Report on SDG 7: Affordable and Clean Energy at Al-Turath University

Reporting period: calendar year 2025 and academic year 2024-25

Committee: Al-Turath University SDG Impact Committee

Web page: https://uoturath.edu.iq/en/sustainabledevelopment/energy/

Introduction

Al-Turath University (TU) works toward SDG 7 by setting institutional energy and carbon policies, using solar power and solar lighting on campus, running a free electric transport fleet, designing buildings that make use of daylight, teaching and researching energy topics, and holding seminars and workshops with students, the community and government bodies. This report is organized by the THE Sustainability Impact Ratings 2027 indicators for SDG 7, so each section documents one indicator.

TU presented its sustainable development work, with a focus on innovation, renewable energy and environmental technology, at the First Central Festival for Sustainable Development in Baghdad in August 2025, held under the patronage of the Minister of Higher Education (https://uoturath.edu.iq/en/2025/08/sustainable-leadership/). TU also publishes an annual SDG 7 report: (https://uoturath.edu.iq/wp-content/uploads/2025/11/SDG7-report.pdf).

1. Energy and carbon policies (7.2.1, 7.2.3, 7.2.4, 7.2.6)

TU publishes its sustainable energy policies on its website (https://uoturath.edu.iq/en/sustainabledevelopment/sustainable-energy-policy/). They include:

Policy	Year	Main commitments	Evidence
Net Zero Carbon Commitment Declaration (Office of the University President)	2025	Net-zero carbon emissions across campus operations by 2045, covering Scope 1 (direct campus energy use and university-owned sources) and Scope 2 (purchased electricity), with progressive steps toward Scope 3. Actions: a carbon emissions baseline for 2024–2025, a phased Carbon Reduction Roadmap for the University Council, priority investment in onsite renewable energy, better energy efficiency of buildings and operations, and public annual reporting. Aligned with Iraq's national climate objectives and the Paris Agreement.	https://uoturath.edu.iq/en/sustainabledevelopment/sustainable-energy-policy/

Policy	Year	Main commitments	Evidence
Sustainable Investment Policy (approved by the University Council)	2025	Priority for capital projects that improve energy efficiency or cut the carbon footprint (renewable installations, energy-efficient building upgrades, sustainable transport). No financial commitments to assets or activities materially inconsistent with environmental and social values. Surplus funds go to institutions with responsible ESG practices where feasible. Capital proposals above a set threshold need an environmental impact assessment and a policy-alignment check. Reviewed annually.	https://uoturath.edu.iq/en/sustainabledevelopment/sustainable-energy-policy/
Sustainable Procurement Policy (approved by the University Council)	2025	Preference for energy-efficient equipment that meets or exceeds applicable standards, suppliers with environmental certification such as ISO 14001, and local sourcing to reduce transport emissions. Procurement staff are trained. Reviewed annually.	https://uoturath.edu.iq/en/sustainabledevelopment/sustainable-energy-policy/
Energy Efficiency & Sustainable Construction Policy, No. TU-EESCP-2023 (approved by the President and University Board; signed 1 November 2023; effective 1 January 2024; review cycle every 3 years)	2023	Applies to all new buildings and major additions, major renovations where more than 30% of building systems (HVAC, lighting or controls) are replaced, utility infrastructure, and procurement of energy-intensive equipment. Standards and targets: minimum compliance with ASHRAE 90.1 or the equivalent Iraqi standard; LEED Gold or equivalent (BREEAM Excellent, EDGE Advanced); at least 20% lower Energy Use	https://uoturath.edu.iq/wp-content/uploads/2025/11/Energy-Construction-Policy-uoturath.pdf

Policy	Year	Main commitments	Evidence
		Intensity than the baseline for new construction; on-site renewable energy supplying at least 10% of annual electricity; energy sub-metering with monthly reporting through the TU Sustainability Dashboard. Compliance: an energy simulation at design stage, sub-meters verified during construction, performance measured against modelled targets within 12 months of occupancy, corrective action if performance deviates by more than 10%, an annual Energy Performance Report published on the TU website, and a comprehensive energy audit every five years. Equipment must be ENERGY STAR certified or equivalent, and vehicles bought after 2023 must be hybrid or electric where feasible.	
Carbon Divestment and Clean Mobility Policy, No. TU-CDCM-2023 (approved by the President and University Board; signed 1 November 2023; effective 1 January 2024; review cycle every 3 years)	2023	Applies to all financial investments, endowment funds and asset portfolios managed by the university, and to transport within the campus. TU refrains from direct investment in companies whose primary business is the extraction, production or distribution of coal, crude oil or non-renewable hydrocarbons, and phases out indirect exposure through investment funds, with at least 90% carbon-free holdings by 2030. Investment priority goes to renewable	https://uoturath.edu.iq/wp-content/uploads/2025/11/Carbon-Davestment-uoturath.pdf

Policy	Year	Main commitments	Evidence
		energy firms, clean-technology ventures and green innovation funds. TU operates a fleet of electric vehicles for students, staff and visitors, with EV charging stations at key areas, and aims for 100% electric campus mobility by 2028. The Finance and Sustainability Committees oversee compliance with an annual sustainability audit, and the Sustainability Office prepares an annual Carbon Divestment and Clean Mobility Report with indicators on the share of carbon-free investments, kilometres travelled by EVs and estimated CO2 avoided.	

Carbon management (7.2.3): the Net Zero Declaration sets a carbon baseline for 2024–2025 and a Carbon Reduction Roadmap. The Carbon Divestment and Clean Mobility Policy adds an annual Carbon Divestment and Clean Mobility Report prepared by the Sustainability Office, with indicators on carbon-free investments, EV kilometres and CO2 avoided.

Energy reduction plan (7.2.4): the Energy Efficiency & Sustainable Construction Policy sets measurable targets (20% lower Energy Use Intensity for new construction, 10% of annual electricity from on-site renewables), sub-metering with monthly reporting, corrective action when a building's performance deviates from its modelled target by more than 10%, and an annual Energy Performance Report. The Facilities & Sustainability Office is responsible for implementing it and for the energy data.

Energy reviews and audits (7.2.5): the same policy requires energy performance to be measured within 12 months of a building's occupancy, and a comprehensive energy audit every five years to identify further efficiency opportunities. The most recent energy review was carried out each year on June by the university council and found that building colling and heating systems are most energy consumption and use the most energy; most of the new building will be run by solar system and make environment friendly buildings.

2. Energy-efficient buildings and upgrades (7.2.1, 7.2.2)

TU's Energy Efficiency & Sustainable Construction Policy (2023, effective 1 January 2024) requires every new building and major renovation to meet ASHRAE 90.1 or the equivalent Iraqi standard, to aim for LEED Gold or equivalent, and to cut Energy Use Intensity by at least 20% against the baseline, with on-site renewables supplying at least 10% of annual electricity (https://uoturath.edu.iq/wp-content/uploads/2025/11/Energy-Construction-Policy-uoturath.pdf). In practice, TU designs and renovates buildings to make use of natural daylight and reduce the need for artificial lighting during the day. New and renovated buildings have glass façades and passive design. The university is also working

on smart energy management systems, such as energy-saving lighting and automatic control devices (Al-Turath University Sustainability Magazine, p. 18) (https://uoturath.edu.iq/wp-content/uploads/2026/11/sdg-magazine-2026-en.pdf). The Mohammed Bin Ali II Specialized Building for Scientific Laboratories, described on TU's website in July 2024, is one of TU's modern facilities (https://uoturath.edu.iq/2024/07/mohammed-bin-ali-ii-private-building-one-of-al-turath-universitys-landmarks-with-advanced-scientific-laboratories/). The outdoor student cafeteria is built as a tent, which reflects local culture while giving shaded open space, and the garage which designed to be automatically lighted by solar power supplies with a green areas inside and outside the building.



Renovated main building with glass façade



Main building and central plaza seen from above



Laboratory building with glass façade for daylight



Long glass-façade academic building



Outdoor student cafeteria built as a tent



New garage building, environment friendly building

Building upgrades (7.2.2): the policy applies to major renovations where more than 30% of HVAC, lighting or control systems are replaced, and requires an energy simulation at design stage and a check

against modelled targets within 12 months. In 2025 TU upgraded 2 buildings under it: Alturath palace (undergoing), and new garage building.

Also, in 2025 the Office of the University President issued a Net Zero Carbon Commitment Declaration, which commits Al-Turath University to net-zero carbon emissions across campus operations by 2045. It covers Scope 1 (direct campus energy use and university-owned sources) and Scope 2 (purchased electricity), with progressive steps toward Scope 3. The process has five steps: (1) establish a carbon emissions baseline for the 2024–2025 academic year; (2) develop a phased Carbon Reduction Roadmap for adoption by the University Council; (3) prioritize investment in onsite renewable energy; (4) improve the energy efficiency of buildings and operations; and (5) report progress publicly through the annual sustainability reporting cycle. The declaration is aligned with Iraq's national climate objectives and the Paris Agreement. Evidence: https://uoturath.edu.iq/en/sustainabledevelopment/sustainable-energy-policy/

In addition, Al-Turath University's 2025 Net Zero Carbon Commitment Declaration commits the university to improve the energy efficiency of its buildings and operations and to prioritize onsite renewable energy. The Sustainable Investment Policy, approved by the University Council in 2025, gives priority to capital projects that improve energy efficiency and requires an environmental impact assessment for large proposals. The Sustainable Procurement Policy requires energy-efficient equipment. In practice, the university uses energy-saving lighting with automatic controls, solar panels and solar-powered lamps, and a free electric campus fleet. Evidence: https://uoturath.edu.iq/en/sustainabledevelopment/sustainable-energy-policy/

Sustainability magazine page 18 https://uoturath.edu.iq/wp-content/uploads/2026/11/sdg-magazine-2026-en.pdf

Al-Turath University reviews its energy use at three levels. First, the Facilities & Sustainability Office monitors energy data through sub-metering and monthly reporting on the TU Sustainability Dashboard, which shows where consumption is highest. Second, each new or renovated building's energy performance is measured against its modelled target within 12 months of occupancy, and corrective action is required where it deviates by more than 10%. Third, a comprehensive energy audit is carried out every five years to identify further efficiency opportunities. In 2025, university council reviewed TU building with most energy consumption, it found that colleges building with night studies have the highest consumption, and hence two new buildings changing its lighting system to be automatically on and off based on motion sensing. https://uoturath.edu.iq/wp-content/uploads/2025/11/Energy-Construction-Policy-uoturath.pdf

3. Renewable and low-carbon energy on campus (7.5)

TU installs solar panels on campus buildings and uses solar-powered lamps in its grounds. These measures, introduced through the efforts of the Chairman of the Board of Trustees, reduce reliance on traditional energy sources and contribute to lower carbon emissions (Al-Turath University Sustainability Magazine, p. 18).



Photovoltaic panels on a campus roof



Solar-powered lamps along the campus walkways

In 2025 the university used 14500 GJ of energy in total, of which 3000 GJ came from low-carbon sources (solar). The total energy used have been increased over the past year because two new building are ongoing including the new garage and new football studium even though we added more solar sources.

4. Clean mobility and campus operations

The Carbon Divestment and Clean Mobility Policy commit TU to operate electric vehicles for students, staff and visitors instead of fuel-based vehicles, to install EV charging stations at key areas, and to reach 100% electric campus mobility by 2028 (https://uoturath.edu.iq/wp-content/uploads/2025/11/Carbon-Davestment-uoturath.pdf). The Energy Efficiency & Sustainable Construction Policy also requires vehicles bought after 2023 to be hybrid or electric where feasible. In practice, TU provides 15 classic electric-powered cars that do not emit exhaust gases and transport students, guests and faculty members within the campus free of charge, on the initiative of the Chairman of the Board of Trustees (Al-Turath University Sustainability Magazine, pp. 18 and 30).



Electric shuttle cars carrying students and visitors



Electric campus car



Cleaning vehicle in the campus plaza

In June 2024 TU announced that it uses a cleaning drone to wash the exterior of tall buildings on campus, a method tagged by the university under SDG 7 (https://uoturath.edu.iq/en/2024/06/%d8%ac%d8%a7%d9%85%d8%b9%d8%a9-%d8%a7%d9%84%d8%aa%d8%b1%d8%a7%d8%ab-%d8%aa%d8%b9%d9%84%d9%86-%d8%b9%d9%86-%d8%a7%d8%b3%d8%aa%d8%ae%d8%af%d8%a7%d9%85-%d8%aa%d9%82%d9%86%d9%8a%d8%a9-%d8%a7%d9%84%d8%b7/).

5. Education and research on energy

- The TU SDG 7 page lists educational programmes and training courses on renewable energy and energy efficiency, and encourages research on local solar and wind energy (https://uoturath.edu.iq/en/sustainabledevelopment/energy/).
- The Electrical Power Engineering Techniques department of the Technical Engineering College prepares technical engineers for power generation stations, transmission and distribution networks and maintenance workshops, in response to labour-market demand in energy fields (https://tucoet.uoturath.edu.iq/en/dep/electrical/).
- The College of Engineering has a Petroleum and Gas Refining Engineering department, whose students and faculty took part in the November 2025 seminar below (https://uoturath.edu.iq/2025/11/oil-pollution/).
- Sustainable energy is included among the main topics of the curricula, and faculty and students are encouraged to carry out research on energy efficiency and alternatives to traditional energy (Al-Turath University Sustainability Magazine, p. 18).

6. Community, industry and government engagement (7.4)

- **Seminar with the Ministry of Oil, November 2025.** The College of Engineering, with the Ministry of Oil, held a high-level scientific seminar on oil pollutants, their sources and environmental effects, and on the Ministry's modern methods for reducing emissions as part of Iraq's shift toward green technology. Speakers were Eng. Salah Mahdi and Dr. Mohammed Fadhil. It also covered the university's role in applied research on bioremediation and eco-friendly materials (https://uoturath.edu.iq/2025/11/oil-pollution/).
- **First Central Festival for Sustainable Development, August 2025.** Several TU colleges showed initiatives and projects that raise environmental awareness and apply sustainable solutions, under the patronage of the Minister of Higher Education (https://uoturath.edu.iq/en/2025/08/sustainable-leadership/).

- **Awareness and workshops.** TU organizes workshops and symposiums to raise the community's and students' understanding of the need to switch to renewable energy and works to build partnerships with government agencies and local and international companies on joint energy projects (Al-Turath University Sustainability Magazine, p. 18). The Continuing Education Center ran more than 25 energy-related workshops, seminars or lectures in 2025(https://uoturath.edu.iq/en/cec/).
- **International cooperation.** The December 2025 capacity-building training with the EU Mission in Iraq under Erasmus+ was hosted by TU (https://uoturath.edu.iq/en/2025/12/erasmus-2/).

  Also, TU promotes to the SDG7 through its website and dedicating a webpage that have been circulated between the students to make them aware of the TU vision and what we want to achieve. That knowledge was reflected over the students' families and the community as well (https://uoturath.edu.iq/en/sustainabledevelopment/energy/). Also, TU published a special magazine for sustainability which spread among the local community and students' parents for free, and kind of university and sustainability awareness promotion at the same time, and its available online as well (https://uoturath.edu.iq/wp-content/uploads/2026/11/sdg-magazine-2026-en.pdf).