scope 2 emissions is a significant milestone in our journey towards a sustainable campus. By implementing energy-efficient practices, reducing waste, and investing in solar power projects across campus, we are taking concrete steps to minimize our environmental impact. We believe that by setting a strong example, we can inspire our students, faculty, and staff to embrace sustainable practices and contribute to a more sustainable world.



**Ajman University
is committed to
become carbon
neutral by 2030**

**PROF. MUSTAHSAN MIR
VICE-CHANCELLOR FOR INSTITUTIONAL
PLANNING AND EFFECTIVENESS**

13.4.1 Commitment to carbon neutral university

Ajman University's Climate & Sustainability Strategy 2022-2030

Ajman University is deeply committed to becoming a carbon-neutral institution. Our Climate & Sustainability Strategy 2022-2030 outlines a clear pathway to achieving this ambitious goal, aligning with the UAE's Green Agenda, Net Zero by 2050 Strategy, the National Climate Change Plan of the UAE 2017–2050, and the UN Sustainable Development Goals.

We have set a target to become carbon neutral by 2030, with a longer-term goal of reaching net zero emissions by 2050. This commitment is backed by our track record of achieving important sustainability milestones in recent years. Our dedicated team is driving forward a range of initiatives to reduce our greenhouse gas emissions across all scopes.

Scope 1 emissions from our own operations are being tackled through energy-efficient upgrades and a shift to renewable power. For Scope 2 emissions from purchased electricity, we are investing in on-site solar generation and procuring green tariffs. Scope 3 emissions from travel, procurement, and waste are being addressed through sustainable travel policies, supply chain engagement, and waste reduction initiatives.

Our progress towards carbon neutrality is being tracked and reported publicly in line with the Greenhouse Gas Protocol. We are committed to transparency and accountability in our climate action journey. By becoming a carbon-neutral university, we aim to make a significant contribution to national and global efforts to combat climate change.

Ajman University's commitment to carbon neutrality demonstrates its role as a leader in sustainable practices within the higher education sector.

The AU Climate and Sustainability Strategy 2022-2030 is a practical guide on how the University will deliver key climate commitments, such as reducing greenhouse gas emissions, supporting a carbon-neutral campus, reducing energy consumption, investing in energy optimization solutions and renewable energy, exploring new ways to decrease direct and indirect CO₂ emissions, minimizing the environmental impact rating of the University activities and processes, and creating awareness on taking action for climate change. The strategy considers how to achieve resilience to the impacts of climate change across University operations and supports a smooth and fair transition to a low and eventually zero carbon future.



This comprehensive strategy outlines a clear path for achieving our climate goals. Learn more about key initiatives like:

- Reducing greenhouse gas emissions
- Creating a carbon-neutral campus
- Lowering energy consumption
- Investing in energy-saving solutions and renewable energy
- Exploring innovative methods to minimize CO2 emissions
- Reducing the environmental impact of university operations
- Raising awareness about climate action

The strategy also addresses building resilience against climate change impacts and transitioning towards a low-carbon future.

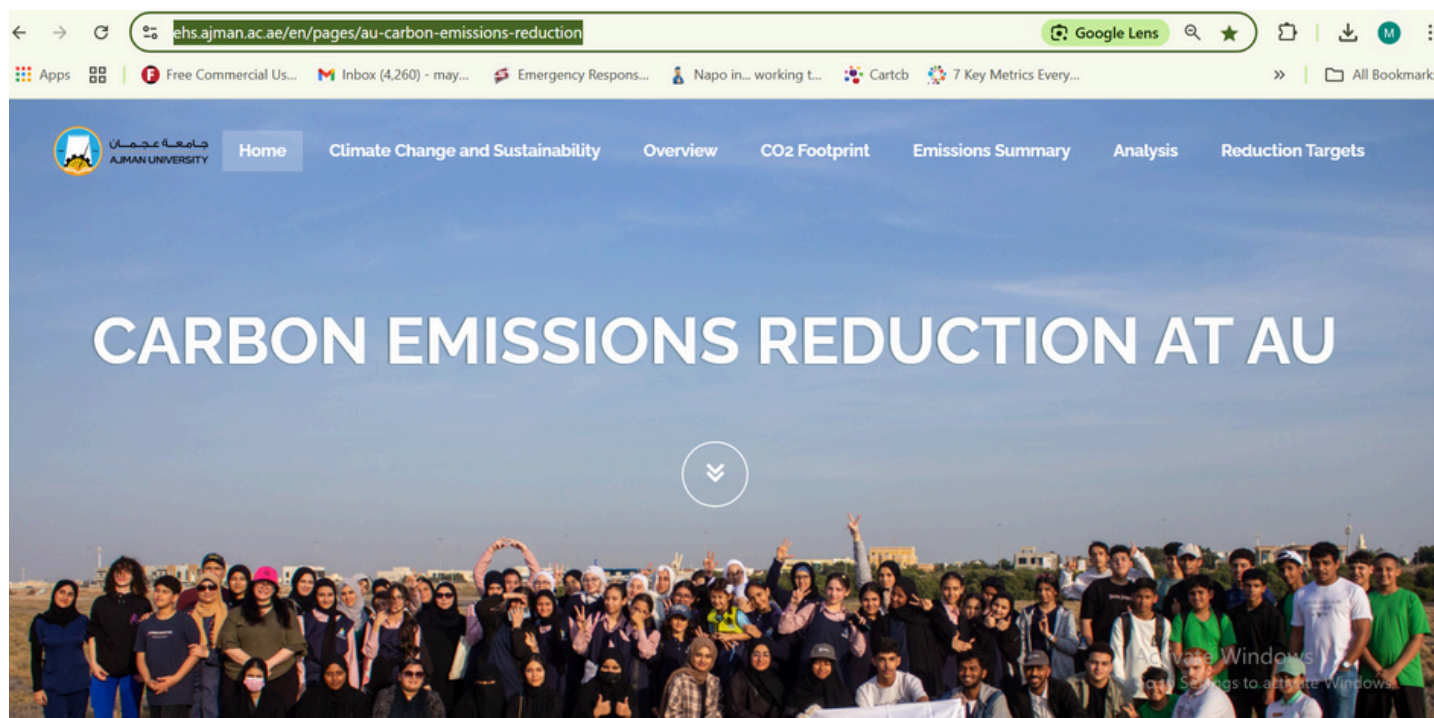


<https://sustainablecampus.ajman.ac.ae/en/>

https://www.ajman.ac.ae/upload/files/ehs/AU_Climate_Sustainability_Strategy_Document_2022_2030.pdf

<https://www.educationracetozero.org/current-signatories>

<https://ehs.ajman.ac.ae/en/pages/au-carbon-emissions-reduction>



Ajman University's Strategic Commitment to Carbon Neutrality

Ajman University recognizes the critical role that higher education institutions must play in addressing the urgent threat of climate change. The constant release of greenhouse gases and the subsequent increases in global concentrations will cause significant climate changes with far-reaching impacts, including increased health risks, decreased biodiversity, and more frequent extreme weather events.

As a responsible and forward-looking institution, Ajman University is strategically committed to carbon neutrality. The AU Strategic Plan 2022-2027 has added the objective of carbon neutrality under the main goal of Institutional sustainability. This objective is cascaded as a Key Performance Indicator (KPI) for several offices at Ajman University.

Our Sustainability Manager leads the Carbon Neutrality/ Campus Decarbonization Pillar of the UAE Universities Climate Network, further demonstrating our commitment to collaborative climate action within the higher education sector. We believe that universities have a critical role to play in modeling sustainable practices, building awareness, and developing the solutions that will be needed to combat climate change.

The Intergovernmental Panel on Climate Change (IPCC) has concluded that the planet has already warmed by 1°C since the pre-industrial era, leading to rising sea levels and more extreme weather events. Climate change disproportionately affects vulnerable populations in developing countries and disadvantaged communities worldwide. To prevent the catastrophic consequences of more than 1.5°C warming, we must make significant changes to our behavior at all scales, reducing our reliance on fossil fuels, investing in renewable energy, and building resilience in our cities and infrastructure.

By becoming a carbon-neutral university, Ajman University is taking a leading role in contributing to national and global efforts to combat climate change. We are committed to tracking and reporting our progress transparently in line with the Greenhouse Gas Protocol, demonstrating our accountability in this critical area. Through our strategic commitment to carbon neutrality, we aim to reshape our future, ensure sustainability and resilience, and preserve our environment for generations to come.

<https://www.cop28.com/en/ucn-events>

UNIVERSITIES CLIMATE NETWORK

Carbon Neutrality Pillar

Objectives & Goals

- Assist universities in establishing CO₂ baseline emissions
- Enhance climate change knowledge and awareness through increased carbon literacy
- Facilitate participation in relevant climate action networks at national, regional, and international levels
- Share the best carbon reduction practices among universities
- Showcase the best projects, ideas, and innovations and highlight the overall progress of the pillar at COP29

Campus Carbon Neutrality

Ms. Julia Carlow

Ms. Maya Haddad

MANGROVE



PLANTING



WASTE RE-USE



CARBON OFFSET



CLEAN UP



CAMPAIGNS



Calculation of Carbon Footprint By Using Greenhouse Gas Protocol (GHG PROTOCOL)

Ajman University is committed to tracking and reducing its greenhouse gas emissions in line with the Greenhouse Gas Protocol (GHG Protocol). The GHG Protocol is the most widely used international standard for accounting for greenhouse gas emissions. It provides a framework for organizations to quantify their emissions across three scopes: Scope 1 (direct emissions from owned or controlled sources), Scope 2 (indirect emissions from purchased electricity, heat, steam or cooling), and Scope 3 (all other indirect emissions, such as business travel, procurement, and waste). By using the GHG Protocol, Ajman University can accurately calculate its carbon footprint, identify areas for reduction, and track progress towards its goal of carbon neutrality. This transparent and rigorous approach to emissions accounting demonstrates the university's commitment to accountability and leadership in climate action.

After identifying all the activities and processes that generate GHG including CO₂ and its related gases from emission sources 1, 2, and 3, the carbon footprint of Ajman University has been calculated using 2020 as the base year.

Ajman University has applied the Greenhouse Gas Protocol (GHG PROTOCOL) to report emission sources. The GHG Protocol Corporate Accounting and Reporting Standard provides requirements and guidance for companies and other organizations preparing a GHG emissions inventory. The GHG Protocol is the internationally recognized standard for greenhouse gas accounting on the corporate level. It was developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). Gases that trap heat in the atmosphere are called greenhouse gases (GHG). Since these gases get trapped in the atmospheric layer instead of being released into space, they cause global warming.

The present Corporate Carbon Footprint discloses all emissions as CO₂ equivalents (CO₂e) and includes six other greenhouse gases that are regulated by the Kyoto Protocol:

- METHANE (CH₄)
- NITROUS OXIDE (N₂O)
- SULFUR HEXAFLUORIDE (SF₆)
- HYDROFLUOROCARBONS (HFCs)
- PERFLUOROCARBONS (PFCS)
- NITROGEN TRIFLUORIDE (NF₃)

The United States Environmental Protection Agency (EPA) has defined GHG Emissions into three scopes: Scope 1 – direct, reporting company Scope 2 – indirect, upstream activities Scope 3 – indirect, upstream and downstream activities



Ajman University Greenhouse Gas Inventory Report (2020-2024)

Ajman University (AU) is committed to environmental responsibility and achieving net-zero carbon emissions. This Greenhouse Gas (GHG) Inventory Report is a key outcome of the assessment phase within Axosomatic's Net-Zero Carbon Intelligence solutions framework. It quantifies AU's annual GHG emissions for the past four fiscal years: September 2020 – August 2021 (2020-2021), September 2021 – August 2022 (2021-2022), September 2022 – August 2023 (2022-2023), and September 2023 – August 2024 (2023-2024).

The data presented adheres to a declared boundary and scope, ensuring transparency and accurate representation of AU's operational emissions for the specified reporting periods.

Report Significance

This report serves several critical purposes:

- Establishes a robust framework for carbon accounting: Utilizing the GHG Protocol Standards, the report outlines a rigorous and accurate approach to carbon accounting and reporting for AU.
- Comprehensive Emissions Coverage: The report encompasses all of AU's GHG emissions, including those generated from upstream activities and employee commuting.
- Performance Evaluation: It provides a foundation for evaluating AU's performance concerning GHG emissions and fosters transparency.
- Resource Optimization: By quantifying emissions, the report facilitates data-driven strategies for optimizing resource use and operational efficiency.
- Knowledge Building and Alignment: The report fosters internal learning and awareness of AU's environmental impact, aligning with its strategic goals and serving as a best practice example for other entities.
- Sustainability Benchmarking: Data from this report can be used to track progress towards AU's sustainability goals and inform future strategies for improvement.



Introduction to the Reporting Framework

The "Scope Definition" section establishes the methodological backbone of the entire emissions inventory. By stating alignment with the GHG Protocol Corporate Standard and the World Resources Institute (WRI), the report immediately signals credibility, rigor, and adherence to a globally recognized standard. This is crucial because:

- **Comparability:** It allows Ajman University's emissions data to be compared with other institutions worldwide, whether they are other universities, corporations, or public entities.
- **Consistency:** It ensures that the university measures and reports its emissions the same way year after year, making it possible to track progress reliably.
- **Completeness:** The GHG Protocol provides a comprehensive framework designed to capture the full spectrum of an organization's climate impact.

Detailed Breakdown of the Three Scopes

The core of the GHG Protocol is the categorization of emissions into three scopes. This scoping is vital for understanding where emissions originate and who is responsible for managing them.

Scope 1: Direct Emissions

These are emissions from sources that are owned or controlled directly by Ajman University. They are the most immediate result of the university's on-site activities. Examples include:

- **Mobile Combustion:** Fuel consumed by the university's own fleet of vehicles (maintenance trucks, shuttle buses).
- **Fugitive Emissions:** Leaks from air conditioning (AC) and refrigeration systems, which use potent greenhouse gases like HFCs.

Scope 2: Indirect Emissions from Purchased Energy

These are indirect emissions resulting from the generation of electricity, steam, heating, and cooling that the university purchases and consumes. While the physical emissions occur at the power plant, they are a direct consequence of the university's energy demand. Examples include:

- **Purchased Electricity:** This is typically the largest source of Scope 2 emissions, covering electricity for lighting, computers, laboratory equipment, and AC across all campuses and facilities.

Scope 3: All Other Indirect Emissions

This is the broadest and often most complex category, encompassing all other indirect emissions that occur in the university's value chain. These are a consequence of its operations but come from sources not owned or controlled by the university itself. For most organizations, including universities, Scope 3 represents the largest portion of their carbon footprint. Examples include:

- Upstream Activities (Emissions from goods/ services the university acquires):
 - Purchased Goods & Services: Manufacturing emissions from computers, furniture, lab equipment, and paper.
 - Capital Goods: Construction and materials for new buildings and infrastructure.
 - Business Travel: Air travel, train travel, and hotel stays by faculty and staff for conferences and research.
 - Employee Commuting: Emissions from cars, buses, and other transport used by staff and students to travel to and from campus.
 - Waste Generated in Operations: Emissions from landfill decomposition and wastewater treatment.
- Downstream Activities (Emissions from the use/ disposal of the university's products):
 - Investments: Emissions associated with the university's endowment or financial investments.

Interpretation of the Data Summary

The provided tables for 2021-2024, expressed in tCO₂e (Metric Tons of CO₂ Equivalent), are the quantitative outcome of this rigorous accounting process.

- tCO₂e (Tonne of Carbon Dioxide Equivalent): This is the standardized unit that allows for the comparison of different greenhouse gases (like methane and nitrous oxide) based on their global warming potential (GWP). It converts all emissions into the equivalent amount of CO₂ that would have the same warming effect, creating a single, comparable metric.
- Trend Analysis: By presenting data across three consecutive periods, the report enables trend analysis. Stakeholders can see:
 - Is the university's total carbon footprint increasing or decreasing?
 - Which scopes are driving these changes? (Did a new building project cause a spike in Scope 3? Did a solar panel installation reduce Scope 2?)
 - How effective are the university's sustainability initiatives?

The Strategic Importance

Defining and reporting on Scopes 1, 2, and 3 is not just an accounting exercise. It is the critical first step in effective climate action. By understanding the full breakdown of its emissions, Ajman University can:

- **Identify Hotspots:** Pinpoint the most significant sources of emissions to prioritize reduction efforts.
- **Set Meaningful Targets:** Establish science-based or strategic targets for carbon reduction that address all relevant scopes.
- **Manage Risks and Opportunities:** Uncover risks in the supply chain and identify opportunities for efficiency, innovation, and cost savings.
- **Demonstrate Leadership:** Provide transparent accountability to stakeholders—including students, faculty, government, and the public—on its environmental performance and commitment to a sustainable future.

To view a copy of the detailed GHG Inventory Reports from 2020 to 2024, please refer to the below reports:

GHG Inventory Report for Year (2020-2022):

[https://ehs.ajman.ac.ae/upload/files/ehs/AU_GHG_Inventory_Report_-_Final_\(2020_-_2022\).pdf](https://ehs.ajman.ac.ae/upload/files/ehs/AU_GHG_Inventory_Report_-_Final_(2020_-_2022).pdf)

GHG Inventory Report for Year (2022-2023):

[https://ehs.ajman.ac.ae/upload/files/ehs/AU_GHG_Inventory_Report_-_Final_2022_-_2023_\(Revised_23_Oct_2025\).pdf](https://ehs.ajman.ac.ae/upload/files/ehs/AU_GHG_Inventory_Report_-_Final_2022_-_2023_(Revised_23_Oct_2025).pdf)

GHG Inventory Report for Year (2023-2024):

[https://ehs.ajman.ac.ae/upload/files/ehs/AU_GHG_Inventory_Report_Final_2023_-_2024_\(Revised_Oct_2025\)_2.pdf](https://ehs.ajman.ac.ae/upload/files/ehs/AU_GHG_Inventory_Report_Final_2023_-_2024_(Revised_Oct_2025)_2.pdf)



TABLE 2. SUMMARY OF SCOPE 1, SCOPE 2 AND SCOPE 3 GHG EMISSIONS DURING 2021 – 2022

Description	GHG Emission (tCO ₂ e)	% of Total
Scope 1: Direct GHG Emission	1,240.36 (1,240,360 KgCO ₂ e)	6
Scope 2: Indirect GHG Emission	12,576.450 (12,576,450 KgCO ₂ e)	60.3
Scope 3: Indirect GHG Emission*	7,034.360 (7,034,360 KgCO ₂ e)	33.7
Total	20,851.170 (20,851,170 KgCO₂e)	100

*Excluding data for business travel

BASE YEAR

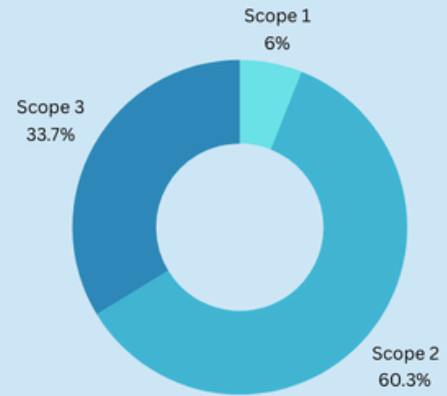


TABLE 2. SUMMARY OF SCOPE 1, SCOPE 2 AND SCOPE 3 GHG EMISSIONS DURING 2022 – 2023

Description	GHG Emission (tCO ₂ e)	% of Total
Scope 1: Direct GHG Emission	966.642 (966,642 KgCO ₂ e)	4.6
Scope 2: Indirect GHG Emission	12,586.353 (12,586,353 KgCO ₂ e)	59.2
Scope 3: Indirect GHG Emission	7,705.850 (7,705,850 KgCO ₂ e)	36.2
Total	21,256.307 (21,256,307 KgCO₂e)	100

PERFORMANCE YEAR

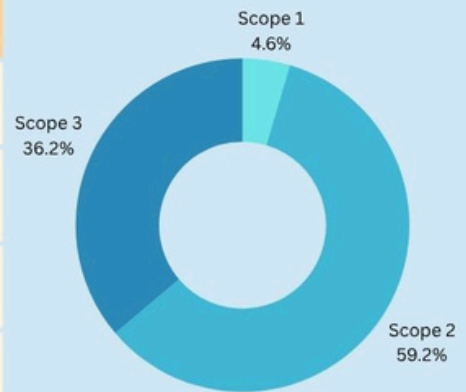
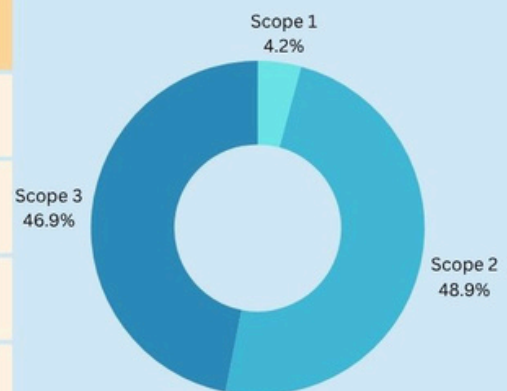


TABLE 2. SUMMARY OF SCOPE 1, SCOPE 2 AND SCOPE 3 GHG EMISSIONS DURING 2023 – 2024

Description	GHG Emission (tCO ₂ e)	% of Total
Scope 1: Direct GHG Emission	1,090.23 (1,090,230 KgCO ₂ e)	4.3
Scope 2: Indirect GHG Emission	12,469.78 (12,469,780 KgCO ₂ e)	48.9
Scope 3: Indirect GHG Emission	11,965.34 (11,965,340 KgCO ₂ e)	46.8
Total	25,525.35 (25,525.35 KgCO₂e)	100

PERFORMANCE YEAR



Summary Findings (Years: 2020-2021 and 2021-2022)

Summary of Scope 1 Findings

Scope 1 direct GHG emissions attributed to Ajman University, occurred from the stationary combustion of LPG, and the mobile combustion of petrol and diesel-operated cars, buses, pickups, trucks, and mobile dental clinics owned by AU. Below is a summary of the findings

- 1.The GHG emissions from all sources, stationary and mobile, during the year 2020 – 2021 are lower than those during 2021 – 2022. This could be attributed to the fact that the period 2020-2021 was the lockdown period in the UAE. Teaching and administrative work were conducted online.
- 2.However, the GHG emissions from the consumption of LPG are the same in both periods. The reason is that the College of Dentistry, which consumes the LPG, was operational during the lockdown years.
- 3.The carbon emissions from the mobile combustion of diesel, in both years, are higher than the carbon emissions from the combustion of petrol. This may be attributed to the number of buses used for transportation.
- 4.The carbon emission from the consumption of LPG is the highest, compared to the mobile of combustion of petrol and diesel.

Summary of Scope 2 Findings

Scope 2 indirect GHG emissions attributed to Ajman University, occurred from the consumption of electricity and water.

The following table summarizes the electricity and water consumptions at AU during the periods of 2020 – 2021 and 2021 – 2022, with the associated carbon emission expressed in metric tons of CO2 equivalent.



Summary of Scope 3 Findings

Scope 3 indirect GHG emissions attributed to Ajman University, occurred from the consumptions of upstream activities listed in the following table:

TABLE 3 .LIST OF UPSTREAM ACTIVITIES 2021 – 2022

Activity	Emission Sources	Status
Purchased goods and services	Food & Beverages, Printing Papers, Toilet Papers, Tissue Papers, Water and Cloud Services	Included
Capital goods	IT Equipment, Office Furniture, Medical Equipment	Included
Fuel -and energy-related activities	Transmission and Distribution (T&D) losses of purchased electricity	Included
Upstream T&D	T&D of purchased good and capital goods	Included
Waste generated in operations	Wastewater, General Waste, Medical Waste, Food Waste, Paper Waste	Included
Business travel	Travel and accommodation of employees/ contactors	Not Included
Employee commuting	Employee commuting from and to AU	Included



Summary Findings (Year: 2022-2023)

Summary of Scope 1 Findings

Scope 1 direct GHG emissions attributed to Ajman University, occurred from the stationary combustion of LPG, and the mobile combustion of petrol and diesel-operated cars, buses, pickups, trucks, and mobile dental clinics owned by AU. Below is a summary of the findings:

1. The GHG emissions from all sources, stationary and mobile, during the year 2022 – 2023 are lower than those during 2021 – 2022, by 22%.
2. GHG emissions from LP are lower in 2022-2023 due to the lower consumption of LPG.
3. Similarly, the emission from mobile combustions is lower in 2022-2023 due to lower consumption of petrol and diesel. These emissions could be further reduced by replacing the existing vehicles with EVs and/or hybrid cars. Research by the European Energy Agency found that the carbon emission of an electric car is around 17 – 30% lower than driving a petrol or diesel car. This means that the GHG emissions of 144.26 tCO₂e (table 15), would be reduced by 34 tCO₂e.
4. The emissions from the mobile combustion of diesel, in both years, are higher than the emissions from the combustion of petrol. This may be attributed to the number of buses used for transportation.
5. The emission from the consumption of LPG and refrigerant leakage is the highest, compared to the mobile of combustion of petrol and diesel.

Summary of Scope 2 Findings

Scope 2 indirect GHG emissions attributed to Ajman University, occurred from the consumption of electricity from 13 buildings:

1. The GHG emissions due to purchased electricity remain almost the same as in the baseline year, albeit with an increase of 0.1%.
2. The GHG emissions of 58% of the sources are above 1000 tCO₂e.
3. The GHG emissions of 50% of the sources in the performance year are less than those in the Baseline year.

Ajman University has secured the following achievements in emission reductions in the performance year (2022-2023), in reference to the baseline year (2021-2022):

1. The emission related to the consumption of LPG has been **reduced by 32%**.
2. The emission related to the consumption of petrol has been **reduced by 19%**.
3. The emission related to the consumption of diesel has been **reduced by 11%**.
4. The emission related to capital goods has been **reduced by 10.59%**.
5. The emission related to energy-related activities has been **reduced by 2.18%**.
6. The emission related to the waste generated in operations has been **reduced by 23%**.
7. The scope 1 emission has been **reduced by 22%**.
8. The emission of scope 1 + scope 2 has been **reduced by 1.91%**.
9. The total emission (scope 1, 2, and 3) has been **reduced by 1.04%**.

Summary of Scope 3 Findings

Scope 3 indirect GHG emissions attributed to Ajman University, occurred from the consumptions of upstream activities listed in the following table:

TABLE 3 .LIST OF UPSTREAM ACTIVITIES 2022 – 2023

Activity	Emission Sources	Status
Purchased goods and services	Food & Beverages, Printing Papers, Toilet Papers, Tissue Papers, Water and Cloud Services	Included
Capital goods	IT Equipment, Office Furniture, Medical Equipment	Included
Fuel -and energy-related activities	Transmission and Distribution (T&D) losses of purchased electricity	Included
Upstream T&D	T&D of purchased good and capital goods	Included
Waste generated in operations	Wastewater, General Waste, Medical Waste, Food Waste, Paper Waste	Included
Business travel	Travel and accommodation of employees/ contactors	Included
Employee commuting	Employee commuting from and to AU	Included



Summary Findings (Year: 2023-2024)

Summary of Scope 1 Findings

Scope 1 direct GHG emissions attributed to Ajman University, occurred from the stationary combustion of LPG, and the mobile combustion of petrol and diesel-operated cars, buses, pickups, trucks, and mobile dental clinics owned by AU. Below is a summary of the findings:

- 1.Total GHG emissions from all sources—both stationary and mobile—in 2023–2024 are 12% lower than in 2021–2022, although they are higher than in 2022–2023.
- 2.GHG emissions from LPG in 2023–2024 are lower than in the baseline year.
- 3.Emissions from mobile combustion (petrol and diesel) are significantly higher than in 2022–2023 and 2021–2022. These emissions could be further reduced by replacing current vehicles with electric or hybrid models. Research by the European Energy Agency indicates that electric vehicles produce 17–30% less carbon emissions compared to petrol or diesel vehicles.

Summary of Scope 2 Findings

Scope 2 indirect GHG emissions attributed to Ajman University, occurred from the consumption of electricity from 13 buildings:

- 1.GHG emissions from purchased electricity have remained nearly constant compared to the baseline year, showing a slight decrease of 0.85%, and a 0.93% reduction compared to the previous year. This indicates stable electricity consumption and consistent energy efficiency performance.
- 2.GHG emissions from electricity consumption in 33% of the buildings are lower than in the baseline year.
- 3.GHG emissions from electricity consumption in 17% of the buildings are significantly higher in the performance year compared to the baseline year.

Ajman University has secured the following achievements in emission reductions in the performance year (2023-2024), in reference to the baseline year (2021-2022):

- 1.The emission related to the consumption of LPG has been **reduced by 35.13%**.
- 2.The emission related to capital goods has been **reduced by 10%**.
- 3.The scope 1 emission has been **reduced by 12.10%**.
- 4.The scope 2 emission has been **reduced by 1%**.
- 5.The emission of scope 1 + scope 2 has been **reduced by 1.86%**.
- 6.The emission related to wastewater has been **reduced by 41.95%**.
- 7.The emission related to Plastic waste has been **reduced by 57.92%**.
- 8.The emission related to Food waste has been **reduced by 15.99%**.
- 9.The emission related to waste has been **reduced by 46%**
- 10.The emission related to business travel has been **reduced by 76.72%**.
- 11.The emission related to employee commuting has been **reduced by 3.40%**.

Summary of Scope 3 Findings

Scope 3 indirect GHG emissions attributed to Ajman University, occurred from the consumptions of upstream activities listed in the following table:

TABLE 3 .LIST OF UPSTREAM ACTIVITIES 2023 – 2024

Activity	Emission Sources	Status
Purchased goods and services	Food & Beverages, Printing Papers, Toilet Papers, Tissue Papers, Water and Cloud Services	Included
Capital goods	IT Equipment, Office Furniture, Medical Equipment	Included
Fuel -and energy-related activities	Transmission and Distribution (T&D) losses of purchased electricity	Included
Upstream T&D	T&D of purchased good and capital goods	Included
Waste generated in operations	Wastewater, General Waste, Medical Waste, Food Waste, Paper Waste	Included
Business travel	Travel and accommodation of employees/ contactors	Included
Employee commuting	Employee commuting from and to AU	Included



Reduction Targets

While direct operations (Scope 1) and purchased energy (Scope 2) are foundational to our carbon mitigation strategy, Ajman University recognizes that our true environmental impact extends far beyond our campus walls. Our most significant carbon footprint lies within our value chain—these are our Scope 3 emissions.

Scope 3 encompasses all indirect greenhouse gas (GHG) emissions, a complex web of activities from the extraction of raw materials to the end-of-life of the products we use. This includes:

- Upstream: Procurement of goods and services, capital equipment, fuel, and energy-related activities not covered in Scope 2, business travel, employee commuting, and waste generated in operations.
- Downstream: Transportation and distribution of our products, the use of sold products, end-of-life treatment of sold products, and investments.

Addressing Scope 3 is not just an add-on; it is a fundamental imperative for any institution serious about achieving net zero and building resilience against climate risks. The Greenhouse Gas Protocol categorizes these emissions to provide a complete picture of our contribution to global warming, driven by the rising atmospheric concentration of carbon dioxide, methane, and other gases like chlorofluorocarbons.

Our Integrated Strategy for Scope 3 Mitigation

Our commitment to a profound decrease of greenhouse gas emissions across our value chain is embedded in our core climate policy. We are moving beyond mere measurement to active mitigation and adaptation through a multi-faceted approach:

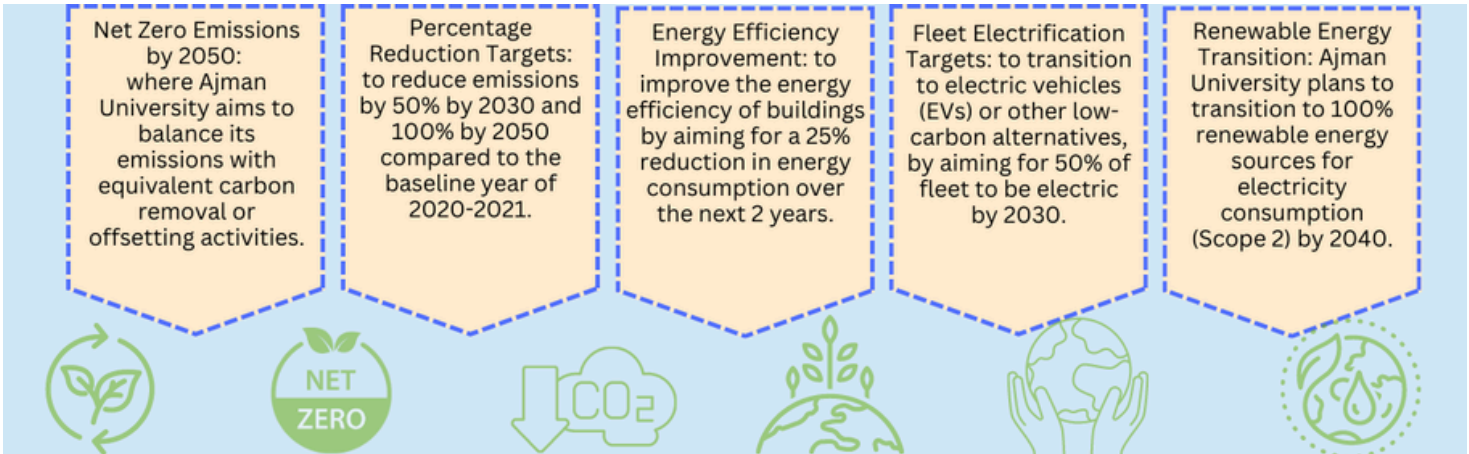
- Sustainable Procurement: We are leveraging our purchasing power to prioritize suppliers committed to energy efficiency, renewable energy, and zero-emissions logistics, thereby reducing embedded carbon emissions in our supply chain
- Advancing a Circular Economy: We are minimizing waste and promoting recycling and reuse across all operations, directly tackling emissions from landfill methane and resource extraction.
- Greening Our Commute and Travel: We are incentivizing low-carbon commuting for our staff and students and integrating sustainability criteria into our business travel policies.
- Investing in Natural Solutions: We champion urban forestry and green infrastructure on campus and in our community, enhancing natural carbon sequestration while providing cooling effects to counter rising temperature.
- Driving Innovation and Efficiency: Our research and operations are focused on energy conservation, the potential of carbon capture technologies, and a transition away from fossil fuels.

By analyzing a wide range of data and modeling various sustainability scenarios, we can make informed predictions and strategically allocate resources for maximum impact. This comprehensive effort is our proactive response to the threat of climate change disaster, ensuring we are part of the global solution.

Ajman University is committed to setting ambitious carbon reduction targets covering Scope 1, 2 and 3 emissions in alignment with the urgency to combat climate change. These targets vary in terms of their specific emission reduction goals, timelines, and strategies, but they all share a common aim of transitioning to a low-carbon economy and reducing dependence on fossil fuels. Ajman University is focusing on reduction targets for its Scope 3 emissions. These include emissions from business travel, procurement, waste, and other indirect sources. While more challenging to measure and influence, Scope 3 emissions represent a significant portion of our overall carbon footprint. We are implementing strategies to reduce Scope 3 emissions, such as promoting sustainable travel options, engaging with suppliers on their emissions performance, and minimizing waste and emissions throughout our supply chain. By taking a comprehensive approach to emissions reduction across all scopes, Ajman University is demonstrating its commitment to achieving carbon neutrality and contributing to a more sustainable future.

By achieving these targets, Ajman University will make a significant contribution to national and global efforts to limit warming to 1.5°C above pre-industrial levels, as recommended by the Intergovernmental Panel on Climate Change (IPCC). We are committed to tracking our progress transparently and to continually refining our strategies to ensure we meet our emissions reduction goals. This will involve regular monitoring and reporting of our emissions, as well as seeking opportunities for innovation and improvement in our sustainability practices.

Through our commitment to reducing Scope 1, 2, and 3 emissions, Ajman University is demonstrating its leadership in climate action within the higher education sector. We recognize that universities have a critical role to play in modeling sustainable practices, building awareness, and developing the solutions that will be needed to combat climate change. By achieving carbon neutrality, we aim to create a sustainable and resilient future for our students, staff, and the wider community.



Acknowledgements

Maya Haddad - Senior Sustainability Manager, report designer/ editor, and content writer

Rami Elhadi - Sustainability Coordinator and report contributor

Fatima Al Ali - Sustainability Officer, Content writer and report contributor

Moza Alsuwaidi - Student, designer, report editor, and content writer

We thank you for your
continued support in
our efforts to contribute
to the SDGs.



Contact

Ajman University
Office of Sustainability
Ajman- United Arab Emirates

<https://sustainablecampus.ajman.ac.ae/en>
sustainability@ajman.ac.ae
@au4sustainability