

# UNIVERSITY OF CARTHAGE

## Carbon Neutrality & Net Zero Action Plan

***Vision: The University of Carthage aspires to become the first carbon-neutral university in Tunisia and a regional leader in sustainable higher education***

### Preamble

The University of Carthage recognizes the urgent global challenge of climate change and affirms its responsibility as an institution of higher education and research to lead by example. The University commits to a structured and ambitious journey toward carbon neutrality (Net Zero), integrating environmental sustainability into its governance, operations, research, and campus culture.

This policy establishes the University's formal commitment to measuring, reducing, and ultimately neutralizing its carbon footprint, while fostering a generation of environmentally conscious graduates and contributing to Tunisia's national climate commitments under the Paris Agreement and the Nationally Determined Contributions (NDCs).

### Strategic Objectives

- Achieve a measurable and verified reduction of greenhouse gas (GHG) emissions across all campuses and operations
- Reach Net Zero carbon emissions by 2035
- Embed sustainability into all academic, research, and administrative activities
- Establish the University of Carthage as a living lab for climate solutions and green innovation
- Contribute actively to Tunisia's national and international climate commitments

### Carbon Neutrality Roadmap

#### Phase 1 — Measure & Baseline (2024–2025)

"You cannot manage what you cannot measure"

- Conduct a comprehensive GHG emissions audit across all University campuses and entities (Scope 1, 2, and 3 emissions)
- Establish a carbon baseline as the reference point for all future reductions
- Map all emission sources: energy consumption, transportation, paper and material use, waste, water, procurement, and travel
- Appoint a University Sustainability Officer and establish a Green Campus Committee
- Subscribe to recognized carbon accounting frameworks (GHG Protocol, ISO 14064)

## Phase 2 — Reduce & Transform (2025–2030)

"Reduce first, offset last"

### Energy & Infrastructure

- Conduct energy audits of all University buildings and facilities
- Progressively install solar photovoltaic panels on university rooftops and grounds
- Transition to LED lighting and smart energy management systems across all campuses
- Procure 100% renewable electricity for university operations by 2028

### Green Campus & Biodiversity

- Develop and expand green spaces, tree planting programs, and urban gardens on all campuses
- Implement sustainable water management practices including rainwater harvesting
- Introduce biodiversity corridors and native plant landscaping

### Waste & Circular Economy

- Implement comprehensive waste sorting and recycling programs across all campuses
- Eliminate single-use plastics from all University facilities and events
- Establish composting systems for organic waste generated in cafeterias and green spaces
- Leverage the existing Paperless Policy to continue reducing paper waste

### Mobility & Transportation

- Promote and incentivize sustainable commuting for staff and students (cycling, carpooling, public transport)
- Develop bicycle infrastructure including secure parking and dedicated lanes on campuses
- Electrify the University vehicle fleet progressively by 2030

### Sustainable Procurement

- Integrate environmental criteria into all procurement and tendering processes
- Prioritize local, low-carbon, and eco-certified suppliers and products

## Phase 3 — Innovate & Engage (2028–2032)

"The University as a climate solution engine"

- Launch a University Carbon Innovation Fund to support student and faculty-led sustainability projects
- Integrate climate literacy and sustainability modules into all academic programs across disciplines
- Establish a Center for Climate Research and Green Transition within the University
- Partner with national and international universities, research institutions, and industry on joint climate research programs
- Organize an annual University Sustainability Summit to share progress and mobilize stakeholders
- Engage students through a Green Campus Ambassador Program

## Phase 4 — Offset & Certify (2032–2035)

"Neutralize what cannot yet be eliminated"

- Invest in certified carbon offset programs for residual emissions that cannot be eliminated (reforestation, renewable energy projects in Tunisia and the region)
- Seek official carbon neutrality certification from a recognized international body
- Publish an annual University Sustainability & Carbon Report aligned with GRI and TCFD standards
- Formally declare Net Zero status by 2035

## Key Performance Indicators (KPIs)

Indicator	Baseline 2024	Target 2027	Target 2030	Target 2035
Total GHG emissions	145,694 t CO <sub>2</sub>	-20%	-50%	Net Zero
Renewable energy share	3,670,845 kWh	25%	60%	100%
Paper consumption	Baseline	-40%	-80%	Near Zero
Green space coverage	60% of reference surface (3,883,151 m <sup>2</sup> )	+15%	+35%	+50%
Electric vehicles in fleet	0%	20%	60%	100%
Annual carbon report	Yes (SUSTAINABILITY REPORT 2024 – 2025)	Yes	Yes	Yes

## Governance & Responsibilities

Body / Role	Responsibility
University President	Champion the policy, ensure institutional commitment and resource allocation
Sustainability Officer	Coordinate implementation, monitoring, and reporting across all entities
Green Campus Committee	Oversee action plans, validate KPIs, and drive cross-departmental coordination
Deans & Department Heads	Integrate sustainability into academic programs and departmental operations
IT & Infrastructure Services	Implement energy efficiency measures and smart campus technologies
Faculty & Researchers	Contribute through climate-related research, teaching, and innovation

Students	Participate as Green Ambassadors and in sustainability initiatives
Administrative Staff	Adopt sustainable practices in daily operations and procurement

## Alignment with International Frameworks

- The Paris Agreement — limiting global warming to 1.5°C above pre-industrial levels
- Tunisia's Nationally Determined Contributions (NDCs) — 45% reduction in carbon intensity by 2030
- UI GreenMetric — international university sustainability ranking framework
- ISO 14001 — Environmental Management Systems
- GHG Protocol & ISO 14064 — Carbon accounting and verification standards
- UN Sustainable Development Goals (SDGs) — particularly SDG 4, 7, 11, 12, 13

***Adopted by the University of Carthage Administration — In commitment to a sustainable future for our students, our country, and our planet***

*"Educating for the world we want to leave behind"*