UNIVERSITY OF CARTHAGE

Université de Carthage

SUSTAINABILITY REPORT

2024 – 2025

Committed to Sustainable Excellence

Aligned with International Standards

GRI Standards 2021 | UN SDGs 2030 | QS Sustainability

33,549	3,571	1,070	5,104
Studentsenrolled	Academic staff	Sustainability publications	International collaborations

Tunis, Tunisia | 2026

Comité RSE| www.ucar.tn

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President's Message

The University of Carthage is navigating a defining decade. In a world reshaped by climate crises, structural inequalities, and digital transformation, our institution has made a deliberate — and strategic — choice: to place sustainability at the very heart of its identity.

This report represents our most rigorous public commitment to date. It follows in the tradition of the world's leading universities, which regard sustainability reporting not as a compliance obligation, but as an act of leadership and accountability towards their stakeholders. It is in that spirit that we have written it.

In 2024, the University of Carthage manages 4.5 million m² of campus space, educates more than 33,000 students, produces 1,070 sustainability-related publications, and maintains 5,104 international collaborations. These figures speak for themselves. But what defines us even more is our trajectory: the sustained growth of our sustainable research investments, the systematic integration of the SDGs into our curricula, and the physical transformation of our campuses into living laboratories for the ecological transition.

This report, structured according to GRI Standards (Global Reporting Initiative) and aligned with QS World University Sustainability Rankings criteria, covers five strategic pillars: ethical governance, environmental performance, social responsibility, pedagogical innovation, and future-oriented research. It reflects our progress with honesty — acknowledging the challenges that remain and setting ambitious goals for 2030.

Sustainability is no longer optional. It is the very condition of our institutional relevance in the world of tomorrow.

Professor Nadia Mzoughi

President, University of Carthage

Tunis, 2026

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Institutional Profile &Governance

2.1 University Portrait

Founded in 1988, the University of Carthage has established itself as one of Tunisia's most diversified universities, spanning five governorates and bringing together institutions of excellence in agricultural sciences, architecture, engineering, business, and environmental sciences. Today, it unites more than 33,549 students, 3,571 academic researchers, and 167 researchers fully dedicated to sustainability — forming an academic ecosystem of exceptional density.

Indicator	Value	Context / Target
Year of foundation	**1988**	Over 35 years of academic heritage
Enrolledstudents	**33,549**	Including 5,036 academic& administrative staff
Total campus area	**4,537,970 m²**	Distributedacross 5 governorates
Academicresearchers	**3,571**	Of whom 167 are dedicated sustainability researchers
Sustainability publications (2024)	**1,070**	Annualscientific output
International collaborations	**5,104**	Recordedbetween 2021 and 2025
Green MetricRanking (national)	**#1**	National leader in sustainability ranking

2.2 Ethical Governance Framework

The governance of sustainability at the University of Carthage rests on a multi-level institutional architecture inspired by the best practices of world-class universities. Our quality management framework, certified ISO 9001:2015, is not a mere compliance mechanism — it is the strategic infrastructure through which we ensure that our environmental and social commitments translate into measurable processes and continuous improvement.

Governance Body	SustainabilityResponsibilities
UniversityPresidency	Validation of strategic SDG objectives; supervision of international commitments
CSR Committee	Sustainability policy and strategy; cross-institutional coordination
ICT & Digital Transformation Committee	Oversight of the Digital Campus Master Plan; monitoring of digital energy efficiency
Infrastructure Coordination Office	Management of green spaces, sustainable mobility, and water governance
Scientific Councils of the Institutes	Integration of SDGs into curricula and research programmes
Student Social Commission	Inclusion, well-being, equal opportunity, and campus life

2.3 Alignment with International Frameworks

This report is structured in accordance with the following reference standards, aligning the University of Carthage with the practices of top-ranking global academic institutions:

- Global Reporting Initiative (GRI Standards 2021) — general reporting framework
- United Nations Sustainable Development Goals (SDGs 2030) — 17 goals mapped against university activities
- QS World University Sustainability Rankings — environmental and social performance criteria
- PRME (Principles for Responsible Management Education) — integration of ESG issues into curricula
- ISO 9001:2015 — quality management system as the operational foundation

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ReportingMethodology

3.1 Scope and Boundaries

This report covers all activities of the University of Carthage for the 2024 fiscal year, including all constituent institutions (INAT, IHEC, ENSTAB, ISSTE, ESAM, ESAMograne) and sites across five governorates. Data collection spans the period 2022–2024 for trend indicators, and focuses on calendar year 2024 for annual performance indicators.

3.2 Data Sources and Validation

The integrity of the data presented in this report is ensured through a three-level collection and validation process:

- Level 1 — Primary collection: operational data from administrative services, institute directorates, and research laboratories
- Level 2 — Cross-validation: verification by department heads and quality coordinators in accordance with ISO 9001:2015
- Level 3 — Institutional review: final validation by the Presidency and the Sustainability Steering Committee

3.3 Materiality Assessment

The materiality analysis — through which we identify the sustainability issues most significant to our stakeholders — was conducted using GRI methodology and QS Sustainability criteria. The material issues selected for this report are:

Dimension	PriorityMaterial Issues
Environmental	Energy consumption, water management, biodiversity, sustainable mobility, waste reduction
Social	Inclusion and equity, student well-being, community engagement, universal accessibility
Governance	Institutional transparency, research ethics, quality certifications
Academic	Integration of SDGs into curricula, green skills development
Economic	Sustainable research investment, graduate employability, industrial partnerships

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Environmental Performance

The ecological transformation of the University of Carthage campuses is one of the most visible and measurable dimensions of our sustainability strategy. Our approach integrates green space management, water conservation, sustainable mobility, and energy efficiency into a coherent vision of the campus as a living ecosystem.

4.1 Land Management & Green Spaces

The University of Carthage's physical footprint — 4,537,970 m² of total area — is managed according to eco-responsible planning principles that make our campuses genuine sanctuaries of urban and peri-urban biodiversity, comparable in philosophy to the 'Green Campus' initiatives of Wageningen University (Netherlands) or the University of Costa Rica.

Indicator	Value	Context / Target
Total campus area	**4,537,970 m²**	Distributedacross 5 governorates
Total vegetated area	**2,329,890 m²**	60% of reference surface (3,883,151 m²)
Natural forest zones	**698,967 m²**	30% of vegetated surface
Plantedvegetation	**1,630,923 m²**	70% of vegetated surface
Open space ratio — Main campus	**91%**	9,531 m² open / 10,493 m² total
Open space ratio — Other campuses	**> 85%**	Standard applied across most institutions

Biodiversity on our campuses is not a passive asset — it is the subject of an active conservation strategy driven by INAT and ESA Mograne. These institutions manage programmes for the preservation of plant genetic resources (Mediterranean durum wheat varieties), animal resources (local poultry breeds), and entomological collections. Soilless cultivation represents one of our flagship agricultural innovations, addressing food security challenges while reducing water consumption.

4.2 Sustainable Water Management

Faced with the specific water challenges of the Mediterranean region, the University of Carthage has deployed a structured water management policy built around two complementary axes: consumption reduction and maximisation of natural rainwater absorption. This approach draws on best practices from universities operating in water-stressed environments, such as the University of California and the University of Cape Town.

Indicator	Value	Context / Target
Absorption surfaces — Main campus	**5,706 m²**	54.4% of total site area
Absorption surfaces — INAT	**49,700 m²**	62% of site area
Absorption surfaces — IHEC Carthage	**9,000 m²**	23% of site area
Total documentedpermeable surfaces	**> 64,406 m²**	Principal sites recorded

These absorption surfaces — combining green roofs, permeable pavements, and dedicated infiltration areas — constitute a Nature-based Solutions (NbS) water infrastructure, consistent with the recommendations of SDG 6 (Clean Water and Sanitation).

4.3 Sustainable Mobility

The University of Carthage's mobility policy aims at a systematic reduction of CO_2 emissions from commuting through a three-pronged strategy: discouraging private vehicles, promoting active mobility, and deploying intelligent transport solutions. The ratio of 0.0052 vehicles per person (204 vehicles for 38,585 individuals) reflects one of the lowest automobile densities in the Tunisian university sector.

SustainableMobility Initiative	Environmental& Social Impact
Dedicateduniversityshuttle service	Reduced congestion, lower CO_2 emissions, improved air quality
Free bicycle-sharing scheme	Zero-emission mobility; promotion of physical well-being
Parking limitation policy (2023–2025)	Discouragesprivatevehicles; reclaims green spaces
Real-time GPS mobile app (shuttles)	Route optimisation; reduced travel times
DeepVolt / LARINA Lab (ENSTAB) partnership	Development of intelligent electromobility on campus
Inclusive pedestrian infrastructure (PRM)	Universal accessibility; safe walking environment

The partnership with DeepVolt and the LARINA laboratory (ENSTAB) for the digitisation and intelligent control of electromobility systems is a pioneering initiative in the Tunisian university context, simultaneously contributing to SDGs 9, 11, and 13.

4.4 Energy Efficiency & Digital Transition

Energy efficiency at the University of Carthage is driven by its digital transformation strategy, which aims to reduce consumption linked to physical processes (printing, travel, paper-based administration). The adoption of Google Workspace for Education from September 2021, the deployment of smart classrooms, and the dematerialisation of degrees via blockchain (BCdiploma — 5,000 certified credentials) are milestones in a transition towards a thoughtful digital campus footprint.

The Digital Campus Master Plan, launched in 2024, sets the strategic framework for this transformation, with the objective of instrumenting all university buildings with real-time energy monitoring tools for proactive management and data-driven decision-making.

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Social Responsibility&Student Life

The social sustainability of the University of Carthage is expressed in the quality of community fabric it weaves among students, faculty, civil partners, and national institutions. Our approach rests on three pillars: inclusive education, civic engagement, and the holistic well-being of the university community.

5.1 Inclusive Education & Development of Sustainable Competencies

The University of Carthage's ambition is to graduate every student as an agent of sustainable transition, regardless of discipline. This vision is embodied in a transversal and systematic integration of environmental, social, and ethical issues across our entire educational offering — an approach comparable to that of the University of Amsterdam and Arizona State University, recognised for their sustainability-embedded curricula.

Indicator	Value	Context / Target
Total courses delivered (2024)	**12,924**	Up from 12,455 in 2022
Share of sustainability-related courses	**> 30%**	Integrated across all disciplines
Sustainabilitystudy programmes	**2,142**	Distinct programmes identified
Academicresearchers	**3,571**	Multidisciplinaryacademic body

Selected specialised Master's programmes illustrate the depth of our commitment:

Institution	SustainabilityMaster's Programmes
ISSTE	Master in Water Treatment &Valorisation | Master in Solar Energy | Master in Eco-Labelling
INAT	Master in Ecosystem Conservation & Restoration | Master in Water Governance & Economics
ESAM	Master in Forage Resource Management | Master in Livestock Product Valorisation
ENSTAB	Programmes in Energy Management & Digitalisation
IHEC Carthage	CSR and Sustainable Finance modules integrated into management curricula

The PEEC GREEN SKILLS training programme — integrating sustainable competencies into entrepreneurial coaching — exemplifies our capacity to bridge academic formation, green employability, and responsible entrepreneurship.

5.2 Community Engagement & Societal Impact

The University of Carthage fully assumes its role as a civic institution and catalyst for societal debate. Between 2022 and 2024, we organised approximately 234 sustainability-related events — an average of 78 per year — demonstrating our vocation to be an open, pluralistic, and constructive space for dialogue.

- International Conference on Governance and Sustainability (CIGD 2025): a major scientific forum bringing together researchers and practitioners on contemporary responsible governance challenges
- Conference on Efficient Fertiliser Use in the Maghreb (with CIEC): contribution to a more sustainable regional agriculture
- Cultural festivals, exhibitions and intercultural events: over 10 cultural events per year, fostering social cohesion and community well-being
- PEEC GREEN SKILLS training: green entrepreneurship support for the next generation of innovators

5.3 Safety, Health & Community Well-being

Social sustainability requires that every member of the university community operates in a secure, healthy, and fulfilling environment. The University of Carthage has deployed first-line safety and health infrastructure across all campuses, compliant with national regulatory standards.

Domain	Devices&ResourcesAvailable
Physical security	CCTV surveillance systems at main entrances; anti-intrusion devices
Firesafety	Standards-compliant fire extinguishers; formalised evacuation procedures
First-line healthcare	First aid stations and health rooms on every campus; certified staff
Universal accessibility	Pedestrian infrastructure with separators and ramps for persons with reduced mobility
Digital well-being	Google Workspace for Education for pedagogical collaboration and continuity

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Research, Innovation & SDG Alignment

Research is the silent engine of sustainable transformation. At the University of Carthage, it is not confined to laboratories — it permeates curricula, informs public policy, and generates concrete solutions for Tunisia and the Mediterranean region. Our model of research for sustainability is inspired by research-intensive universities committed to the ecological transition, such as ETH Zurich, Wageningen University, and Uppsala University.

6.1 Research Investment & Scientific Output

Investment in sustainability-oriented research has followed a sustained and deliberate upward trajectory, reflecting the institution's conviction that scientific knowledge is the most powerful lever for societal transformation.

Indicator	Value	Context / Target
Sustainabilityresearchinvestment — 2022	**USD 545,000**	Reference baseline
Sustainabilityresearchinvestment — 2023	**USD 561,000**	+2.9% vs 2022
Sustainabilityresearchinvestment — 2024	**USD 572,265**	+2.0% vs 2023 / +5.0% vs 2022
Averageannualinvestment 2022–2024	**USD 559,421**	Consistent growthtrajectory
Sustainability publications (2024)	**1,070**	Annualscientific output
International collaborations (2021–2025)	**5,104**	Global research network
Dedicatedsustainabilityresearchers	**167**	Identifiedspecialists on campus

6.2 FlagshipResearchProjects

Our flagship research projects illustrate the University of Carthage's capacity to address the most pressing regional and Mediterranean challenges, mobilising interdisciplinary expertise and leading international partnerships.

Research Project	Objectives & Impact
MAEWA — MediterraneanBioremediation	Mitigating agricultural impacts through bioremediation technologies for soils and wetlands. Environmental and economicbenefits for the MENA region.
SCALA-MEDI — Resilient Agriculture	Improving the sustainability of ovine and poultry livestock; valorisation of local Mediterranean breeds for more resilient agriculture.
MAYA — Erasmus+ Agro-Hydrology	Promoting innovative agricultural and hydrological approaches for sustainable development; strengthening regional institutional capacity.
DeepVolt / LARINA — Smart Electromobility	Digitisation and intelligent control of electromobility systems; emissions reduction; transition towards sustainable campus transport.
BCdiploma — AcademicBlockchain	Decentralised, tamper-proof, trilingual certification of 5,000 academic credentials — a technological precedent for academic integrity.

6.3 SDG Contribution Mapping

The University of Carthage's activities directly or indirectly contribute to 12 of the 17 United Nations Sustainable Development Goals. The table belowdetailsthis contribution by thematicpillar:

SDG	University of Carthage Contribution
SDG 4 — Quality Education	12,924 courses; 30%+ sustainability-linked; 2,142 specialised study programmes
SDG 6 — Clean Water	64,406+ m² of absorption surfaces; soillesscultivation; sustainable water resource management
SDG 9 — Innovation & Infrastructure	Electromobility, academic blockchain, smart campus, university–startup partnerships

SDG 11 — SustainableCities	Shuttles, free bicycles, parking limitation, PMR infrastructure, liveable campus
SDG 13 — Climate Action	CO_2 mobility reduction; 2,329,890 m^2 of vegetated surfaces; MAEWA bioremediation projects
SDG 15 — Life on Land	Conservation of genetic resources; campus biodiversity; biological collections at INAT/ESAM
SDG 17 — Partnerships for the Goals	5,104 international collaborations; Erasmus+ projects; CIEC cooperations; industrial partnerships

Strategic Roadmap 2025–2030

The University of Carthage has set ambitious targets for the next five years, consistent with the UN Agenda 2030 and the criteria of international sustainability rankings. These commitments are not rhetorical aspirations — they will be tracked, measured, and reported annually.

Strategic Target	Goal &Timeline	Baseline / Context
SDG CurricularCoverage	**50% of courses integrating sustainability by 2027**	vs 30%+ currently
RenewableEnergy	**30% of consumption covered by solar energy by 2028**	Baseline to be established in 2025
Biodiversity — Greening	**65% vegetated surface area by 2029**	vs 60% currently
Research Investment	**USD 650,000/year in sustainability research by 2027**	vs USD 572,265 in 2024
Electric Mobility Fleet	**50% electrification of shuttle fleet by 2028**	DeepVolt/LARINA collaboration
Digital Footprint — Paper	**80% reduction in administrative paper consumption by 2027**	Via dematerialisation
QS SustainabilityRanking	**Enter the global Top 100 by 2030**	International benchmark
Certification — STARS (AASHE)	**Achieve Bronze level certification by 2026**	International benchmark

The implementation of this roadmap will be overseen by the Sustainability Steering Committee, with semi-annual reviews and an annual public report. Each target will be translated into operational action plans, with designated responsibilities, intermediate milestones, and verifiable monitoring indicators.

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Conclusion & Perspectives

This Sustainability Report 2024–2025 marks a decisive step in the evolution of the University of Carthage. It bears witness to an institution that has made the choice of transparency, ambition, and accountability — three virtues that define world-class universities in their relationship with society.

Our achievements are significant: 4.5 million m² of campus space managed according to eco-responsible principles, 60% of surfaces vegetated, sustainability research investments on a continuous growth trajectory, over 5,100 international collaborations, and an academic community of more than 38,000 people committed to building knowledge that is both useful and equitable.

Yet the University of Carthage does not rest on its achievements. It looks towards 2030 with a clear vision: to become the reference university in North Africa for institutional, academic, and social sustainability. This leadership will be built not through words, but through action — decarbonised campuses, graduates who carry a culture of sustainability, and research that concretely improves the lives of Tunisian and Mediterranean citizens.

The sustainable future of Tunisia and the Mediterranean is being built, today, in the lecture halls, laboratories, and green spaces of the University of Carthage.

University of Carthage | CSR Committee

Tunis, Tunisia

| www.ucar.tn

Présidente
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UNIVERSITE DE CARTHAGE

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