ANNUAL SUSTAINABILITY REPORT 2025

Author: Dr. Ing. Clyde Falzon Bouvett

Edited by: Ing. Louis Aquilina

12th November 2026

1. Executive Summary

1.1. Purpose of the Report

The Annual Sustainability Report serves as a comprehensive institutional benchmark for the Malta College of Arts, Science and Technology (MCAST). Its primary purpose is to document, evaluate, and communicate MCAST's environmental and operational performance across its campuses for the year 2025. By establishing a rigorous baseline, the report measures key resource impacts - specifically regarding electricity, water, waste, and mobility - while providing a structured framework to monitor progress, ensure accountability, and guide future sustainability initiatives in alignment with national and European targets.

1.2. Main Environmental Impacts

During the 2025 reporting period, MCAST's extensive vocational, educational, and operational activities generated notable environmental footprints across its campus infrastructure:

- **Energy & Emissions:** Total electricity consumption reached 2,964,980 kWh, resulting in 1,153 t CO_2-eq of greenhouse gas emissions based on Malta's national emission factor (389 g CO_2/kWh). On-site renewable energy generation contributed 145,755 kWh (on-site PV generation equivalent to approximately 5% of annual grid electricity consumption), while institutional fleet operations consumed 1,062 litres of diesel and 356 litres of unleaded petrol.
- **Water Consumption:** Total annual water consumption stood at 16,027,000 litres (16,027 m^3), entirely sourced from the municipal supply, with estimated upstream GHG emissions of 29.2 t CO_2-eq associated with municipal water production, calculated using published national energy-intensity and electricity emission-factor proxies."
- **Community Scale & Resource Use:** Serving a thriving campus population of 8,774 total MCAST full-time community (comprising 7,842 full-time students and 932 full-time employees), daily activities across teaching facilities, laboratories, workshops, and offices represent the core driver of resource demand and campus-wide waste generation.

1.3. Main Improvement Areas

To systematically address its environmental impacts and foster a greener institutional culture, MCAST has identified key operational improvement areas for future implementation:

- **Energy & Building Efficiency:** Expanding solar PV generation capacity, retrofitting high-efficiency LED lighting, installing smart meters and room occupancy sensors, optimizing HVAC systems, and upgrading thermal insulation and shading across older buildings.
- **Water Conservation:** Deploying low-flow plumbing fixtures, sensor and push taps, dual-flush toilets, rainwater harvesting systems, greywater reuse, and rigorous leak detection protocols.
- **Waste Management:** Formulating a comprehensive campus-wide waste management plan, integrating on-site suppliers (such as canteens and stationery shops), placing clearly labelled multi-stream separation bins, enhancing hazardous waste protocols, and installing drinking water fountains to phase out single-use plastics.
- **Sustainable Mobility & Engagement:** Promoting carpooling, expanding bicycle and scooter infrastructure, introducing EV charging stations, optimizing public transport

connections through commuting surveys, and embedding sustainability across governance, procurement, and curricula.

2. Contents

1. Executive Summary 1
1.1. Purpose of the Report 1
1.2. Main Environmental Impacts 1
1.3. Main Improvement Areas 1
3. Introduction 5
3.1. MCAST 5
3.2. Campus Overview 8
3.3. Student and Staff Population 9
3.4. Academic and Operational Functions 12
3.5. Facilities 12
3.6. Sustainability at MCAST 13
4. MCAST's Sustainability Policy 13
4.1. Current Environmental Policies 13
4.2. Proposed Environmental Sustainability Policy 14
4.3. Roles and Responsibilities 15
4.4. Alignment with National and EU Sustainability Policies 16
5. Methodology 16
5.1. Scope and Reporting Boundaries 16
5.1.1. Description of Scope of the Report 16
5.1.2. Description of the Reporting Boundaries 17
5.2. Data Collection Methods 18
5.2.1. Electricity Data 18
5.2.2. Water Consumption Data 18
5.3. Key Limitations and Assumptions of this Report 19
5.4. Key Performance Indicators (KPIs) 19
5.4.1. ii. Description of Key Performance Indicators (KPIs) for Future Reports 19
6. Environmental Performance Assessment 20
6.1. Energy 20
6.1.1. Electricity Consumption and Generation 20
6.1.2. Heat Consumption 20
6.1.3. Fuel Consumption 20
6.1.4. Other Energy Figures 21
6.1.5. Energy Indicators 21
6.1.6. Areas for Improvement 21
6.2. Water Management 22

6.2.1. Water Consumption 22
6.2.2. Water Sources 22
6.2.3. Other Water Figures 22
6.2.4. Water Indicators 22
6.2.5. Areas for Improvement 22
6.3. Waste Management 23
6.3.1. Waste Generation 23
6.3.2. Waste Separation Practices 23
6.3.3. Hazardous Waste Handling 23
6.3.4. Waste Management Indicators 23
6.3.5. Areas for Improvement 23
6.4. Transport & Mobility 24
6.4.1. Student and staff Commuting Patterns 24
6.4.2. Public Transport Accessibility 24
6.4.3. Institutional Vehicle Fleet 24
6.4.4. Transport and Mobility Greenhous Gas emissions 24
6.4.5. Transport and Mobility Indicators 25
6.4.6. Areas for improvement 25
6.5. Campus Buildings 25
6.5.1. Building Performance (old buildings) 25
6.5.2. Sustainable Construction (new buildings) 26
6.5.3. Possible Indicators 26
6.5.4. Areas for improvement 26
6.6. General Improvement Initiatives 26
7. Key Sustainability Actions and Projects 27
7.1. Environmental Actions 27
7.2. Social / Organisational Actions 27
7.3. Education / Research / Outreach Actions 28
8. Conclusions 28
8.1. Main Highlights for the Reporting Year 28
8.2. Sustainability Priorities for the Next Reporting Period 28
9. References 30

3. Introduction

3.1. MCAST

i. Brief overview about MCAST

The Malta College of Arts, Science and Technology (MCAST) was established in 2001 and has developed into one of Malta's leading vocational and professional education and training institution. Its mission is to provide universally accessible vocational and professional education and training with an international dimension, while remaining responsive to the needs of learners, industry, and the wider economy. Through this role, MCAST contributes directly to Malta's social and economic development by preparing students with practical, technical, and professional skills required across a broad range of sectors.

MCAST offers a wide range of learning pathways, from introductory certificate levels up to doctoral level qualifications, covering MQF/EQF Levels 1 to 8. The College provides over 200 (MCAST, 2026) full-time courses and more than 300 part-time vocational courses, supporting both initial education and lifelong learning. This broad academic offer allows learners to progress through different stages of education while gaining qualifications that are closely aligned with employment opportunities and sectoral needs (MCAST, 2026).

The College operates through specialised institutes and campuses which provide focused expertise in key areas of study. These include the Institute of Applied Sciences; the Institute for the Creative Arts; the Institute of Engineering and Transport; the Institute of Business Management and Commerce; the Institute of Community Services; and the Institute of Information and Communication Technology and the Institute for the Trades. In addition, the Gozo Campus supports access to vocational and professional education for students based in Gozo. MCAST's main campus is located in Paola, while other teaching and specialist facilities are situated in locations such as Mosta, Qormi, and Għajnsielem (MCAST, 2026).

A defining feature of MCAST is its strong relationship with industry. The College works closely with employers and stakeholders to ensure that its programmes remain flexible, relevant, and responsive to a changing labour market. Work-based learning, apprenticeships, entrepreneurship initiatives, applied research, and knowledge transfer activities form an important part of this approach. These links help students gain practical experience while supporting employers, including small and medium-sized enterprises, through training, innovation, and skills development (MCAST, 2026).

Within the context of this sustainability report, MCAST represents a significant educational and operational community, bringing together students, staff, teaching facilities, laboratories, workshops, offices, libraries, canteens, outdoor areas, and support services. Its scale and diversity of activities create both environmental impacts and opportunities for improvement. As a public education institution with a strong applied focus, MCAST is well positioned to promote sustainability not only through campus operations, but also through teaching, research, student engagement, industry collaboration, and awareness-raising across the wider community.

ii. Administration structure

MCAST is governed through a structured institutional framework that combines strategic oversight, executive leadership, academic administration, and operational support. **In accordance with the MCAST Act, 2023**, at the highest level, MCAST is governed by a Board of Governors, which provides institutional oversight and strategic direction. Executive leadership is led by the Principal and Chief Executive Officer, supported by central administrative and corporate functions responsible for areas such as strategy, legal affairs, data protection, communications, international affairs, European projects, capital projects, and institutional development (MCAST, 2026).

This structure is further supported by key institutional functions, including regulatory services, curriculum, and quality assurance, which contribute to the academic governance, regulatory compliance, development, and quality oversight of the College's educational provision. Academic and student-related administration is supported by the Office of the Registrar, working with institutes, centres, and support departments to manage academic processes, student records, course administration, and student services (MCAST, 2026).

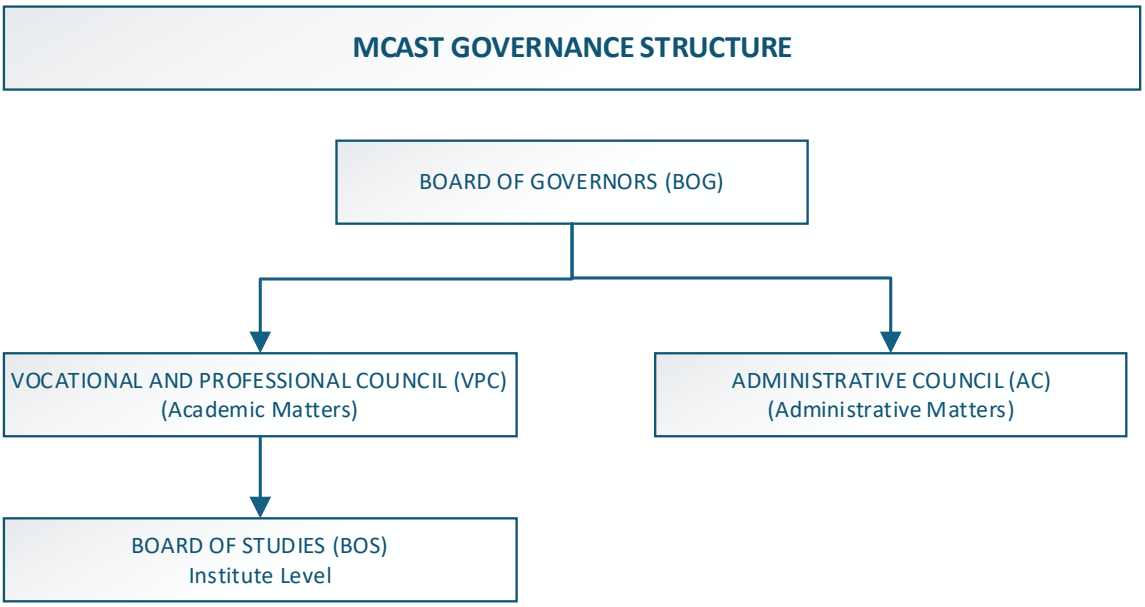
From a sustainability reporting perspective, this structure is important because environmental performance depends on coordinated action across governance, management, facilities, procurement, finance, communications, and academic functions. Clear governance arrangements support responsibility assignment, reliable data collection, and the integration of sustainability considerations into teaching, operations, infrastructure planning, and engagement with students and staff (MCAST, 2026).

Summary of MCAST's Administrative and Governance Structure Relevant to Sustainability Reporting

The main governance and administrative elements relevant to sustainability reporting are summarised in this section. This overview highlights the institutional functions that support accountability, data collection, decision-making, and the implementation of environmental improvement actions across MCAST.

1. **Board of Governors**
    - Provides strategic oversight, institutional governance, and high-level direction for the College.
    - Supports accountability and ensures that sustainability considerations can be reflected in institutional planning and decision-making.
2. **Principal and Chief Executive Officer**
    - Leads the executive management of MCAST and oversees the implementation of strategic priorities.
    - Provides leadership for coordinating sustainability-related actions across academic, administrative, and operational functions.
3. **Central Administrative and Corporate Functions**
    - Support institutional functions such as strategy, legal affairs, data protection, communications, international affairs, European projects, capital projects, and institutional development.
    - Contribute to regulatory compliance, internal coordination, stakeholder communication, and the integration of sustainability into corporate processes.

4. **Office of the Registrar**
    - Supports academic affairs, student records, course administration, registry functions, and student-related services.
    - Works with institutes, centres, and support departments to maintain consistency in academic processes and provide information relevant to student-related sustainability indicators.
5. **Institutes, Centres, and Support Departments**
    - Deliver academic programmes, student support, applied learning, research, and operational activities across the College.
    - Contribute to sustainability data collection, curriculum-related initiatives, awareness-raising, and the implementation of improvement actions at institute and departmental level.
6. **Facilities, Procurement, Finance, and Campus Services**
    - Manage campus operations, resource use, procurement, supplier coordination, finance-related controls, and infrastructure-related services.
    - Provide key operational data and practical support for monitoring environmental performance and delivering sustainability improvements across MCAST sites.



2.2 Statutory Governing Boards

According to Article 9 of the MCAST Act, 2023, the governing bodies of the College are:

- **Board of Governors** – The highest governing body of the College, responsible for strategic leadership, governance, financial oversight, policy direction and institutional accountability.

- **Vocational and Professional Council (VPC)** – Responsible for the general direction and governance of academic, vocational and professional education and training, including programmes of study, academic standards, quality of qualifications and curriculum development.

- **Administrative Council** – Responsible for overseeing administrative affairs, human resources planning, financial planning, communications, recruitment, policy implementation and operational management.

- **Boards of Studies** – Established for each academic Institute or Section and responsible for curriculum matters, academic planning, academic development, research proposals and Institute-level academic governance.

iii. Gender diversity in governance bodies

MCAST's official Gender Equality Plan 2022–2025 recognises gender balance in leadership and decision-making as one of its key priority areas. The Plan states that MCAST is committed to promoting equality of opportunity across its learning, teaching, research, and working environments, while supporting a culture based on respect, inclusion, equity, and excellence. This provides an important policy basis for considering gender diversity within governance and senior decision-making structures (MCAST, 2026).

The composition of the Board of Governors and the structure of the Principal's Office, as presented on MCAST's website, show that governance and administrative leadership include both board-level representation and senior management functions. For sustainability reporting, gender diversity in these bodies is relevant because inclusive governance can strengthen accountability, broaden perspectives in decision-making, and support fairer institutional policies (MCAST, 2026).

3.2. Campus Overview

i. Description of MCAST Campus

MCAST operates across four campuses which support its vocational, professional, and technical education provision as follows: the MCAST Main Campus in Paola; the Institute for the Creative Arts in Mosta; the Gozo Campus in Għajnsielem; and the Institute of Applied Sciences, Centre of Agriculture, Aquatics and Animal Sciences, in Qormi (MCAST, 2026).

The Paola Main Campus is the central campus of MCAST and is the main location for most full-time course delivery, excluding any specific courses which are delivered at the external campuses. It accommodates key academic, administrative, student-support, and operational functions, and therefore represents the principal campus area for assessing environmental performance within this sustainability report. Its concentration of teaching spaces, offices, workshops, laboratories, student facilities, circulation areas, and service functions makes it especially relevant for reviewing energy, water, waste, mobility, and building-related impacts (MCAST, 2026).

Figure 1 presents the Paola Campus plan. This plan provides a spatial reference for understanding the layout of the main campus and supports the identification of buildings, activity zones, access routes, and common areas that may be considered when collecting sustainability data and planning future environmental improvements (MCAST, 2026).

ii. Campus plan

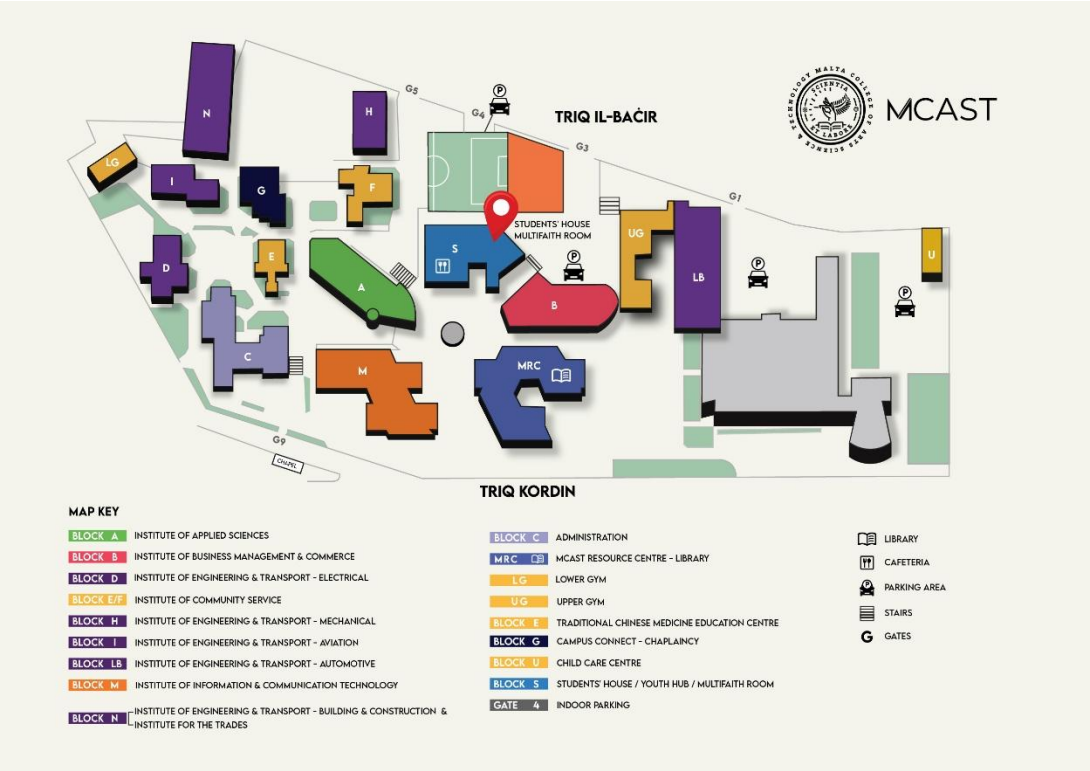


Figure 1 MCAST Paola Campus plan (MCAST, 2026)

3.3. Student and Staff Population

Figures for full-time employees, full-time students and the total MCAST full-time community for the period 2021 to 2025 are represented in Table 1, Table 2 and Table 3. The data show that the full-time student population increased steadily over the period, reaching 7,842 in 2025, while full-time employee numbers remained comparatively stable, with the highest value recorded in 2023. Overall, total MCAST full-time community increased from 7,201 in 2021 to 8,774 in 2025, confirming that students represent the largest share of the MCAST community and are therefore a key consideration when assessing resource use, campus services and sustainability impacts. This is represented in the graphs of figures included in Figure 2 and Figure 3.

Year	Full-time Employees			
	Male	Female	Other	Total
2025	473	458	1	932
2024	463	431	2	896

2023	507	475	1	983
2022	472	450	/	922
2021	452	427	/	879

Table 1 Number of full-time employees from 2021 to 2025

Year	Full-time Students			
	Male	**Female**	**Other**	**Total**
2025	4,325	3,516	1	7,842
2024	4,103	3,248	1	7,352
2023	3,955	3,062	1	7,018
2022	3,616	2,724	2	6,342
2021	3,655	2,665	2	6,322

Table 2 Number of full-time students from 2021 to 2025

Year	Full-time Employees	Full-time Students	Total MCAST Full-time Community
2025	932	7,842	8,774
2024	896	7,352	8,248
2023	983	7,018	8,001
2022	922	6,342	7,264
2021	879	6,322	7,201

Table 3 Total full-time employees and students from 2021 to 2025

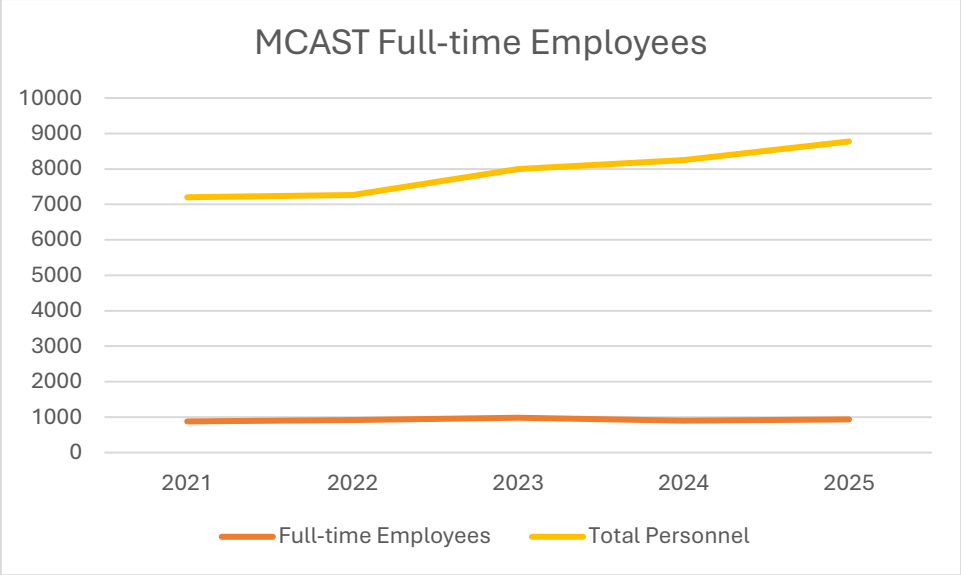


Figure 2 MCAST Full-time Employees

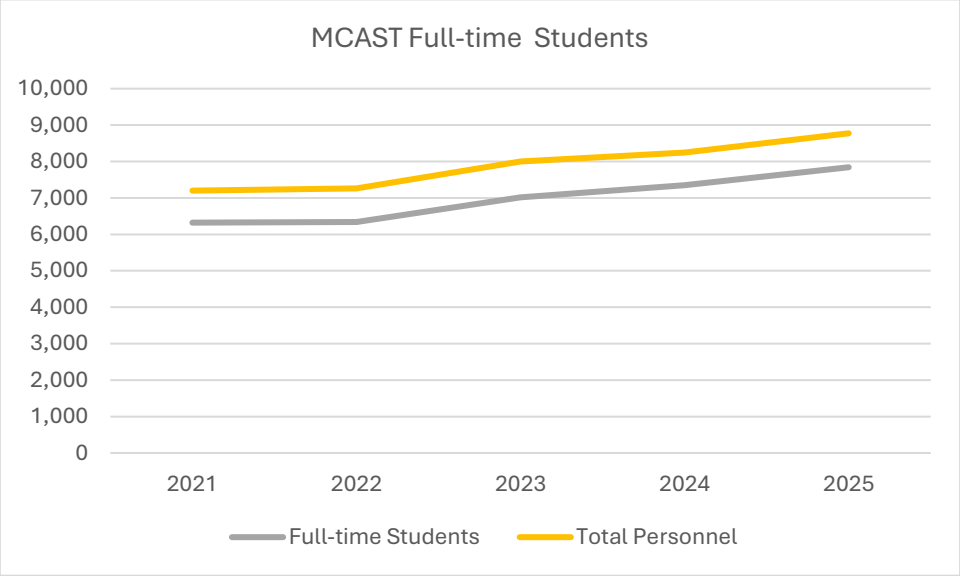


Figure 3 MCAST Full-time Students

3.4. Academic and Operational Functions

MCAST's core functions are summarised below (MCAST, 2026):

a. **Delivery of vocational, professional, and technical education** through full-time, part-time, and lifelong learning programmes from MQF Level 1 to Level 8.
b. **Academic teaching and learning** across specialised institutes, including applied sciences, creative arts, engineering and transport, business management and commerce, community services, information and communication technology, trades, and Gozo-based provision.
c. **Work-based learning, apprenticeships, internships, and employability-related activities** developed in collaboration with industry and employers.
d. **Research, innovation, applied research, knowledge transfer, and entrepreneurship** initiatives supporting students, industry, and wider society.
e. **Student support services**, including guidance, mentoring, wellbeing support, learning support, career guidance, library and learning resources, and international student services.
f. **Community, outreach, internationalisation, and stakeholder engagement** activities, including collaboration with local and international partners, employers, public entities, and the wider community.

To support these core activities, MCAST also carries out the following operational functions (MCAST, 2026):

g. **Administrative, governance, and corporate functions** supporting admissions, registry, finance, procurement, communications, quality assurance, legal affairs, projects, data protection, and institutional management.
h. **Campus operations and facilities management**, including the operation of teaching spaces, laboratories, workshops, offices, libraries, student areas, canteens, outdoor areas, parking, and support services.

3.5. Facilities

i. List of MCAST main facilities include (MCAST, 2026):
   a. **Teaching and learning spaces**, including lecture rooms, specialised training rooms, and study areas.
   b. **Specialised laboratories**, including ICT, computer, science, engineering, and other programme-related laboratory spaces.
   c. **Workshops and practical training areas** used for vocational, technical, engineering, trades, creative, and applied learning activities.
   d. **Libraries and learning resource centres**, including study spaces, computer access, printing, scanning, photocopying, and learning support resources.
   e. **Administrative and staff facilities**, including offices, academic offices, staff rooms, boardrooms, and meeting rooms.
   f. **Student and common facilities**, including student areas, canteen facilities, games room, auditorium, exhibition spaces, and other shared-use areas.

g. **Support and service facilities**, including storage areas, maintenance rooms, sanitary facilities, changing rooms, and operational support areas.
h. **External campus facilities**, including outdoor spaces, parking areas, access routes, and circulation areas.

3.6. Sustainability at MCAST

i. Main sustainability principles practiced at MCAST

MCAST's sustainability approach is reflected in its Green Commitment Eco Charter (MCAST. (2022, December) and its Strategic Plan 2022–2027. The Eco Charter identifies key environmental and social priorities, including reducing energy and water use, increasing efficiency, expanding renewable energy sourcing, reducing waste generation and paper use, separating waste for recycling, promoting circular economy practices, improving campus quality of life, strengthening health and safety, embedding sustainability within curricula and operations, creating greener campus spaces, supporting biodiversity, promoting lower-emission transport, and engaging stakeholders in MCAST's green journey (MCAST, 2026).

Within this sustainability report, these principles provide a practical framework for assessing MCAST's environmental performance across energy, water, waste, transport, buildings, procurement, teaching, research, and community engagement. They also support the College's wider strategic direction, which places emphasis on greener sustainability, digitalisation, modern infrastructure, work-based learning, applied research, innovation, and stronger links with industry and society.

ii. Sustainability-related training and capacity building

MCAST supports sustainability-related capacity building through formal education, applied research, project participation, awareness initiatives, and community engagement. Its academic offer includes environmental sustainability-related programmes, while research and innovation activities include projects addressing greenhouse gas emissions management, sustainable innovation, and industry-relevant solutions. These activities help build knowledge and practical skills among students and staff while supporting Malta's transition towards more sustainable economic and social practices (MCAST, 2026).

4. MCAST's Sustainability Policy

4.1. Current Environmental Policies

MCAST's commitment to sustainability is reflected in a range of institutional initiatives, including the Green Commitment Eco Charter (MCAST, 2022), which outlines key areas of environmental responsibility, such as energy efficiency, water conservation, waste management, sustainable transport, green spaces, biodiversity, stakeholder engagement and progress monitoring. These commitments are being further developed through ongoing initiatives, including the preparation

of dedicated Waste Management and Water Management policies. Together, these efforts demonstrate MCAST's evolving approach towards establishing a more comprehensive and structured institutional sustainability framework, while recognising that certain measures remain under development or are yet to be fully implemented. These commitments are supported by the MCAST Strategic Plan 2022–2027, which identifies greener sustainability and digitalisation as a transversal theme and links sustainability with modern infrastructure, quality education, applied research, innovation, work-based learning, governance, and community engagement (MCAST, 2021).

While these documents provide a strong foundation, MCAST is currently working towards a formal Sustainability Policy to consolidate existing commitments into one operational framework. The policy would define objectives, responsibilities, reporting requirements, performance indicators, and review arrangements so that sustainability is consistently embedded across all campuses, institutes, departments, services, and contracted activities.

4.2. Proposed Environmental Sustainability Policy

MCAST's environmental sustainability policy will address the College's environmental impacts in a comprehensive and integrated manner. It will cover a broad range of environmental areas, set clear commitments in practical and measurable sectors, and be supported by effective governance structures for implementation. Given MCAST's academic role in Malta, the policy will also promote the integration of environmental sustainability within the curriculum.

The proposed environmental sustainability objectives highlight MCAST commitment to:

i. **Use energy, water, and resources more efficiently**
   a. Reduce electricity and fuel use where practical.
   b. Reduce greenhouse gas emissions from campus operations.
   c. Reduce water consumption through efficient fixtures, monitoring, and good practice.
   d. Promote continuous improvement in how resources are used across MCAST sites.

ii. **Increase clean energy and improve buildings**
   a. Increase the use of renewable energy where technically and financially feasible.
   b. Improve the environmental performance of buildings and infrastructure.
   c. Consider energy efficiency when planning maintenance, refurbishment, and new projects.

iii. **Reduce and manage waste responsibly**
   a. Reduce waste at source where possible.
   b. Promote reuse, recycling, proper waste separation and handling.
   c. Ensure responsible disposal of residual waste.
   d. Apply safe procedures for hazardous waste generated in laboratories, workshops, and other relevant areas.

iv. **Buy goods and services more sustainably**
   a. Consider environmental impacts when purchasing goods and services.
   b. Include sustainability criteria in tenders and contracts where relevant.
   c. Encourage suppliers and contractors to support MCAST's environmental objectives.

v. **Promote more sustainable travel**
    a. Encourage walking, cycling, public transport, and carsharing.
    b. Support the gradual transition to lower-emission transport options.
    c. Monitor staff and student commuting patterns where possible.

vi. **Support green spaces and biodiversity**
    a. Protect and improve existing green areas.
    b. Expand green spaces where possible.
    c. Manage campus grounds in an environmentally responsible way.

vii. **Support sustainability in education and College life**
    a. Embed sustainability principles in teaching where relevant.
    b. Support applied research and student projects linked to sustainability.
    c. Encourage sustainability-related initiatives across wider College activities.

viii. **Raise awareness and encourage responsibility**
    a. Promote environmental responsibility among students and staff.
    b. Engage suppliers, contractors, and the wider College community.
    c. Use campaigns, guidance, and communication to support positive behaviour change.

4.3. Roles and Responsibilities

The implementation of the Sustainability Policy will be supported by clearly defined responsibilities at strategic, management, and operational levels.

High level

The Board of Governors will provide strategic oversight for the Sustainability Policy and ensure that sustainability is integrated into institutional planning, resource allocation, governance, and accountability arrangements.

Medium to high level

The Principal and Chief Executive Officer, supported by senior management, will lead implementation of the policy and ensure coordination between institutes, centres, corporate services, facilities, procurement, finance, communications, academic departments, and student-support functions.

On the ground implementation

MCAST will appoint Sustainability Coordinators for each College building. These coordinators should support the establishment of a cross-functional Sustainability Committee responsible for implementation, data collection, awareness-raising, project prioritisation, and regular reporting to senior management and the Board of Governors.

4.4. Alignment with National and EU Sustainability Policies

The recommended Sustainability Policy will align with Malta's Sustainable Development Strategy for 2050, which translates Malta's sustainable development vision into strategic direction for environmental protection and socio-economic development (MEER , 2024). It should also support the national transition towards a climate-neutral green and blue economy, sustainable consumption and production, protection of natural capital, sustainable urban development, smart mobility, education, wellbeing, digital transformation, and social fairness (Government of Malta, 2026).

At EU level, the policy will support the European Green Deal by contributing to climate action, resource efficiency, circular economy practices, clean energy, sustainable mobility, pollution prevention, biodiversity protection, and a fair transition (European Commission, 2019). It will also reflect European higher-education guidance which encourages universities and colleges to integrate sustainability across governance, teaching, research, campus operations, procurement, mobility, infrastructure, and stakeholder engagement (European University Association, 2023).

5. Methodology

5.1. Scope and Reporting Boundaries

5.1.1. Description of Scope of the Report

The *MCAST Annual Sustainability Report 2025* establishes a comprehensive institutional baseline for the Malta College of Arts, Science and Technology (MCAST), documenting its environmental, operational, and governance performance for the 2025 reporting year. Grounded in MCAST's *Green Commitment Eco Charter* and the *Strategic Plan 2022–2027*, the report evaluates key resource impacts and identifies priority areas for continuous improvement in alignment with *Malta's Sustainable Development Strategy for 2050*, *Malta Vision 2050*, and the *European Green Deal*.

Specifically, the thematic and operational scope of this report covers:

- **Environmental Performance & Resource Assessment:** Quantitative and qualitative evaluation across five core operational domains:
    1. **Energy:** Grid electricity consumption, on-site renewable solar photovoltaic (PV) generation, heat consumption, and associated greenhouse gas CO_2-eq emissions.
    2. **Water Management:** Municipal water consumption, water sourcing profiles, per-capita intensity indicators, and indirect emissions associated with desalination energy intensity.
    3. **Waste Management:** Institutional waste streams (general, recyclable, organic, and hazardous waste), segregation practices, and disposal protocols *(currently under institutional review for baseline quantification)*.
    4. **Transport & Mobility:** Institutional maintenance fleet fuel consumption (diesel and unleaded petrol), alongside framework indicators for staff and student commuting patterns and public transport accessibility.

5. **Campus Buildings:** Energy performance assessments of existing legacy infrastructure and sustainable construction considerations for new developments.

- **Institutional & Governance Context:** Overview of MCAST's academic and operational functions, administrative and governance structures (Board of Governors, Office of the Principal and CEO, Registrar, Institutes, and Campus Services), gender diversity in leadership, and the proposed *Environmental Sustainability Policy*.
- **Community Reach:** The report accounts for MCAST's active full-time community of **8,774 total** MCAST full-time community in 2025, comprising **7,842 full-time students** and **932 full-time employees**, which forms the basis for per-capita resource intensity metrics.

5.1.2. Description of the Reporting Boundaries

The reporting boundaries define the physical sites, operational activities, and data inclusions accounted for within this 2025 baseline assessment:

- **Geographical and Physical Boundaries:** While MCAST operates across four primary locations in Malta and Gozo—the **MCAST Main Campus in Paola**, the **Institute for the Creative Arts in Mosta**, the **Gozo Campus in Għajnsielem**, and the **Centre of Agriculture, Aquatics and Animal Sciences in Qormi -** the **Paola Main Campus** serves as the principal physical boundary and focal point for this baseline assessment. As the central hub for most full-time course delivery, specialised workshops, laboratories, administrative offices, student facilities, and support services, the Paola Main Campus represents the primary concentration of MCAST's environmental footprint. Where building-level sub-metering is available (such as electricity consumption and PV generation across Applied Science, Auto Yard, Lower Campus Yard, and the Underground Carpark), data is disaggregated accordingly; site-wide utility figures reflect total metered supply within the reported campus boundary.
- **Operational and Organisational Boundaries:** The report covers activities under the direct operational control of MCAST, encompassing academic teaching spaces, specialised laboratories, vocational workshops, libraries, administrative offices, common areas, and maintenance fleet operations. Third-party and contracted on-site services (such as canteen operators and stationery suppliers) are identified within the broader campus ecosystem for future waste management integration, though their independent operational data (Scope 3) falls outside the current quantitative baseline.
- **Temporal and Data Boundaries:**
    - **Reporting Period:** All baseline activity data (energy, water, fleet fuel, and full-time population figures) corresponds to the **2025 calendar/reporting year**.
    - **Emission Factors:** Where 2025 national emission factors were not yet published at the time of compilation, the latest official 2024 national figures from the Regulator for Energy and Water Services (REWS) and the Water Services Corporation (WSC) were applied to ensure methodological consistency.
    - **Exclusions & Data Gaps:** Quantitative datasets currently undergoing institutional review or infrastructure deployment—specifically building-level water sub-metering, backup generator fuel logs, full campus waste tonnage, and student/staff commuting modal split surveys—are explicitly noted as baseline limitations and earmarked for inclusion in subsequent reporting cycles.

5.2. Data Collection Methods

To establish an accurate and verifiable baseline for the 2025 reporting year, environmental activity data was compiled from primary operational records, direct meter readings, and official utility billing statements provided by MCAST's Facilities, Finance, and Campus Services departments:

i. **Energy (Electricity Consumption & Generation):** Total grid electricity consumption and building-level consumption figures (Applied Science, Auto Yard, Lower Campus Yard, and Underground Carpark) were obtained from official utility bills and main/sub-meter readings. On-site renewable electricity generation from installed solar photovoltaic (PV) systems was recorded directly via inverter/generation meter readings.
ii. **Water Management:** Total annual campus water consumption was derived from official municipal utility bills and main supply meter readings issued by the Water Services Corporation (WSC). Because building-level water sub-metering is not yet installed, consumption is reported on a consolidated campus-wide basis.
iii. **Transport & Mobility (Institutional Fleet):** Fuel consumption for MCAST's maintenance department vehicles (diesel and unleaded petrol) was compiled from internal fuel dispensing logs, purchase receipts, and fleet operational records. *(Data collection mechanisms for staff and student commuting patterns are currently being developed via institutional travel surveys.)*
iv. **Waste Management & Campus Buildings:** Qualitative operational descriptions were gathered through consultations with Campus Services and Facilities management. Quantitative waste weighing records and building-level energy audit datasets are currently under institutional review and will be standardised in future reporting cycles using dedicated data collection templates.

5.2.1. Electricity Data

Electricity consumption environmental impacts

Greenhouse gas emissions from electricity consumption are calculated using Malta's electricity emission factor of 389 g CO_2/kWh, as reported by the Regulator for Energy and Water Services for electricity supplied to end users in 2024 (REWS, 2025).

Where 2025 emission factors were not available, the latest published national emission factors are applied.

GHG emissions (t $CO_{2\text{-eq}}$) = Electricity consumption (kWh) × electricity emission factor (t CO_2/kWh)

= 2,964,980kWh × 0.000389 t CO_2/kWh

= 1,153 t $CO_{2\text{-eq}}$

5.2.2. Water Consumption Data

Water production environmental impacts

Estimated upstream GHG emissions associated with municipal water production were calculated using published national water-production energy-intensity and electricity emission-factor proxies.According to the Water Services Corporation, the average annual specific energy consumption for water production was 4.68 kWh/m^3 in 2024 (WSC, 2024). The same emission

factor of 389 g CO_2/kWh was then used to estimate the associated greenhouse gas emissions (REWS, 2025).

Where 2025 emission factors were not available, the latest published national emission factors are applied.

GHG emissions (t $CO_{2\text{-eq}}$) = Water consumed (m^3) × water production energy intensity (kWh/m^3) × electricity emission factor (t CO_2/kWh)

= 16,027 m^3 × 4.68 kWh/m^3 × 0.000389 t CO_2/kWh

= 29.2 t $CO_{2\text{-eq}}$

5.3. Key Limitations and Assumptions of this Report

As MCAST's inaugural baseline assessment, this report is subject to specific data limitations and methodological assumptions that inform the interpretation of results and guide future monitoring improvements:

- **Emission Factor Proxies:** Because official 2025 national emission factors were not yet published at the time of report compilation, 2024 national figures were assumed as representative proxies—specifically Malta's electricity emission factor of 389 g CO_2/kWh (REWS, 2025) and the Water Services Corporation's average water production energy intensity of 4.68 kWh/m^3 (WSC, 2024).
- **Sub-Metering & Granularity Constraints:** While electricity data is disaggregated across four main metered zones, building-level sub-metering is not yet available across all campus blocks or for water distribution, requiring water consumption to be assessed at an aggregate campus level.
- **Datasets Under Review:** Certain operational streams - total waste tonnage by stream (organic, recyclable, residual, and hazardous), and building-specific floor-area energy intensities - remain under institutional review and are excluded from quantitative totals in this baseline edition.
- **Per-Capita Normalisation & Commuting Scope:** Per-capita resource intensity indicators (such as kWh and litres per person) are calculated using full-time student and staff headcount (8,774 total MCAST full-time community) and do not separately weight part-time learners or external campus visitors. Additionally, indirect emissions from daily staff and student commuting are currently excluded pending the rollout of campus-wide mobility surveys.

5.4. Key Performance Indicators (KPIs)

5.4.1. Description of Key Performance Indicators (KPIs) for Future Reports

To track year-on-year environmental progress against this 2025 baseline and support data-driven campus management, future MCAST sustainability reports will monitor a standardised set of core Key Performance Indicators (KPIs) across all operational domains:

- **Energy KPIs:** Total annual electricity consumption (kWh), energy consumption per full-time student and staff member (kWh/capita), share of on-site renewable electricity generation (%), and total energy-related greenhouse gas emissions (CO_2/kWh-eq).
- **Water Management KPIs:** Total annual water consumption (litres and m^3), water consumption per full-time student and staff member (litres/capita), and indirect water-related greenhouse gas emissions (CO_2/kWh-eq).
- **Waste Management KPIs:** Total waste generated (tonnes), waste generation disaggregated by stream (food/organic, recyclables, residual, and hazardous waste), and overall campus recycling/recovery rate (%).
- **Transport & Mobility KPIs:** Staff and student commuting modal split (% private car, public transport, walking, cycling, and carpooling), estimated annual commuting and institutional fleet emissions (CO_2-eq), and the proportion of low-emission or electric vehicles in the institutional fleet (%).
- **Campus Buildings KPIs:** Building-level energy use intensity (kWh/m^2/year), percentage energy reduction achieved following retrofit or refurbishment works, building-level renewable energy contribution (%), and Energy Performance Certificate (EPC) ratings where available.

6. Environmental Performance Assessment

6.1. Energy

6.1.1. Electricity Consumption and Generation

i. Total Electricity consumption (kWh)in 2025: **2,964,980**
ii. Total Electricity generation (kWh)in 2025: **145,755**
iii. Electricity consumption and generation (kWh) per building

Building	Electricity Consumption (kWh)	Electricity Generation (kWh)
Applied Science	608,600	34,400
Auto Yard	162,900	71,344
Lower Campus Yard	942,480	40,011
Underground Carpark	1,251,000	/
Grand Total	**2,964,980**	**145,755**

Table 4 Electricity consumption and Generation per building

6.1.2. Heat Consumption

i. No heat consumption at MCAST campus

6.1.3. Fuel Consumption

i. Total fuel consumption by type by generators installed on campus

ii. Total fuel consumption by type by any other source on campus

Fuel consumption data for backup electrical generators and any other stationary fuel-burning equipment installed across MCAST's campus facilities is currently under institutional review and is therefore excluded from the quantitative 2025 energy baseline. Moving forward, MCAST's Facilities and Campus Services departments are establishing standardised fuel dispensing logs and maintenance records to systematically track generator runtime and fuel refilling by type (e.g., diesel) for inclusion in future reporting cycles. (Note: Fuel consumed by MCAST's mobile maintenance vehicle fleet is recorded separately under Section 6.4.3, Institutional Vehicle Fleet).

6.1.4. Other Energy Figures

i. Share of renewable energy (%) is **4.9%**
ii. Total energy consumption (kWh) per full-time student and staff is **338 kWh**
iii. Total emissions generated by energy consumption in $CO_{2\text{-}eq}$ is **1,153 t $CO_{2\text{-}eq}$**

6.1.5. Energy Indicators

i. Total energy consumption (kWh)
ii. Total energy consumption (kWh) per full-time student and staff
iii. On-site PV generation as a percentage of annual grid electricity consumption (%)
iv. (%)
v. Total emissions generated by energy consumption in $CO_{2\text{-}eq}$

6.1.6. Areas for Improvement

i. Solar PV servicing and expansion
ii. LED lighting retrofitting
iii. Smart metering
iv. HVAC servicing and optimization (Making a heating, ventilation, and air conditioning system operate more efficiently, more consistently, and more in line with how a building is used.)
v. Installation of room occupancy sensors
vi. Building energy management systems
vii. Improved insulation and shading measures
viii. Regular maintenance of air-conditioning systems
ix. Replacement of inefficient equipment and appliances
x. Energy awareness campaigns for staff and students
xi. Time and temperature controls for lighting and cooling systems

6.2. Water Management

6.2.1. Water Consumption

i. Total water consumption in (Litres) in 2025; **16,027,000L (16,027m^3)**
ii. Water consumption in (Litres) by building is not available

6.2.2. Water Sources

i. Campus water sources
    a. Government supply: 100%
    b. On campus reservoirs: 0%
    c. Other sources: 0%

6.2.3. Other Water Figures

i. Total annual water consumption per full-time student and staff is **1,826L**
ii. Estimated upstream GHG emissions associated with municipal water production: 29.2 t $CO_{2\text{-eq}}$
iii.

6.2.4. Water Indicators

i. Total water consumption in (L)
ii. Water use per full-time student and staff
iii. Estimated upstream GHG emissions associated with municipal water production (t CO_2-eq)

6.2.5. Areas for Improvement

i. Installation of Low-flow fixtures
ii. Installation of Smart meters
iii. Expand Rainwater harvesting measures
iv. Greywater reuse
v. Leak detection and preventive maintenance
vi. Installation of dual-flush toilets
vii. Sensor taps or push taps
viii. Water-efficient landscaping with drought-resistant plants
ix. Scheduled irrigation during cooler hours
x. Regular monitoring of water consumption by building
xi. Awareness campaigns on water conservation for staff and students

6.3. Waste Management

MCAST is currently in the process of establishing a standardised, campus-wide framework to systematically monitor, weigh, and manage waste streams across its facilities. As quantitative waste generation records are still being consolidated as part of this institutional setup, baseline tonnage figures are not included in the 2025 assessment. The following subsections outline the operational structure, segregation protocols, hazardous waste procedures, performance indicators, and targeted improvement actions being implemented to govern MCAST's upcoming waste management activities.

6.3.1. Waste Generation

i. Total waste generated
ii. Waste generation measured per building basis
iii. Waste generation measured by type basis (food, recyclables, glass and residual)
iv. Waste generation measured according to hazardous nature of the waste by building. Examples include electronics, chemicals, engine oils, paints, pesticides, batteries and others.

6.3.2. Waste Separation Practices

i. Description of waste separation practices at MCAST

6.3.3. Hazardous Waste Handling

i. Description of hazardous waste handling at MCAST

6.3.4. Waste Management Indicators

i. Total waste generated
ii. Waste generation measured by type basis (food, recyclables, residual)
iii. Hazardous waste generated
iv. Total Recycling rate (quantity of waste directed for recycling/proper management)

6.3.5. Areas for Improvement

i. Prepare and implement a campus-wide waste management plan for MCAST covering all waste generated.
ii. Integrate all onsite suppliers such as canteen and stationery to MCAST waste management plan.
iii. Install clearly labelled waste separation bins in classrooms, corridors, offices, laboratories, workshops, and common areas.
iv. Provide targeted awareness guidance for students, staff, cleaners, and service providers on correct waste separation practices.
v. Strengthen cooperation with cleaning staff to ensure that separated waste streams remain segregated during collection.

vi. Weigh and monitor the waste generated and source sorted.
vii. Ensure collection is carried out by registered waste collectors and that disposal or recovery records are retained.
viii. Promote paperless administration and reduce unnecessary printing across academic and administrative departments.
ix. Establish dedicated collection points and procedures for hazardous waste, electronic waste, batteries, and printer cartridges.
x. Improve internal signage and communication materials to support consistent waste segregation across all buildings.
xi. Install drinking water fountains to encourage the use of refillable bottles and reduce reliance on single-use plastics on campus.

6.4. Transport & Mobility

6.4.1. Student and staff Commuting Patterns

i. Survey data will be collected to identify the transport mode used by students and staff when travelling to the MCAST campus, including the power source of any private vehicle and each respondent's place of residence.
ii. For respondents who do not use public transport, the survey should also ask them to explain the reasons for this choice.

6.4.2. Public Transport Accessibility

i. Feedback from student and staff surveys should be discussed with public transport stakeholders to help improve the public transport system and encourage its use for travel to the college.

6.4.3. Institutional Vehicle Fleet

i. Total fuel consumption in litres by type by MCAST maintenance department fleet
    - Diesel **1,062L**
    - Unleaded Petrol **356L**

6.4.4. Transport and Mobility Greenhous Gas emissions

i. Estimated commuting-related greenhouse gas emissions ($CO_{2\text{-eq}}$/year)
    - Staff mobility
    - Student mobility
ii. Estimated greenhouse gas emissions ($CO_{2\text{-eq}}$/year) generated by MCAST fleet (business travel)

6.4.5. Transport and Mobility Indicators

i. Modal split by transport mode (% private car, bus, walking, cycling, carpooling, and other modes)
ii. Estimated commuting-related greenhouse gas emissions (CO_2-eq/year)
    - Staff mobility
    - Student mobility
iii. Estimated greenhouse gas emissions (CO_2-eq/year) generated by MCAST fleet (business travel)
iv. Percentage of low-emission or electric vehicles in the institutional fleet

6.4.6. Areas for improvement

i. Incentivise carpooling among staff and students.
ii. Provide secure and accessible bicycle and scooter parking facilities.
iii. Install electric vehicle charging infrastructure on campus.
iv. Promote flexible working and learning arrangements, where operationally feasible, to reduce commuting demand.
v. Work with public transport stakeholders to improve route coverage, service frequency, and connections to campus.
vi. Introduce awareness campaigns to encourage the use of public transport, walking, cycling, and carpooling.
vii. Encourage the gradual transition of the institutional fleet to low-emission or electric vehicles.
viii. Monitor commuting patterns regularly through staff and student surveys.
ix. Consider reserved parking measures or incentives that favour carpooling and low-emission vehicles.

6.5. Campus Buildings

6.5.1. Building Performance (old buildings)

MCAST is committed to systematically evaluating and upgrading the environmental efficiency of its existing building stock across its campuses. As a foundational step, the College plans to conduct structured energy performance assessments and building-level audits across its older facilities to establish accurate consumption baselines and identify key areas of thermal and electrical loss. Following these assessments, MCAST will implement targeted, building-specific improvement plans—prioritising passive cooling measures (such as shading, solar control, and natural ventilation), enhanced thermal insulation and glazing, high-efficiency LED lighting retrofits, occupancy sensors, HVAC system optimisation, and the adoption of building energy management systems (BEMS) to reduce overall energy intensity.

6.5.2. Sustainable Construction (new buildings)

In alignment with its *Strategic Plan 2022–2027*, the proposed *Environmental Sustainability Policy*, and national and European green building standards, MCAST integrates sustainable construction principles into the planning, design, and development of new campus buildings and capital projects. These initiatives focus on incorporating high thermal envelope performance, energy-efficient lighting and HVAC technologies, smart metering and automated building controls, and on-site renewable energy generation (such as solar photovoltaic installations) where technically and financially feasible. Additionally, new developments are designed to support water conservation, accessibility, natural daylighting, and greener surrounding campus spaces to minimise long-term operational footprints.

6.5.3. Possible Indicators

i. Energy intensity by building (kWh/m^2/year)
ii. Percentage reduction in energy use following retrofit or refurbishment works
iii. Renewable energy contribution at building level (%)
iv. Building energy rating or energy performance certificate result, where available

6.5.4. Areas for improvement

i. Implement passive cooling measures, including shading, solar control, and natural ventilation improvements where feasible.
ii. Upgrade lighting systems to high-efficiency technology.
iii. Install occupancy sensors and time controls for lighting and air-conditioning systems.
iv. Improve the thermal performance of buildings through better insulation, glazing, and sealing of air leaks.
v. Optimise HVAC systems through regular maintenance, calibration, and improved operating schedules.
vi. Adopt building energy management systems to improve control and monitoring.
vii. Replace inefficient equipment and appliances with energy-efficient alternatives.
viii. Incorporate energy performance criteria into refurbishment and maintenance projects.
ix. Expand on-site renewable energy generation where technically and financially feasible.
x. Promote energy-saving awareness and good operating practices among staff and students.
xi. Establish building-specific improvement plans based on audit findings and performance data.

6.6. General Improvement Initiatives

i. Introduce green areas and natural shading across the campus.
ii. Adopt a Sustainable Procurement Policy for MCAST.
iii. Further integrate sustainability into the curriculum and provide opportunities for practical, hands-on learning.

iv. Organise sustainability events, awareness campaigns, and capacity-building activities for students, staff, and the wider public.
v. Collaborate with private companies, government entities, NGOs, environmental organisations, and other stakeholders to support sustainability initiatives, research dissemination, CSR opportunities, and participation in local and European projects.

7. Key Sustainability Actions and Projects

During the 2025 reporting period, MCAST translated its *Green Commitment Eco Charter* and *Strategic Plan 2022–2027* into operational, organisational, and academic initiatives across its campuses. Below is a summary of key actions implemented across environmental, social/organisational, and educational domains.

7.1. Environmental Actions

- **On-Site Renewable Energy Generation:** Operated and monitored rooftop and campus solar photovoltaic (PV) installations across key zones—including the Auto Yard (71,344 kWh), Lower Campus Yard (40,011 kWh), and Applied Science (34,400 kWh) - generating a combined 145,755 kWh of clean electricity in 2025 and offsetting approximately 56.7 t CO_2-eq (4.9% of total campus electricity demand).
- **Institutional Environmental Baseline & Metering Consolidation:** Established MCAST's inaugural structured environmental baseline across electricity, water, and maintenance fleet fuel consumption, disaggregating electricity data across four major campus zones to identify high-load areas (such as the Underground Carpark and Lower Campus Yard) for targeted efficiency interventions.
- **Institutional Fleet & Campus Mobility Planning:** Monitored fuel consumption across the MCAST maintenance vehicle fleet (1,062 L diesel and 356 L unleaded petrol) and initiated the design of a campus-wide staff and student commuting survey to assess modal splits and guide future public transport and low-emission mobility measures.

7.2. Social / Organisational Actions

- **Gender Equality & Inclusive Governance Frameworks:** Implemented MCAST's institutional *Gender Equality Plan*, actively promoting gender balance, equity, and inclusive representation across senior management, academic leadership, and governance bodies (supporting a diverse community of 932 full-time employees and 7,842 full-time students in 2025).
- **Development of a Consolidated Environmental Sustainability Policy:** Initiated the drafting of a formal, institution-wide *Environmental Sustainability Policy* to unify the *Green Commitment Eco Charter* with clear operational targets, building-level Sustainability Coordinators, and a cross-functional Sustainability Committee.
- **Student Wellbeing & Holistic Support Services:** Expanded comprehensive student support structures - including mentoring, career guidance, wellbeing services, learning support, and accessible campus facilities (such as Campus Hub, Campus Connect, the Multifaith Room, and the Child Care Centre) - to foster an inclusive and supportive learning and working environment.

7.3. Education / Research / Outreach Actions

- **Integration of Sustainability in Vocational Curricula:** Embedded environmental sustainability, resource efficiency, and green transition principles across specialised vocational and technical programmes (MQF Levels 1 to 8), equipping learners with practical skills aligned with Malta's green and blue economy needs.
- **Applied Research & Industry Knowledge Transfer:** Supported applied research, student-led innovation projects, and industry collaborations focused on greenhouse gas management, sustainable technologies, and practical solutions for local enterprises and SMEs.
- **Stakeholder & European Network Engagement:** Collaborated with national authorities, employers, NGOs, and European partners through work-based learning, apprenticeships, and European projects aligned with *Malta's Sustainable Development Strategy for 2050* and the *European Green Deal*.

8. Conclusions

8.1. Main Highlights for the Reporting Year

The *MCAST Annual Sustainability Report 2025* marks a foundational milestone in the College's commitment to transparent environmental stewardship, institutional accountability, and sustainable campus operations. Serving a thriving academic and operational community of **8,774 full-time** MCAST full-time community (7,842 full-time students and 932 full-time employees), MCAST successfully established its inaugural quantitative baseline across core resource areas:

- **Energy & Renewable Generation:** Total campus electricity consumption stood at 2,964,980 kWh (338 kWh per full-time student and staff member), corresponding to 1,153 t CO_2-eq in greenhouse gas emissions. On-site solar photovoltaic installations generated 145,755 kWh of clean electricity—meeting 4.9% of total campus electricity demand—with zone-level metering providing actionable insights across key campus blocks.
- **Water & Fleet Monitoring:** Total annual water consumption was recorded at 16,027,000 litres (16,027m^3, or 1,826 litres per capita), with estimated upstream GHG emissions associated with municipal water production of 29.2 t CO_2-eq.", while institutional maintenance fleet fuel usage was benchmarked at 1,062 litres of diesel and 356 litres of unleaded petrol.
- **Governance & Educational Integration:** MCAST strengthened inclusive governance through its *Gender Equality Plan*, initiated a consolidated *Environmental Sustainability Policy*, and continued embedding sustainability principles across vocational curricula, applied research, and industry collaborations aligned with *Malta's Sustainable Development Strategy for 2050* and the *European Green Deal*.

8.2. Sustainability Priorities for the Next Reporting Period

Building upon the 2025 baseline and identified data gaps, MCAST will focus on two overarching priorities for the next reporting cycle:

1. **Formalising Governance & Expanding Data Granularity:** Adopt the proposed *Environmental Sustainability Policy* - establishing building-level Sustainability

Coordinators and a cross-functional Sustainability Committee - while deploying standardised data collection templates, sub-metering, waste-weighing protocols, and staff/student commuting surveys to close current quantitative gaps in waste, generator fuel, and mobility emissions.

2. **Accelerating Resource Efficiency & Campus Infrastructure Upgrades:** Roll out targeted operational interventions across campus buildings, prioritising the expansion of solar PV capacity, high-efficiency LED lighting and HVAC optimisation, water-saving fixtures and rainwater/greywater measures, and a structured campus-wide waste segregation system to measurably reduce MCAST's environmental intensity year-on-year.

9. References

European Commission. (2019, December 11). *Communication on the European Green Deal (COM(2019)*. Retrieved from https://commission.europa.eu/publications/communication-european-green-deal_en

European University Association. (2023). *A Green Deal roadmap for universities*. Retrieved from https://www.eua.eu/publications/reports/a-green-deal-roadmap-for-universities.html

Government of Malta. (2026). *Malta Vision 2050*. Retrieved from https://maltavision.mt/wp-content/uploads/2026/03/MALTA-VISION-2050.pdf

MCAST. (2021). *MCAST Strategic Plan 2022-2027 - A community College for All*. Retrieved from https://mcast.edu.mt/strategic-plan-2022-2027/

MCAST. (2022, December). *Our Green Commitment - The MCAST ECO Charter*. Retrieved from https://mcast.edu.mt/wp-content/uploads/MCAST-GREEN-COMMITMENT-ECO-CHARTER-2.pdf

MCAST. (2026, July). Retrieved from MCAST Web Site: https://mcast.edu.mt/

MCAST. (2026, July). *MCAST Gender Equity Plan*. Retrieved from MCAST Web Site: https://mcast.edu.mt/wp-content/uploads/MCAST_GEP_2026-2030_approved.pdf

MCAST. (2026, August 1). *MCAST Main webpage*. Retrieved from https://mcast.edu.mt/

MEER . (2024). *Malta Sustainable Development Strategy 2050*. Retrieved from https://sustainabledevelopment.gov.mt/wp-content/uploads/2024/06/Maltas-Sustainable-Development-Strategy-for-2050-1.pdf

REWS. (2025). *2025 National Report of the Regulator for Energy and Water Services to the European Commission on the Electricity and Natural Gas sectors in Malta.* Malta: Regulator for Energy and Water Services (REWS).

WSC. (2024). *Water Services Corporation - Annual Report 2024.* Luqa: Water Services Corporation .